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Telephone Crisis Intervention: Empathy and Conceptual Level

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TELEPHONE CRISIS INTERVENTION:
EMPATHY AND CONCEPTUAL LEVEL

by

Paul J. Seymour

A dissertation submitted in partial fulfillment
of the requirements for the degree
of
DOCTOR OF PHILOSOPHY
in
Psychology

Approved:

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1976
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Paul J. Seymour
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ABSTRACT

Telephone Crisis Intervention: Empathy and Conceptual Level

by

Paul J. Seymour, Doctor of Philosophy

Utah State University, 1976

Major Professor: Dr. Glen H. Maw
Department: Psychology

The telephone crisis intervention service at Utah State University (Help-Line) was evaluated in order to make the training program accountable and to produce recommendations for improvement in volunteer training.

Help-Line training teaches a "non-directive" counseling model and incorporates experiential sensitivity type exercises, didactic discussion, and role playing.

Help-Line volunteers were assessed by two methods. The first was a pretest-posttest control group design. Training was the independent variable and the discrimination of core conditions (as measured by the Crisis Center Discrimination Index) and the communication of empathy (as measured by the Crisis Center Communication Index) were the dependent variables. The Indexes are patterned after the work of Robert Carkhuff and utilize his 5-point rating system. The trainees scored significantly better than the control
The second method was a comparison of the volunteers on the variables of Conceptual Level as postulated by Harvey, Hunt, and Schroder, and the decision of the volunteers regarding whether or not to work on Help-Line after training. Conceptual Level was measured by the Conceptual Systems Test (form 71) categorizing subjects according to cognitive structure and beliefs into one of four Conceptual Levels (CL): CL 1--concrete-proestablishment, CL 2--concrete-antiestablishment, CL 3--abstract-dependent, and CL 4--abstract-independent.

Both trainers were CL 4 individuals and the interaction between subject and trainer is unknown. A comparison of CL 1, CL 3, and CL 4 subjects (the test identified no CL 2 members) on the Crisis Center Discrimination Index produced no significant differences.

A comparison of CL 1, CL 3, and CL 4 subjects on the Crisis Center Communication Index showed no significant differences on the pretest scores but a significant difference (.05 level) on the post-test scores, CL 4 subjects scoring significantly higher than CL 3 and CL 1 subjects. No significant differences in the communication of empathy were found between CL 1 and CL 3 subjects.

A comparison of those subjects who elected to work on Help-Line after training and those who elected not to work on Help-Line after training revealed no significant differences on either the discrimination or communication indexes.
A comparison of those subjects who elected to work on Help-Line after training and those who elected not to work on Help-Line after training with respect to Conceptual Level was made. Chi-square tests showed no significant differences for CL 1 subjects choosing to work or not to work, significance at the .05 level favoring CL 3 subjects choosing to work, and significance at the .05 level favoring CL 4 subjects choosing not to work.
Volunteer crisis intervention telephone services called by such names as hotlines, helplines, switchboards, etc. were first established in the 1950's in response to problems for which immediate help was paramount such as suicide and drug overdoses. These services are staffed by mental health paraprofessionals, i.e. volunteers who are trained by professionals in the mental health fields. Estimates of the number of paraprofessionals working on these services runs upwards of 50,000. The National Directory (1973) lists over 1,000 such services in the United States.

The telephone crisis intervention service at Utah State University was begun in March, 1971. The service was given the name of Help-Line. Help-Line is staffed by volunteers who are trained in five three-hour training sessions. Approximately 500 volunteers have been trained to date. The volunteers are trained not to give advice or intervene in any problem themselves but rather to listen empathetically and make a referral to another agency if further help is needed. The motto of Help-Line is "listen and refer."

Help-Line has received approximately 2,500 calls yearly. The large number of calls received indicates that Help-Line evidently fulfills a need of the university and the community.

One of the advantages of hotlines is the anonymity offered to the caller. The caller does not have to identify himself in any
manner and may terminate the conversation at any time by simply hanging up the telephone. This anonymity is probably the foundation of much of the success of telephone crisis intervention services.

The anonymity of the caller also makes empirical assessment of the effectiveness of the service difficult. No contact can be made with any of the recipients of the service, there can be no selection of callers, no follow-up, and no tape recording of calls. For these reasons, little scientific data is available concerning the effectiveness of telephone crisis intervention services. Their effectiveness has been inferred mostly by their proliferation.

As the training of Help-Line volunteers is limited and the use of the service extensive, empirical validation seems desirable. The purpose of the present study was to evaluate the Help-Line training program at Utah State University by studying the core conditions postulated by Truax and Carkhuff (1967), empathy (Carkhuff, 1969, vol. I), and Conceptual Systems Theory (Harvey, Hunt, & Schroder, 1961). The study was designed to make the training program accountable and to produce recommendations for improvement.

Definition of Terms

Help-Line. The name of the telephone crisis intervention service at Utah State University.

Hotline. A generic word for any telephone crisis intervention service.

Volunteer. A person who has volunteered for Help-Line training.
Worker. A person who has completed training for Help-Line and has worked on the lines.

Nonworker. A person who has completed training for Help-Line but who elected not to work on the lines.


Conceptual Level or System. Refers to the level of cognitive functioning as formulated in Conceptual Systems Theory. Four Conceptual Levels are postulated. CL 1 persons are concrete-proestablishment, CL 2 persons are concrete-antiestablishment, CL 3 persons are abstract-dependent, and CL 4 individuals are abstract-independent.

Empathy. Refers to accurately perceiving the message of a sender so as to catch what the sender communicates as it seems to the sender and having the ability to communicate this to the sender. Empathy was measured utilizing the instructions of Carkhuff (1969, vol. I).

Core conditions. Refers to the dimensions of empathy, genuineness, and non-possessive warmth as defined by Truax and Carkhuff (1976).

Delimitations

1. Only students at Utah State University were used as subjects in this study.

2. A larger group of control subjects would have permitted more extensive analysis for any sex differences.

3. The volunteers were evaluated on pencil and paper instruments and not while actually working on Help-Line.
4. No provisions to control for the Hawthorne Effect were incorporated into this study.

5. There were no provisions to partial out the instructor effects. Other instructors would certainly give different emphasis to the various training exercises.

6. Only the CST was used to measure Conceptual Level.

7. Only the CCDI was used to measure discrimination of core conditions.

8. Only the CCCI was used to assess empathy.

Any conclusions drawn from this research should incorporate these limitations and their possible effects.
Review of Literature

Volunteer Crisis Intervention

Telephone Services

Telephone counseling services called by such names as hotlines, helplines, switchboards or other similar names were first established in the 1950's (Bermin, Davis, & Phillips, 1973). They were formed in response to the need of persons for whom immediate help was paramount such as suicide and drug overdoses. Hotlines had advantages over more traditional mental health facilities in that they were generally open 24 hours a day to give immediate intervention and they offered anonymity to the caller. Hotlines were also as convenient as a telephone (Dilley, Lee, & Verrill, 1971; Schmitz & Mickelson, 1972). Killeen and Schmitz (1973) describe how they were originally begun and staffed by the counter-culture of the Sixties to deal with drug crises and how they have since become part of the status quo of community mental health services.

Hotlines have also evolved to offer general counseling, information, and referral sources. Their effectiveness is inferred in that the National Directory (1973) lists over 1,000 such services in the United States. Carothers and Inslee (1974) estimate that between 50 and 100 persons are involved with each hotline. This means that at least 50,000 persons were involved as paraprofessionals who are presumed to have some competence in counseling. Hotlines seem to have filled a void in the mental health services of most communities.
The first published reports concerning telephone counseling dealt primarily with the suicidal caller (Kapham & Litman, 1962; Bartholmew & Kelly, 1963; Litman, Farberow, Schneidman, Heillio, & Kramer, 1965; Tabachnick & Klugman, 1965; Lamb, 1969; Murphey, Wetzel, Swallwo, & McClure, 1969). Assessment techniques to determine the seriousness of the suicide threat and effective treatment procedures evolved from these studies.

As the number of hotlines increased, professionals began publishing descriptive studies in professional journals (Tucker, Megenity, & Vigil, 1970; McCarthy, Berman, & Alan, 1971; Briggs, 1972; De Cell, 1972; Delworth, Rudow, & Taub, 1972; Berman et al., 1973; McCord & Packwood, 1973; Spivack & Troupe, 1973). These reports describe selection procedures, training procedures, operating procedures, analyses of the calls, and recommendations to other services. The training procedures all emphasize didactic instruction and role playing. Non-directive counseling is the theoretical approach that virtually all centers teach, but the above reports offer no data to show that paraprofessionals are able to effectively use this model. McCord and Packwood (1973) conclude that there is little communication among existing services.

The number of empirical studies concerning hotlines are few in number. As visual communication has been shown to be a powerful variable in the establishment of interpersonal relationships (Shapiro, 1966; Mehrabian, 1968), one of the first studies undertaken was to test the effects of eliminating these cues. Dilley et al. (1971)
compared face to face, confessional, and telephone counseling. Their results indicated that there were no essential differences between the three situations with respect to empathetic understanding on the part of the counselor.

Carothers and Inslee (1974) conducted a study which rated workers drawn at random from hotlines throughout the United States with respect to empathetic understanding. The mean empathy rating on Carkhuff's (1969, vol. I) 5-point scale was 1.95. This rating indicates that workers in general offer as good a level of empathetic understanding as can be found in interpersonal relationships generally available (Carkhuff & Berenson, 1967). The study also showed that the level of empathy tended to increase as the length of the conversation increased.

Tanley (1974) used hotline services to conduct research on the Whitehorn-Betz A-B theory of counselor interaction. The theory predicts that type A persons will be more effective with schizoid patients and type B persons will be more effective with intropunitive neurotic patients. The theory found support in the hotline setting as it does in face to face settings.

Berman et al. (1973) studied the relationship between the number of calls to the University-based hotline and the number of persons coming to the University counseling center. They found the two services to offer different kinds of help to different kinds of people. Their research suggested that the two services seem to function independently of each other.
In studying the personality characteristics of hotline workers, Turner (1973) found volunteers to be more self-controlled, tolerant, and dedicated to social improvement as compared to a group of non-volunteers. Trap and Spanier (1973) administered the Personal Orientation Inventory, Tennessee Self-Concept Scale, and Sixty Item Self-Disclosure Scale to a group of hotline workers and concluded that "the volunteer emerges as a flexible, spontaneous, self-actualizing individual with a capacity for warmth and understanding and an openness in his relationships with others" (p. 249).

There is only one study that looks at personality factors and the worker's ability to be effective. Maw (1974) studied the effect of conceptual level on the ability to discriminate between more and less empathetic responses. Conceptual level is a part of a social-psychological theory formulated by Harvey et al. (1961) called Conceptual Systems Theory. Conceptual level is a measure of how a person cognitively views the world on a dimension of concreteness and abstractness. Maw found that workers who are concrete in their cognitive view of the world are impaired in their ability to discriminate between levels of empathy.

McCord and Packwood (1973) sum up the situation by stating that "to date there is almost no empirical evidence concerning what kind of person makes the best telephone listener" (p. 727).

In general, there is little data concerning hotlines. Carothers and Inslee (1974) state that "surprisingly little attention has been given to a broadly based activity that involves tens of thousands of persons"
acting in a lay counselor role" (p. 274). There is no indication that these services will cease to exist even though the drug problem for which many were originally established seems to have declined (McCord & Packwood, 1973).

Accountability

The profession of counseling psychology has recently been attacked by persons both in and outside of the field for not being more accountable. Counselor training, and client treatment programs have traditionally been devised with clinical judgment as the main evaluative device and little scientific data to support conception or facilitation (Hosford & Ryan, 1970). This lack of scientific data has not been resultant from a lack of concern but rather from a lack of adequate methodology. One of the methodological difficulties preventing the evaluation of counselor training programs has been the lack of agreement among professionals regarding what characteristics or behaviors therapists should exhibit to be effective. Another difficulty is that professionals have not come to complete agreement as to just what desired client outcome is. The therapeutic effectiveness of a counselor is difficult to examine when there is no agreement as to what mental health is. Numerous theories of personality and behavior differ with respect to desired client outcome (Carkhuff & Berenson, 1967). A further methodological problem is that many of the variables that counseling psychologists have felt to be important and necessary for client improvement are not readily or easily
measurable. Behaviorists have circumvented this problem by defining everything in observable behavioral terms (Sulzer & Mayer, 1972).

Counseling psychologists in general do not advocate this method entirely as feelings and emotions are thought to be highly significant and these are not easily measured (Carkhuff & Berenson, 1967). Another difficulty is that scientific research design demands that a control group not receive the intended treatment and most psychologists feel it is unethical to delay treatment to persons in need for the sake of a research project. In summary, most counselor training programs do not state specific and measurable goals within their own theoretical framework. Evaluating a program is difficult if no one states what the program sets out to accomplish.

There is great demand for determining the most efficient and effective counseling and guidance procedure, and it is rather ironic that we in the profession have been slower than society to recognize the need for a science-based approach showing accountability and responsibility for our practices. Although several factors may be responsible for the present lack of such accountability, probably the main one is that we have been taught to believe in effectiveness in non-quantifiable terms. Also, our programs have been developed not on a set of procedures verified by scientific investigation but on the basis of what we think or hope will result. Thus, there has been little basis for assessing whether a given procedure accomplishes its objective for a given program. (Hosford & Ryan, 1970, p. 221)

The assessment of counselor effectiveness has always presented a formidable problem to those educating professional or paraprofessional counselors (Joslin, 1965; Engelkes & Roberts, 1970; Truax & Lister, 1970; Carothers & Inslee, 1974; Oden, 1974).

The assessment of hotlines is even more formidable in that it is impossible to contact any of the recipients of the service.
Anonymity of both the caller and the worker is the sine qua non of all hotline services. There can be no selection of callers, no follow-up, no control groups, and no tape recording of calls.

Truax and Carkhuff (1967) extensively studied methods of evaluating the effectiveness of counseling services. Their findings indicated that empathetic understanding, genuineness, and non-possessive warmth (which they call the core conditions) promoted constructive client change as judged by clinical observations and widely used psychometric methods such as the MMPI, EPPS, CPI, etc. (Truax & Carkhuff, 1967; Carkhuff & Berenson, 1967). Carkhuff (1969, vol. I) developed measuring devices for the core conditions making feasible the determination of therapeutic effectiveness without resorting to testing constructive client change. The following section of this review will acquaint the reader with the research focusing on the core conditions and especially with the concept of empathy as it has been shown most often to be related to constructive client change.

Core Conditions

In the 1950's and 1960's counseling or psychotherapy came under attack as being no more effective than no treatment at all (Teuber & Powers, 1953; Brill & Beebe, 1955; Gerard, Saenger & Wile, 1962). Other researchers responded to these attacks and produced data that showed psychotherapy to be effective and justifiable (Shilen, Mosak, & Dreikurs, 1962; Spielberger, Weitz, & Denny, 1962). Both sides made charges of methodological and measurement errors. Eysenck (1960)
went so far as to suggest that psychotherapy is similar to the "wonder cure" developed by Galen the father of modern medicine. "Galen promoted his remedy as follows: All who drink this remedy recover in a short time, except for those whom it does not help, who all die and have no relief from any other medicine. Therefore, it is obvious that it fails only in incurable cases." Truax and Carkhuff (1967) responded to Eysenck's criticism, "after careful review of the relevant research literature, it now appears that Eysenck was essentially correct in saying that average counseling and psychotherapy as it is currently practiced does not result in average client improvement greater than that observed in clients who receive no special counseling or psychotherapy" (p. 5). Truax and Carkhuff explain this statement by noting that some therapists produce negative results and others positive results so that in looking at all of the studies it seems that psychotherapy is of little benefit.

What this evidence bears out is that instead of measuring outcome, a need to measure process exists to discover what conditions lead to therapeutic gain. Specific studies of specific therapists have shown positive results, indicating that their therapy is effective. From this line of reasoning, empathy, genuineness, and non-possessive warmth were shown to be the three core conditions necessary for constructive client change (Carkhuff & Berenson, 1967; Truax & Carkhuff, 1967). The reason for the effectiveness of these three core conditions is that they lead the client to engage in self-exploration which leads to therapeutic improvement (Truax & Carkhuff, 1964, ch. 7,
Truax and Carkhuff (1967) have shown that the three core conditions are most effective when used together but that each condition in and of itself can lead to client improvement.

"The ingredient most often pointed to in theory and most often related to constructive client outcome in research is the level of empathetic understanding" (Truax & Carkhuff, 1967, p. 313). Patterson (1968) states that empathy is the therapeutic dimension for which there is greatest agreement among therapists as to its necessity for therapeutic improvement.

Truax and Carkhuff (1967) state that the training of counselors should begin with the concept of empathy. Once this concept is learned and practiced the other two core conditions are grasped fairly quickly.

Truax and Carkhuff (1967) describe a high level of empathy as follows:

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. His response not only indicates his sensitive understanding of the obvious feelings, but also serve to clarify and expand the client's awareness of his own feeling or experiences.

[A low level of empathy is described in the following way:] At a low level of accurate empathy the therapist may go off on a tangent of his own or may misinterpret what the patient is feeling. ... At this low level of empathy the therapist is doing something other than listening, understanding, or being sensitive: he may be evaluating the client, giving advice, sermonizing, or simply reflecting his own feeling or experience. (p. 46)

Rogers (1967) defined empathy as when "the therapist senses and expresses the client's felt meaning, catching what the client communicates as it seems to the client" (p. 10).
Most of the research concerning empathy as related to positive client change is reviewed in Carkhuff and Berenson (1967), Truax and Carkhuff (1967), and Carkhuff (1969, volumes I and II). In these three texts, the authors make a strong case for empathy as a necessary therapeutic ingredient for constructive client change. The outcome of the Wisconsin Schizophrenic Project which is probably the most extensive study of schizophrenic patients to date reports that those patients who received the highest levels of empathy showed the greatest reduction on the schizophrenic subscale of the MMPI (Rogers, 1967).

A study by Truax (1963) showed significantly positive correlations between empathy and therapy outcomes for both inpatients and outpatients.

A 1963 study by Bergin and Solomon showed that supervisor ratings of graduate students are correlated with the level of empathy being offered by the graduate student. Those students who were judged by their supervisors to be able to effect constructive client change were offering the highest levels of empathy.

Cartwright and Lerner (1966) hypothesized that those therapists who were more empathetic to their clients would be more accurate at predicting their clients performance on a Q-sort. The hypothesis was confirmed and they concluded that high degrees of empathy are positively correlated with constructive client change.

Carkhuff (1966), and Truax, Wargo, Frank, Imber, Battle, Hoehn, Nash, and Stone (1966) all report significant gains in client outcome measures due to empathetic understanding being offered by the therapist.

In summary, it appears in the literature that empathy has been widely claimed to be one of the core conditions necessary in psychotherapeutic processes for constructive client change. Empathy has been tested in a variety of settings with a variety of therapists. This investigator feels that empathy is a very adequate construct to begin the evaluation of counselors be they professionals or paraprofessionals.

Measurement of empathy. Truax was the first to operationalize the concept of empathy in developing The Accurate Empathy Rating Scale (Truax & Carkhuff, 1967). This device is a 9-point scale which differentiates higher and lower degrees of empathy. The midpoint is the minimally facilitative level for constructive client change. The average reliability computed from 28 studies was .74 (Truax & Carkhuff, 1967).

Robert Carkhuff (1967a) modified the Truax scale by reducing the scale to a 5-point rating system. The midpoint was retained as the minimally facilitative level of empathy. As the 5-point scale was used in the present study, it will be discussed in detail. Carkhuff and Berenson (1967) describes each rating as follows:

At level 3 of the empathetic understanding scale, the verbal or behavioral expressions of the first persons (the counselor or therapist, teacher or parent) in response to the verbal or behavioral expressions of the second person (the client, student, or child), are essentially interchangeable with those of the second person in that they...
express essentially the same affect and meaning. Below level 3, the responses of the counselor detract from those of the client. Thus, at level 1, the lowest level of interpersonal functioning, the first person's responses either do not attend to or detract significantly from the expressions of the second person in that they communicate significantly less of the second person's feelings than the second person has communicated himself. At level 2, while the first person does respond to the expressed feelings of the second person, he does so in such a way that he subtracts noticeably from the affective communications of the second person. Above level 3, the first person's responses are additive in nature. Thus, at level 4, the responses of the first persons add noticeably to the expressions of the second in such a way as to express feelings a level deeper than the second person was able to express himself. Level 5, in turn, characterizes those first person responses which add significantly to the feelings and meanings of the second person in such a way as to express accurately feelings [sic] levels below what the person himself was able to express or, in the event of ongoing deep self-exploration on the second person's part, to be fully with him in his deepest moments. (p. 5)

With respect to variability between populations on this scale, Martin and Carkhuff (1967) report the average level of empathy offered by the general public is midway between level 1 and level 2. "They provide a level of interpersonal functioning not significantly different from neuropsychiatric patients under outpatient care" (Carkhuff & Berenson, 1967, p. 8). Carkhuff's (1967b) assessment of professionals showed outpatient therapists to function slightly above level 2, while inpatient therapists function slightly below level 2. Existentially oriented therapists function midway between level 2 and 3. Psychoanalytically oriented therapists function slightly above level 2. Vocational counselors function below level 2. Behaviorist oriented counselors function below level 2. Carkhuff considers level 3 to be the minimally facilitative level of empathy for constructive client change.

In establishing that this method of research was productive, it became desirable to standardize the helpee stimulus. Greenbaum (1968) found a close relation between (a) responding to helpee expressions in written form; (b) responding to helpee expressions verbally; (c) responding in the helping role. Antonuzzo and Kratochvil (1968) found a close relationship between (a) verbal stimulus expressions and written responses and (b) written stimulus expressions and written responses. Carkhuff (1969, vol. I) states that both written and verbal means of assessing communication of empathy are valid.

With this information, Carkhuff (1969, vol. I) then proceeded to develop a communication scale with standardized helpee expressions. This scale consists of 16 helpee excerpts that are typical of presenting problems in a counseling setting. The respondent is asked to give one response to each excerpt. The responses are rated for empathy on the 5-point Carkhuff scale (Carkhuff & Berenson, 1967) as defined earlier in this review.
Carkhuff also hypothesized that the discrimination of core conditions would be a prerequisite to the communication of empathy. From this line of reasoning, he developed the discrimination scale (Carkhuff, 1969, vol. I). The discrimination scale consists of the same 16 helpee excerpts used in the communication scale and four alternative responses to each excerpt. The person taking the test is asked to rate on a 5-point scale the degree that the response recognizes the concerns of the helpee and is helpful to the helpee. The ratings are then compared to the ratings of experts.

The relationship between the two scales was studied by Anthony and Carkhuff (1969), Antonuzzo and Kratochvil (1968), and Greenbaum (1968). These studies indicated that the two variables are unrelated. Carkhuff, Kratochvil and Friel (1968) made a further study of the two scales and concluded that low discriminators are low communicators but that high discriminators may or may not be high communicators. In other words, discrimination is a necessary but not sufficient condition for the communication of empathy.

In assessing the validity and reliability of the communication and discrimination instruments, Carkhuff (1969, vol. I) states that they have construct validity and stability. This statement is based on the comparability of numerous studies utilizing the same techniques, similar techniques (such as those studies by Truax), and even different techniques (e.g., the standard interview).

Delworth, Rudow, and Taub (1972) devised a communication and discrimination index for a telephone crisis intervention setting.
These indexes, herein referred to as the Crisis Center Discrimination Index (CCDI) and the Crisis Center Communication Index (CCCI) are patterned after the scales of Carkhuff and correlate very highly with Carkhuff's indexes. The two scales, like Carkhuff's, consist of 16 helpee stimulus expressions with four alternative responses to each of the expressions for the discrimination index. The Crisis Center Indexes were chosen for use in this study because they approximate a hotline setting whereas Carkhuff's scales approximate a counseling setting. The Crisis Center Indexes will be described in greater detail in the procedures section of this paper.

Conceptual Systems Theory

Conceptual Systems Theory is the core of a social-psychological theory developed by Harvey et al. (1961). The theory is cognitive in nature and concerns itself with the manner in which an individual processes information. Specifically, the theory refers to the belief system a person has and the effect of this belief system upon behavior and personality. Harvey (1970b) writes:

A belief system represents a set of predispositions to perceive, feel toward and respond to ego involving stimuli and events in a consistent way. As such, it operates as a kind of psychological filter which renders the individual selective in his discriminations, in what he attends to, in what he admits into and keeps out of his system, in what generates positive and negative affect within him and in the ways he responds to certain bonds of family or stimuli. (p. 68)

Harvey (1970a) is concerned with the content and structure of a person's belief system. Content refers to an individual's deeply held
beliefs about such things as God, oneself, or any direct or indirect experience. Structure refers to how an individual organizes these beliefs on dimensions such as openness-closedness, consistency-inconsistency, and complexity-simplicity. By combining structure and content Harvey et al. (1961) developed the construct of Conceptual Level or Conceptual System which refers to the way a person cognitively views their environment on the dimension of concreteness-abstractness. Harvey et al. (1961) have deduced four major Conceptual Levels or Conceptual Systems. Harvey (1970a) describes these levels as follows:

System one [or Conceptual Level one (CL 1)] is characterized by such things as high concreteness of beliefs; high absolutism toward rules and roles; a strong tendency to view the world in an overly simplistic, either-or, black-and-white way; a strong belief in supernaturalism and inherent truth; a strongly positive attitude towards tradition, authority, and persons of power as guidelines to thought and action; an inability to change set, role play, put oneself in another's boots, and to think and act creatively under conditions of high involvement and stress. ... Evidence of role absolutism and deference toward status and power is manifested by the System 1 representative in his tendency to pay little attention to the logic of what is being said or to the expertise of the one saying it, but instead to make his decisions and actions conform to those espoused by a person of power and high status, irrespective of the latter's expertise and informational basis for his espousal. The old adage that 'It's not what is said but who says it that matters' seems to be particularly valid for the person of System 1 beliefs.

Representatives of System 2 [or Conceptual Level 2 (CL 2)] are only slightly less dogmatic, evaluative, and inflexible than System 1 individuals. However, they tend to have strong negative attitudes toward institutions, traditions, and the social referents toward which System 1 persons are strongly positive. Also, representatives of System 2 are the lowest of the four groups in self-esteem and the highest in alienation and cynicism, wanting and needing keenly to trust and rely upon authority and other persons, but fearing to do so because of potential loss of personal control and exploitation. ... One other interesting
and seemingly paradoxical behavior of the System 2 representative centers around his use of authority and power. While he denounces power figures and their use of power when he is of low status and without power, he appears to use authority and power quite rigidly and abusively once he gets them. Espousal of the cause of the weak and disenfranchised by the System 2 individual when he is of low power doesn't seem to stop him from using power unfairly once he acquires it.

A System 3 [or Conceptual Level 3 (CL 3)] belief system is reflected in a strong outward emphasis upon friendship, interpersonal harmony, and mutual aid. This takes the more subtle form of efforts at manipulation through establishing dependency, of oneself on others, and of others on oneself. Those whom the System 3 representative would have dependent upon him are persons of low status and low power, the underdog whom the System 2 representative extols and then abuses. Those on whom the System 3 individual would be dependent are individuals of high status, power, and expertise. The apparent need of the System 3 person to control others through dependency relations tends to be guised under the desire and need to help others. Thus we should expect, and some of our evidence supports this, that members of the helping professions, such as clinical psychology, social work, etc., overly represent the System 3 orientation.

System 4 [or Conceptual Level 4 (CL 4)], the most abstract and open minded of the four belief systems, manifests itself in information seeking, pragmatism, a problem-solving orientation, and a higher ability to change set, withstand stress, and behave creatively. Representatives of this system are neither pro-rule, like System 1 persons, nor anti-rule, like System 2 individuals. They are for rules, structure, and organization when these are utilitarian and instrumental to problem solving and attaining an objective; but they want none of these for its own sake. (pp. 11-12)

In Harvey's theorizing he considers CL 1 and CL 2 individuals to be concrete and CL 3 and CL 4 persons to be abstract. Although individuals are placed into dichotomous groups, he sees the concrete-abstract dimension as a continuum (Harvey et al., 1961).

Harvey (1970a) describes the social environments that lead to each of the four Conceptual Levels. System 1 persons show a history
of being brought up in an environment in which the exploration of values and social roles are prohibited. The beliefs and values of those in authority are strictly imposed and any deviations are punished. The person is taught to rely upon institutional authority for answers to all questions and is not encouraged to explore areas for themselves.

System 2 persons are also brought up by omnipotent parents but the rules are applied inconsistently and arbitrarily. This causes the child to mistrust authority and the institutions that delegate authority. While needing structure on the one hand, the System 2 person is so distrustful of authority that he rebels against it. The System 2 individual is often brought up in an environment which espouses one set of values but in reality practices another.

The System 3 individual tends to grow up in an environment which is overprotective. One or both parents serve as a buffer between the child and the environment thus preventing the child from learning how to effectively cope with the environment. This protection fosters dependency needs. The parent tends to create a need in the child, often creating a situation where the child will fail without their help thus reinforcing the child's view of parental indispensability.

System 4 individuals evolve from an environment which encourages the child to explore both his physical and social worlds. The child is encouraged to derive his own beliefs and values from his own reasoning and experience. Social norms are not arbitrarily imposed and the child's exploration is in an environment of warmth and respect as a person in his own right. Both parents participate equally
in the child rearing and rewards and punishments many times take the
form of explanations to the child.

On a behavioral level there is an abundance of information to
describe and predict how an individual might behave depending upon
his or her Conceptual Level. Harvey (1970b) states that the concrete
person (CL 1 and CL 2) shows a seemingly tight stimulus-response
linkage, the extreme of which can be illustrated by the moth flying
invariably towards the light. The abstract person (CL 3 and CL 4)
utilizes a more complex and enriched mediational system which allows
greater freedom of thought and action.

Harvey (1967, pp. 206-207, 1970b, pp. 70-71) and Miller and
Harvey (1973, p. 445) depict the behavioral manifestations of the
concrete person as opposed to the abstract person. The concrete
person when compared to the abstract person has:

1. A simpler cognitive structure with regard to domains of
high involvement. This means that the concrete person makes fewer
discriminations and sees fewer alternatives in situations that are
ego involved or affectively arousing. Under low involvement condi-
tions there is no difference between the abstract and concrete thinker
(White & Harvey, 1965; Harvey, 1966, 1967; Harvey & Ware, 1967; Har-
vey et al., 1968).

2. A greater tendency towards extreme and polarized judgments
(White & Harvey, 1965; Adams, Harvey, & Heslin, 1966; Ware & Harvey,
1967).
3. A greater reliance upon status and power than on information and expertise as guidelines to beliefs, judgments, and evaluations (Harvey, 1964, 1966; Kritzberg, 1965; Tiemann, 1965, Harvey & Ware, 1967).

4. A greater intolerance of ambiguity and uncertainty, expressed both by higher scores on measures of authoritariansm and dogmatism, and by the tendency to form quick judgments of novel or strange stimuli (Harvey, 1966; Reich, 1966; Ware & Harvey, 1967).

5. A greater need for cognitive consistency plus a greater tendency toward negative arousal when experiencing inconsistencies. While the concrete individual extols the virtues of being cognitively consistent in his beliefs and values, the abstract person is actually more consistent and at the same time the concrete person will experience more discomfort than the abstract person if inconsistencies are made apparent (Harvey, 1965, 1967; Ware & Harvey, 1967).

6. A greater inability to change set and hence greater rigidity in the solution of complex and/or changing problems (Felknor & Harvey, 1963; Harvey, 1963a, 1966; Reich, 1966).

7. A greater insensitivity to subtle cues in the environment and hence a greater susceptibility to obtrusive cues even though they may provide false leads (Harvey, 1965).

8. A poorer capacity to act "as if" or take the role of another. The concrete person has more difficulty than the abstract person in thinking in terms of the hypothetical situation (Harvey, 1963b; Harvey & Kline, 1965).
9. A greater tendency to believe that their opinions will not change with time (Hoffmeister, 1965).

10. A greater tendency to generalize and form impressions of others from highly incomplete data (Ware & Harvey, 1967).

11. A higher score on the factor of dictatorialness as reflected in such behavior as high need for structure, low flexibility, high orientation towards rules, high dictation of procedures, high frequency in the use of unexplained rules, and low encouragement of individual responsibility and originality (Coates, Harvey, & White, 1968; Harvey, White, Prather, Alter, & Hoffmeister, 1968).

12. A poor delineation between means and ends and thus fewer alternatives towards solving problems or achieving goals (Harvey, 1966).

13. A greater tendency towards absolutism, ethnocentrism, and close-mindedness to negative evaluation (Miller & Harvey, 1973).

14. A greater tendency toward trite and normative behavior and thus a lower tendency toward innovation and creativity (Harvey, 1966; Brown & Harvey, 1968).

With regards to population distributions of the four Conceptual Levels Harvey (1970a) gives the following data: From the study of several thousand profiles of liberal art students, 35% are System 1, 15% are System 2, 20% are System 3, and 7% are System 4.

Among undergraduate education majors approximately 45% are System 1, 5% are System 2, 25% are System 3, and 5% are System 4.
Among practicing teachers approximately 55% are System 1, there are almost no System 2 persons, 15% are System 3, and 4% are System 4.

Seventy-five percent of the principals and 90% of the superintendents in the schools of Colorado, Wyoming, and Utah are System 1 representatives.

In Maw's (1974) study at Utah State University, 51% were System 1, there were no System 2 persons, 13% were System 3, and 28% were System 4 individuals.

The reason that the above percents do not add up to 100% is that Harvey has a catchall category for those persons who do not fit into any of the four Conceptual Systems. He calls these persons admixtures (CL 0) and almost nothing is known about them.

In assessing the stability of Conceptual Level, Harvey (1970a) gives the following data. He found that liberal arts students as well as Air Force Academy cadets become slightly, but significantly, more abstract from the freshman to the senior year. On the other hand, studies carried out at two major teacher training institutions found the highest number of System 4 persons occurring at the sophomore level and decreasing from there all the way through graduate training. Harvey states that this is not the result of attrition but rather the effect of socializing influences of the institutions studied.

Maw (1973) tested for Conceptual Level on a group of Help-Line volunteers before and after training and found only one person had changed Conceptual Level.
Measurement of Conceptual Systems. Conceptual Systems Theory postulates both the content and structure of a person's belief system to influence behavior and personality. As discussed previously, content refers to an individual's deeply held beliefs about such things as God, oneself, or any direct or indirect experience. Structure refers to how an individual organizes these beliefs on dimensions such as openness-closedness, consistency-inconsistency, and complexity-simplicity. The criteria by which a person is placed into one of the four Conceptual Levels includes both the content and structure variables.

There are two instruments to date which measure Conceptual Level as postulated by Harvey and his associates (1961). The This I Believe Test (TIB), which is a semi-projective sentence completion test, was developed first. The other instrument is called the Conceptual System Test (CST), which is an objective measure developed from the TIB (Harvey, 1970b).

The TIB was developed specifically to assess Conceptual Level (Harvey, 1964, 1965, 1966; White & Harvey, 1965). The test asks the respondent to indicate his beliefs about a number of social and personality referents by completing the phrase, "This I believe about _________," in two or three sentences. The blank is replaced successively by one of 10 to 12 referents such as "the American way of life," "religion," "marriage," "myself," and the "American flag." With the aim of keeping the responses spontaneous and uncensored, the subject is given a 2-minute time limit for each response.
Miller and Harvey (1973) write that the subjects are then classified as representatives of System 1 if their completions denote high absolutism, high ethnocentrism, high religiosity, high evaluativeness, and a strong identification with the American way of life. The subjects are classified as System 2 if in addition to being highly evaluative and absolute, they express negative attitudes toward most of the referents which the System 1 person holds positive. A person is classified as System 3 if they indicate more differentiation and relativism, and less evaluativeness than System 1 or 2 individuals and at the same time indicate that friendship and people represent a critical aspect of their existence. System 4 functioning is inferred from responses that imply a high degree of novelty and appropriateness, high relativism and contingency of thought, and the general usage of multidimensional rather than unidimensional thought processes.

The CST is an objective measure developed from the completions of persons on the TIB and from certain other tests which purport to measure some of the same characteristics (Harvey, 1970b). There have been eight revisions of this test and factor analysis of each of the eight revisions has yielded six highly consistent factors. Harvey (1970b, pp. 73-74) lists these six factors and some of the representative items as follows:

**Divine fate control (DFC):** is assessed by such items as "I believe that to attain my goals it is only necessary for me to live as God would have me live," "Marriage is the divine institution for the glorification of God," and "There are some things which God will never permit man to know."
Need for structure and order (NSO): is assessed from such items as "I like to have a place for everything and everything in its place," "I like to have my life so arranged that it runs smoothly and without change in my plans," and "I like to plan and organize the details of any work that I undertake."

Need to help people (NHP): is inferred from such items as "I like my friends to confide in me and tell me their troubles," "Contributing to human welfare is the most satisfying human endeavor," and "I enjoy making sacrifices for the sake of the happiness of others."

Need for people (NFP): is measured by such items as "I like to join clubs and social groups," "I like to make as many friends as I can," and "I like to do things with my friends rather than by myself."

Interpersonal aggression (IA): is assessed by such items as "I feel like telling other people off when I disagree with them," "I feel like getting revenge when someone has insulted me," and "I feel like making fun of people who do things I regard as stupid."

General distrust (GD): is measured by such items as "These days a person doesn't know whom he can count on," "You sometimes can't help wondering whether anything is worthwhile anymore," and "Anyone who completely trusts anyone else is asking for trouble."

Individuals are placed into one of the four Conceptual Levels by use of preestablished cutoff scores for each of the six factors. These scores were derived by comparing the CST and TIB in the same populations.
Harvey (1970a) states that both tests are excellent means of assessing Conceptual Level.

In the assessment of Conceptual Level, Harvey (1966) compared results of the TIB with the California F Scale and Rokeach's Dogmatism (D) Scale. Negative correlations were found between the TIB and both the F and D Scales. Harvey (1966) explains the relationship in the following excerpt:

Splitting both F and dogmatism scores at the median into high-low segments and combining them into a 2-2 contingency table provides a fairly accurate way of ascertaining the four systems. System 1 subjects tend to fall in the cell of high authoritarianism-high dogmatism, System 2 subjects to fall in low authoritarianism-high dogmatism, System 3 individuals to fall in the high authoritarianism-low dogmatism, and System 4 representatives to fall in the cell of low authoritarianism-low dogmatism. (p. 49)

Harvey (1967) states that neither scale alone distinguishes between the four Conceptual Levels but both scales together are somewhat effective in discriminating between the Systems.

Research concerning cognitive functioning and empathy will be discussed in the following section of this review along with the rationale for the use of Conceptual Systems Theory in this paper.

Cognitive Functioning and Empathy

Conceptual Systems Theory postulates that there are cognitive differences in the way individuals of different Conceptual Levels perceive the environment. It follows logically that these persons would also respond differently based on these perceptions. Research was presented which shows that persons of differing Conceptual Levels do indeed behave differently.
The literature on the construct of empathy has shown that there are more and less facilitative ways of responding in a helping situation. As was cited in the empathy section of this review, being a professional does not necessarily guarantee adequate levels of empathy in the offering to a client. Berenson and Carkhuff (1967, p. 427) cite 13 studies showing that lay persons who are trained and supervised can do anything that professionals can do and possibly even more in some cases. This would lead one to consider the possibility that maybe there are factors other than training at work in one's ability to communicate core conditions.

Empathy was defined as when "the therapist senses and expresses the client's felt meaning, catching what the client communicates as it seems to the client (Rogers, 1967, p. 10). In order for a therapist to be empathetic to a client, the therapist must first be able to enter into the frame of reference of the client. In light of Conceptual Systems Theory it would seem that the concrete person with his emphasis on rules and obedience plus a simplistic way of looking at things would have a much harder time in doing this than would the abstract person with his emphasis on understanding, flexibility, and a complex manner of processing information. Assuming that there is a relationship between an individual's Conceptual Level and the role he plays in helping others, his belief system could act as a psychological filter which dictates what role that person can assume and thus behave.
Boy and Pine (1969) state,

The mark of a competent counselor is not with his ability to deal with clients who are cut from the same value system or socioeconomic class as himself, but rather his ability to deal with clients who are vastly different from himself. He must prize their right to be before he can ever become involved in a process that will encourage their emergence. (p. 65)

Conceptual Systems Theory predicts that a concrete person will have much more difficulty in understanding another's value system than the abstract person.

Research that leads to the position that Conceptual Level might logically be expected to influence a person's ability to be empathetic is as follows. When compared to the abstract individual the concrete person has:

1. A simpler cognitive structure under high ego involvement and is not able to see as many alternatives in problem solving as is the abstract person (White & Harvey, 1965; Harvey, 1966, 1967; Harvey & Ware, 1967; Harvey et al., 1968).

2. A greater tendency towards extreme and polarized judgments (White & Harvey, 1965; Adams, Harvey & Heslin, 1966; Ware & Harvey, 1967).

3. A greater intolerance of ambiguity and uncertainty (Harvey, 1966; Reich, 1966; Ware & Harvey, 1967).

4. A greater inability to change set and hence greater rigidity in the solution of complex and/or changing problems (Felknor & Harvey, 1963; Harvey, 1963a, 1966; Reich, 1966).
5. A greater inability to sense subtle cues in the environment and hence a greater susceptibility to obtrusive cues even though they may provide false leads (Harvey, 1965).

6. A poorer capacity to act "as if" or take the role of another. The concrete person has more difficulty in thinking in terms of the hypothetical situation (Harvey, 1963b; Harvey & Kline, 1965).

7. A greater tendency to generalize and form impressions of others from highly incomplete data (Ware & Harvey, 1967).

The above results all point towards the concrete person functioning at a lower facilitative level (low levels of the core conditions) than the abstract person.

In summary, it appears that those persons of Systems 3 and 4 would be able to incorporate higher levels of the core conditions than would those individuals of Systems 1 and 2. If this hypothesis is true, then it seems desirable to be able to predict the phenomenon.

Related research. A few studies have been concerned with cognitive functioning and the ability to be empathetic.

Maw (1974) studied the effects of Conceptual Level on an individual's ability to discriminate between more and less empathetic responses. His study showed that CL 1 persons are significantly poorer at making the discrimination than are CL 3 or CL 4 individuals.

There are two studies in the literature which test the effects of a cognitive system as developed by Schroder, Driver, and Streufert (1967). This system is similar to Harvey's system but is concerned only with the structure variable. Corelations between Schroder's...
et al. measures of assessment and Harvey's measures are of low order (Guy, 1971). Guy (1971) studied the effects of cognitive structure as postulated by Schroder et al. on a person's ability to discriminate and communicate accurate empathy and found no significant differences. Heck and Davis (1973) also tested Schroder's et al. theory and found the concrete person to communicate significantly less amounts of empathetic understanding than the abstract person. For an extensive review of the differences between Schroder's et al. theory and Harvey's et al. theory the reader is referred to Maw (1974).

Foulds (1971) tested the effects of dogmatism on the ability to communicate empathy and found no significant differences.

In summary, the data concerned with cognitive functioning and empathy is ambiguous. Some studies have obtained significant results and others have not. Conceptual Systems Theory appears to be a fruitful area of research in testing variables which may affect the way a person responds in a counseling situation. If Conceptual Systems Theory does affect a person's manner of responding, then there would be implications for both the selection and training of persons involved in helping relationships. For these reasons, the investigator chose Conceptual Systems Theory as a variable in the present study.
Objectives and Hypotheses

The specific objectives and hypotheses that were tested are as follows:

Objective A

The first objective was to test the effectiveness of the Help-Line training program at Utah State University. The following null hypotheses were tested:

1. No significant difference exists between the mean scores of discrimination of core conditions for persons who participated in Help-Line training and the control group who did not participate in Help-Line training.

2. No significant difference exists between the mean scores of communication of empathy for persons who participated in Help-Line training and the control group who did not participate in Help-Line training.

Hypotheses 1 and 2 were tested by use of the Crisis Center Discrimination Index and the Crisis Center Communication Index.

Objective B

The second objective was to test for any differences between those persons who after completing training elected to work on Help-Line (workers) and those persons who after completing training elected not to work on Help-Line (nonworkers). The following null hypotheses were tested:
3. No significant difference exists between the mean scores of discrimination of core conditions for workers and nonworkers.

4. No significant difference exists between the mean scores of discrimination of core conditions for males and females.

5. No significant difference exists between the mean scores of communication of empathy for workers and nonworkers.

6. No significant difference exists between the mean scores of communication of empathy for males and females. Hypotheses 3, 4, 5, and 6 were tested by use of the Crisis Center Discrimination Index and the Crisis Center Communication Index.

Objective C

The third objective was to study the effects of Conceptual Level on the ability to discriminate core conditions and communicate empathy. The hypotheses tested were as follows:

7. No significant difference exists between the mean pretest scores of discrimination of core conditions of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects.

8. No significant difference exists between the mean pretest scores of communication of empathy of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects.

9. No significant difference exists between the mean posttest scores of discrimination of core conditions of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects.

10. No significant difference exists between the mean posttest
scores of communication of empathy of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects.

Hypotheses 7, 8, 9, and 10 were tested by use of the Crisis Center Discrimination Index and the Crisis Center Communication Index.

Objective D

Objective four of this study was to test the effects of Conceptual Level as a variable related to workers and nonworkers. The following null hypothesis was tested:

11. No significant difference exists in the distribution of Conceptual Level for workers and nonworkers.

Hypothesis 11 was tested by use of the Conceptual Systems Test.
Procedures

Materials

Description of the Conceptual Systems Test (CST). CST, Form 71, was the instrument used in this study to determine the Conceptual Level of the subjects. The test is published by Test Analysis and Development Corporation, Boulder, Colorado. Machine scoring by the publishers and hand scoring keys are available. There are 48 objective type questions which are answered by making a response on a 5-point Likert type scale, the poles being "I agree completely" and "I disagree completely." The questions and answer blanks are on the same sheet of paper.

Scoring of the Conceptual Systems Test. Subjects are placed into one of the four Conceptual Levels by use of their subscores on the six factors identified in the review of literature section of this paper. The six factors are: Divine Fate Control, Need for People, Need to Help People, Need for Structure and Order, General Distrust, and Interpersonal Aggression. From combinations of these subscores individuals are placed into one of the four Conceptual Levels as follows: An individual is classified as Conceptual Level 1 (CL 1) if his mean score on Divine Fate Control is equal to or greater than 3.75. An individual is classified as Conceptual Level 2 (CL 2) if his mean score on Divine Fate Control is equal to or greater than 3.75, his mean score on Interpersonal Aggression is 3.75 or more, and his mean score on General Distrust is greater than or equal to 3.75. A person is classified as Conceptual Level 3 (CL 3) if his
mean score on Divine Fate Control is less than 3.75, and his mean score on Need for People is greater than or equal to 3.75. An individual is designated as Conceptual Level 4 (CL 4) if his mean score on Divine Fate Control is less than 3.75, his mean score on Need for Structure and Order is less than 3.75, and his mean score on Interpersonal Aggression is 3.75 or less (Harvey & Hoffmeister, 1971).

Description of the Crisis Center Discrimination Index (CCDI). This is a paper and pencil instrument developed at Colorado State University, Fort Collins, Colorado, for the assessment of hotline workers. The CCDI is patterned after the discrimination index of Carkhuff (Carkhuff, 1969, vol. I; Delworth et al., 1972).

The instrument consists of 16 helpee excerpts or stimulus expressions which are essentially presenting problems typical of college students. To each excerpt are four alternative responses, each representing different levels of the core conditions as defined by Carkhuff (1969, vol. I). The subject is asked to read each response and then rate each response on a 5-point Likert type scale with ratings at each half-point. This is done for each of the 16 excerpts which give a total of 64 rated responses. As the basis for the rating, the subject is instructed to use his own experiences, knowledge, attitudes, and feelings about what seems most helpful under the conditions expressed.

Scoring of the Crisis Center Discrimination Index (CCDI). To score for the discrimination of core conditions the ratings made by the subjects are then compared directly with ratings done by experts.
When a rating of a subject differs widely from a rating of experts, then there is a low degree of discrimination of core conditions. It makes no difference whether the response is scored well above or well below that of experts. The discrimination index can then be said to be a measure of how closely the subject's responses show a sensitivity to and a preference for responses characterizing high levels of the core conditions of empathy, genuineness, and nonpossessive warmth.

The discrimination index score is computed by summing the absolute deviations between the subject's score and the score of experts. There are four responses to each of the 16 excerpts and thus there are 64 values to sum. The higher the discrimination score, the poorer the subject is in discriminating core conditions.

Description of the Crisis Center Communication Index (CCCI). This instrument was developed at Colorado State University, Fort Collins, Colorado, for the assessment of hotline workers. The CCCI is patterned after the Carkhuff index of communication (Carkhuff, 1969, vol. I) and uses the same scoring procedures (Delworth et al., 1972).

The instrument is a paper and pencil instrument and consists of the same 16 helpee excerpts as used in the CCDI. The subject is given the excerpts and asked to write one response to each excerpt that would be helpful to the person seeking help. The subjects are instructed to consider the excerpts as presenting problems made early in the course of conversation. The person need not be thought of as a formal client but as another individual seeking help. As a basis
for the response, the subject is instructed to use his own experiences, knowledge, attitudes, of feelings about what seems most helpful under the conditions expressed.

Scoring of the Crisis Center Communication Index (CCCI). To score the CCCI for communication of empathy, the instructions of Carkhuff (1969, vol. I) are employed. Carkhuff has shown this method to be both reliable and valid for assessing facilitative interpersonal communication. The responses to the stimulus expressions are rated on Carkhuff's 5-point empathy scale as follows:

1. A score of 1 is given if the verbal expressions of the helper either do not attend to or detract significantly from the verbal expressions of the helpee. The helper does everything but express that he is listening, understanding, or being sensitive to even the most obvious feelings of the helpee.

2. A score of 2 is given if the expressions of the helper are such that they subtract noticeable affect from the helpee. The helper communicates some awareness of the obvious feelings of the helpee but distorts the level of meaning. The helper may indicate his own ideas of what is going on or may be giving advice.

3. A score of 3 is given if the expressions of the helper are essentially interchangeable with those of the helpee in that they express essentially the same affect and meaning. The helper neither subtracts or adds to the expressions of the helpee. He is responding to surface feelings and communicating an openness to go beneath the surface feelings. Level 3 constitutes the minimal level of facilitative interpersonal functioning.
4. A score of 4 is given if the responses of the helper add noticeably to the expressions of the helpee in such a way as to express feelings a level deeper than the helpee is able to express himself. The helper's responses add deeper feeling and meaning than is expressed by the helpee.

5. A score of 5 is given if the helper's responses add significantly to the feelings and meaning of the expressions of the helpee. The helper indicates that he is in full awareness of the helpee and has a comprehensive and accurate understanding of the individual's deepest feelings.
Methodology

The method for each objective will be discussed separately as different subjects and research designs were used to examine the four objectives of this study.

Objective A. The first objective was to test the effectiveness of the Help-Line training program at Utah State University. A pre-test-posttest control group design (Campbell & Stanley, 1963) was used. Training was the independent variable and the discrimination of core conditions and the communication of empathy were the dependent variables.

1. Subjects. The subjects who participated in the treatment group were those persons who volunteered for Help-Line training at Utah State University during Winter Quarter, 1975. There were 23 subjects in this group. Thirteen were male and 10 were female. Nine were freshmen, four were sophomores, six were juniors, and four were seniors. These subjects will be subsequently referred to as Treatment Group 1. Eight subjects began training but did not complete the training procedures and were thus eliminated from the subject pool.

Nine subjects served as controls for Treatment Group 1. These subjects volunteered for Help-Line training during Winter Quarter, 1975, but did not receive any training whatsoever. Three of the subjects were male and six were female. Five were freshmen, one was a sophomore, one was a junior, and two were seniors. One subject completed the pretest but not the posttest and was thus eliminated from the subject pool.
2. Method. The subjects in Treatment Group 1 were selected as follows. Help-Line advertised via the campus newspaper, campus radio station, and posters placed throughout the campus for volunteers to staff the telephones. The advertising was done at the beginning of Winter Quarter, 1975. Prospective members were asked to fill out an application form at the University Counseling Center. In the advertising, the students were told where the training sessions were held and when they began. All training sessions were held on Wednesday evenings from 7 o'clock P.M. to approximately 10 o'clock P.M. in the University Center. Training consisted of five sessions.

The first training session was held on January 22, 1975. At the beginning of the first training session the volunteers were informed that research on the effectiveness of the training procedures was being done and if any persons did not wish to partake in the research part of the training they did not have to do so. None of the volunteers objected. The training procedures are described in detail in Appendix A. At the end of the first training session the volunteers completed the instruments, as the investigator wished to establish rapport with the subjects before the testing and the first training session taught nothing related to the core conditions or empathy. First they completed the CST, then the Crisis Center Communication Index, and finally the Crisis Center Discrimination Index. The reason that the communication index was given before the discrimination index was that each index as discussed previously uses the same 16 stimulus excerpts representing possible presenting problems. The
four responses that the discrimination index provides to each stimulus expression could bias a subject's responses to the communication index if they were read first. The subjects completed four more training sessions and then took the posttests. Four weeks elapsed between pretesting and posting. The posttesting comprised first the Crisis Center Communication Index and then the Crisis Center Discrimination Index.

Thirty-one subjects took the pretest and 23 subjects completed the posttest. The eight subjects who did not take the posttest were not included in this study.

The testing for this study required between 1 1/2 and 2 1/2 hours for the pretest and between 1 and 2 hours for the posttest.

The subjects did not participate anonymously in this study so that it would be possible to eliminate the pretests for any subject who did not complete the posttest in the statistical analysis. The subjects were informed before the pretesting that their performance on the tests would not enter into any decision on whether or not they would be allowed to work on the telephones as the testing was strictly for research purposes. Although the concept of empathy was taught during the training sessions and presented as a facilitative means of responding on the lines, at no time were the subjects informed that the instrumentation was concerned with the measurement of empathy.

The CST's were then scored for Conceptual Level, the Crisis Center Communication Indexes were scored for mean empathy level, and the Crisis Center Discrimination Indexes were scored for the
discrimination score. Complete descriptions of the scoring procedures are given on pages 41 and 42 of this paper.

The above description constitutes the procedures for Treatment Group 1.

The control group in this study was selected and tested as follows. Nine subjects who were not present for the first training session of Winter Quarter, 1975, presented themselves at the second session and asked to be trained. These subjects were informed that training had begun the week earlier and that they could not train during Winter Quarter, but they were needed for a research project regarding Help-Line training. The subjects were told that if they participated in the research project during Winter Quarter they could train for Help-Line during Spring Quarter, 1975, and not have to complete the instruments again as all Help-Line volunteers were requested to take them once. The subjects were informed that if they completed the instruments at this time, they could leave early on the two nights that the volunteers would be taking the instruments during Spring Quarter, 1975, training sessions. The subjects were also informed that they would be contacted in 4 weeks to complete the instruments a second time.

All nine individuals agreed to serve as control subjects for this study. The subjects were then administered the CST, the Crisis Center Communication Index, and the Crisis Center Discrimination Index in that order.

One student came to the University Counseling Center during the second week of training asking to be trained for Help-Line that
Quarter. The investigator informed this student that training had already begun but that he was needed for a research project. The subject was told the same as the subjects described above and the subject agreed to partake in the study. This subject was administered the CST, Crisis Center Discrimination Index, and Crisis Center Communication Index at the time of his coming to the University Counseling Center.

Four weeks later the investigator contacted the 10 subjects in the control group and requested them to complete the Crisis Center Communication Index and the Crisis Center Discrimination Index for a second time. The subjects were informed that their scores were needed again for comparison to the treatment group. The investigator gave verbal instructions for the subjects to be sure to complete the communication scale before the discrimination scales and also left written instructions with the instruments to that effect. The investigator left the instruments with the subjects and asked them to return them to the University Counseling Center within the week if at all possible.

Nine of the 10 subjects returned the instruments to the investigator. The one subject who did not return the instruments was re-contacted twice but still did not return them and was thus eliminated from the subject pool. The CST's were scored for Conceptual Level, the Crisis Center Communication Indexes were scored for mean empathy level, and the Crisis Center Discrimination Indexes were scored for the discrimination score.
The above description constitutes the procedures for the control group of this study.

The investigator attempted to replicate the procedures described above during Spring Quarter, 1975, to increase the N for both the treatment group and control group. The investigator experienced no difficulty in testing the Spring Quarter, 1975, Help-Line volunteers for use in this study, but was unable to test any control subjects. No persons who were not present at the first training session came to the second training session requesting training. One possible explanation is that previous to Winter Quarter, 1975, persons coming to the second training session requesting to be trained were generally included in the sessions. The possibility exists that the information that this was no longer possible was communicated to prospective volunteers as many volunteers learn of Help-Line through friends who have trained the previous quarter. The Winter Quarter volunteers may have informed their friends that they had to be present at the first training session in order to be trained. Due to the lack of a control group, the volunteers who were trained during Spring Quarter, 1975, were not included in the treatment group for this objective.

While the control group in this study was not strictly from the same population as those persons who were in the treatment group, the investigator believes that the sample was adequate for use in this study. All of the persons in the control group gave between 3 1/2 and 4 1/2 hours of their time for this study. This represents a considerable commitment to Help-Line.
A control group from the same population was not utilized because this would have necessitated deferring training to half of the volunteers who came for training. Help-Line is a volunteer service and the investigator felt that to defer training was unethical. On the pragmatic side, Help-Line needs all the volunteers it can get to adequately staff the lines. To defer half of the volunteers for two quarters would have put the service in serious jeopardy with regards to staffing. The ethical implications of this problem were also duly noted.

In any event, the control group is seen as one of the delimitations of this study and should be noted by the reader.

To test for any significant differences in the discrimination and communication scores between Treatment Group 1 and the control group (hypotheses 1 and 2) one-way analysis of covariance (Ferguson, 1971) was used.

Objective B. The second objective was to test for any differences between those persons who after completing training elected to work on Help-Line (workers) and those persons who after completing training elected not to work on Help-Line (nonworkers). Electing to work or not to work plus sex of subject were the independent variables and the discrimination of core conditions and the communication of empathy were the dependent variables.

1. Subjects. Volunteers from Winter Quarter, 1975, and Spring Quarter, 1975, were utilized as subjects. The Winter Quarter volunteers were labeled as Treatment Group 1 and discussed previously on
page 43 of this paper. The Spring Quarter, 1975, volunteers are labeled as Treatment Group 2 for use in this paper.

Treatment Group 2 consisted of 30 subjects. Eight were male and 22 were female. Seven were freshmen, 10 were sophomores, 7 were juniors, 3 were seniors, and 3 were graduate students. Five subjects began the training but did not complete the training procedures and were thus eliminated from the sample.

Combining Treatment Groups 1 and 2 gives a sample of 53 subjects. Twenty-three were male and 30 were female. Seventeen were freshmen, 14 were sophomores, 12 were juniors, 7 were seniors, and 3 were graduate students.

2. Method. The treatment for Treatment Group 1 was discussed previously on page 44 of this paper. The treatment for Treatment Group 2 was a replication of this same treatment. Copious notes were kept from the training of Treatment Group 1, and an attempt was made to follow these notes exactly for the training of Treatment Group 2. The investigator and a psychologist from the University Counseling Center served as trainers for Treatment Groups 1 and 2. There were no gross deviations from the procedures so far as the investigator could determine. Training for Treatment Group 2 commenced on April 16, 1975. The meetings were held on Wednesday evenings from 7 o'clock P.M. to approximately 10 o'clock P.M. There were five training sessions. As a human element was present in the training sessions the investigator acknowledges that an exact replication was not possible and this fact should be noted by the reader.
Six weeks after the end of training for Treatment Group 1, the investigator asked the student director for a list of the Winter Quarter volunteers who had worked at least one 2-hour shift since the termination of training. Eleven of the 23 subjects had worked at least one 2-hour shift and these subjects were designated as workers. The 12 subjects who had not worked at least one 2-hour shift were designated as nonworkers.

Six weeks after the end of training for Treatment Group 2, the investigator again requested the student director for a list of the Spring Quarter volunteers who had worked at least one 2-hour shift since the end of the training sessions. Thirteen subjects met this criteria and were designated as workers. The 17 subjects who had not worked at least one 2-hour shift were designated as nonworkers.

Combining these subjects for both Winter and Spring Quarters gave a total of 24 workers and 29 nonworkers. Of the workers, 11 were male and 13 were female. Seven were freshmen, 6 were sophomores, 6 were juniors, 4 were seniors, and 1 was a graduate student. Of the nonworkers, 12 were male and 17 were female. Ten were freshmen, 8 were sophomores, 6 were juniors, 3 were seniors, and 2 were graduate students.

To test for any differences in the mean discrimination and communication scores between workers and nonworkers and between males and females (hypotheses 3, 4, 5, and 6) two-way analysis of variance (Ferguson, 1971) was used.
Objective C. The third objective of this study was to test the effects of Conceptual Level on the ability to discriminate core conditions and communicate empathy. Conceptual Level was the independent variable and the discrimination of core conditions and the communication of empathy were the dependent variables.

1. Subjects. The subjects were those individuals who completed Help-Line training during Winter or Spring Quarters, 1975 (Treatment Groups 1 and 2). Fifty-three persons were in this group. Seventeen were CL 1, 16 were CL 3, and 20 were CL 4 individuals.

2. Method. The subjects were categorized into one of the four Conceptual Levels by use of the CST. There were no CL 2 individuals in the sample. One individual was a CL 0 (admixture) but this subject did not complete the training and was thus eliminated from the subject pool.

Both pretest and posttest scores of discrimination and communication were compared by Conceptual Level (hypotheses 7, 8, 9, and 10). One-way analysis of variance (Ferguson, 1971) was used to make this comparison.

Objective D. The fourth objective of this study was to test the effects of Conceptual Level as a variable related to workers and nonworkers. Conceptual Level was the independent variable and electing to work or not to work was the dependent variable.

1. Subjects. The subjects for this analysis were those persons in Treatment Groups 1 and 2. The subjects were categorized by two variables--workers vs. nonworkers and Conceptual Level. Of the workers,
7 were CL 1, 12 were CL 3, and 5 were CL 4 individuals. Of the non-workers, 10 were CL 1, 4 were CL 3, and 15 were CL 4 individuals.

2. Method. The subjects were categorized into one of the four Conceptual Levels by use of the CST. An analysis of the distribution by Conceptual Level and electing to work or not to work (hypothesis 11) was made by use of the Chi-square test for independence (Ferguson, 1971).
Scoring of the Instruments

The CST protocols for this study were hand scored by the Counseling and Testing Center at Utah State University. This is an objective type test which is scored by use of scoring keys.

The Crisis Center Communication Index protocols were scored by two raters following the instructions of Carkhuff (1969, vol. I) as discussed on page 41 of this paper. The rater training procedure is described in Appendix B. An interrater reliability coefficient of +.96 (Pearson r) was reached between the total mean scores. The investigator served as one rater and an undergraduate student who worked at the Counseling and Testing Center at Utah State University served as the other rater. The undergraduate student knew nothing of the design or specific objectives of this study. Both raters rated each response independently and were blind to the experimental condition under which the response was given. Each subject's final mean score of empathy was computed by averaging the scores of the two raters.

The Crisis Center Discrimination Index protocols were all scored by the investigator as this is an objective type test and requires no subjective judgments. The absolute deviation score was used for the statistical analysis.
Results

To test hypothesis 1 (no significant difference exists between the mean scores of discrimination of core conditions for persons who participated in Help-Line training and the control group who did not participate in Help-Line training) one-way analysis of covariance was used. Table 1 summarizes the results of this analysis.

Significance was obtained for hypothesis 1 at the .01 level. Those persons who were trained for Help-Line (Treatment Group 1) scored significantly better than the control group on the Crisis Center Discrimination Index.

To test hypothesis 2 (no significant difference exists between the mean scores of communication of empathy for persons who participated in Help-Line training and the control group who did not participate in Help-Line training) one-way analysis of covariance was used. Table 2 summarizes the results of this analysis.

Significance was obtained at the .05 level for hypothesis 2. Those persons who were trained for Help-Line (Treatment Group 1) did significantly better on the Crisis Center Communication Index than did the control group.

To test hypothesis 3 (no significant difference exists between the mean scores of discrimination of core conditions for workers and nonworkers) and hypothesis 4 (no significant difference exists between the mean scores of discrimination of core conditions for males and females) two-way analysis of variance was used. Table 3 summarizes the results of this analysis.
Table 1
Analysis of Covariance and Adjusted Means of Discrimination of Core Conditions by Experimental Condition

<table>
<thead>
<tr>
<th>Source</th>
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<th>F</th>
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</thead>
<tbody>
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<td></td>
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<tr>
<td>Treatment</td>
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<td>3,007</td>
<td>16.08**</td>
</tr>
<tr>
<td>Error</td>
<td>29</td>
<td>5,426</td>
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</tbody>
</table>

<table>
<thead>
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<td></td>
<td>52.14</td>
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<tr>
<td></td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>74.92</td>
<td></td>
</tr>
</tbody>
</table>

*a Smaller mean score is more accurate discrimination.
**Significant at .01 level.

Table 2
Analysis of Covariance and Adjusted Means of Communication of Empathy by Experimental Condition

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>s.s.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>30</td>
<td>6.0</td>
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</tr>
<tr>
<td>Training</td>
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<td>8.6</td>
<td>7.33*</td>
</tr>
<tr>
<td>Error</td>
<td>29</td>
<td>4.79</td>
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</tr>
</tbody>
</table>

<table>
<thead>
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</thead>
<tbody>
<tr>
<td></td>
<td>2.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
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</tr>
<tr>
<td></td>
<td>2.09</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .05 level.
Table 3

Two-way Analysis of Variance Summary and Adjusted Mean Scores\(^a\) for the Discrimination of Core Conditions by Electing to Work or Not Work and Sex

<table>
<thead>
<tr>
<th>Source</th>
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<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>52</td>
<td>356.47</td>
<td></td>
</tr>
<tr>
<td>Working</td>
<td>1</td>
<td>7.40</td>
<td>.03</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>58.64</td>
<td>.26</td>
</tr>
<tr>
<td>Interaction</td>
<td>1</td>
<td>53.08</td>
<td>.23</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>225.47</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Workers</th>
<th>Nonworkers</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>54.3</td>
<td>57.1</td>
<td>55.7</td>
</tr>
<tr>
<td>Female</td>
<td>54.2</td>
<td>52.9</td>
<td>53.5</td>
</tr>
<tr>
<td>Electing to work or not work</td>
<td>54.2</td>
<td>55.0</td>
<td></td>
</tr>
</tbody>
</table>

No significant differences

\(^a\) Smaller mean score is more accurate discrimination.
Null hypotheses 3 and 4 were tenable. For Treatment Groups 1 and 2 there were no significant differences between workers and nonworkers nor between males and females on the Crisis Center Discrimination Index.

Hypothesis 5 (no significant difference exists between the mean scores of communication of empathy for workers and nonworkers) and hypothesis 6 (no significant difference exists between the mean scores of communication of empathy for males and females) were tested by use of two-way analysis of variance. Table 4 summarizes the results of this analysis.

Null hypotheses 5 and 6 were tenable. For Treatment Groups 1 and 2 no significant differences between workers and nonworkers were found on the Crisis Center Communication Index.

Hypothesis 7 (no significant difference exists between the mean pretest scores of discrimination of core conditions of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects) was tested by use of one-way analysis of variance. Table 5 summarizes the results of this analysis.

Null hypothesis 7 was tenable. For Treatment Groups 1 and 2 there were no significant differences between the different Conceptual Levels on the Crisis Center Discrimination Index pretest.

To test hypothesis 8 (no significant differences exist between the mean pretest scores of communication of empathy of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects) one-way analysis of variance was used. Table 6 summarizes the results of this analysis.
Table 4
Two-way Analysis of Variance Summary and Adjusted Mean Scores for the Communication of Empathy by Electing to Work or Not Work and Sex

<table>
<thead>
<tr>
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<th>m.s.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>52</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Working</td>
<td>1</td>
<td>.07</td>
<td>.69</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>.12</td>
<td>1.18</td>
</tr>
<tr>
<td>Interaction</td>
<td>1</td>
<td>.0005</td>
<td>.005</td>
</tr>
<tr>
<td>Error</td>
<td>47</td>
<td>.10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Workers</th>
<th>Nonworkers</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2.43</td>
<td>2.52</td>
<td>2.48</td>
</tr>
<tr>
<td>Female</td>
<td>2.55</td>
<td>2.62</td>
<td>2.56</td>
</tr>
<tr>
<td>Electing to work or not work</td>
<td>2.49</td>
<td>2.57</td>
<td></td>
</tr>
</tbody>
</table>

No significant differences.
### Table 5

Analysis of Variance and Adjusted Means for Pretest Scores of Discrimination of Core Conditions by Conceptual Level

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>m.s.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual Level</td>
<td>1</td>
<td>726.06</td>
<td>2.76</td>
</tr>
<tr>
<td>Error</td>
<td>50</td>
<td>262.65</td>
<td></td>
</tr>
</tbody>
</table>

CL 1  | CL 3  | CL 4
79.6   | 69.8   | 67.8

No significant differences.

a Smaller mean score is more accurate.

### Table 6

Analysis of Variance and Adjusted Means for Pretest Scores of Communication of Empathy by Conceptual Level

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>m.s.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual Level</td>
<td>1</td>
<td>.056</td>
<td>1.00</td>
</tr>
<tr>
<td>Error</td>
<td>50</td>
<td>.056</td>
<td></td>
</tr>
</tbody>
</table>

CL 1  | CL 3  | CL 4
2.01   | 2.01   | 2.11

No significant differences.
Null hypothesis 8 was held as tenable. For Treatment Groups 1 and 2 there were no significant differences between the different Conceptual Levels on the Crisis Center Communication pretest.

To test hypothesis 9 (no significant difference exists between the mean posttest scores of discrimination of core conditions of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects) one-way analysis of variance was used. Table 7 is a summary of the results of this analysis.

Hypothesis 9 was held as tenable. For Treatment Groups 1 and 2 there were no significant differences between Conceptual Levels on the Crisis Center Discrimination posttest.

Hypothesis 10 (no significant difference exists between the mean posttest scores of communication of empathy of persons who participated in Help-Line training for CL 1, CL 3, and CL 4 subjects) was tested by use of one-way analysis of variance. Table 8 summarizes the results of this analysis.

Null hypothesis 10 was rejected at the .05 level. For Treatment Groups 1 and 2 Conceptual Level did influence the subject's responses on the Crisis Center Communication Index posttest. To find the source of the significance a multiple comparison between all combinations of means was run as suggested by Tukey (Guilford, 1965). Table 9 summarizes the results of this analysis.

The results of Table 9 indicate that for Treatment Groups 1 and 2 there were no significant differences between CL 1 and CL 3 individuals on the Crisis Center Communication Index posttest but CL 4
Table 7
Analysis of Variance and Adjusted Means\textsuperscript{a} for Posttest Scores of Discrimination of Core Conditions by Conceptual Level

<table>
<thead>
<tr>
<th>Source</th>
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<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual Error</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CL 1</th>
<th>CL 3</th>
<th>CL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.4</td>
<td>50.1</td>
<td>53.0</td>
<td></td>
</tr>
</tbody>
</table>

No significant differences
\textsuperscript{a}Smaller mean score is more accurate discrimination.

Table 8
Analysis of Variance and Adjusted Means for Posttest Scores of Communication of Empathy by Conceptual Level

<table>
<thead>
<tr>
<th>Source</th>
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<th>m.s.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Conceptual Level</td>
<td>50</td>
<td>.48</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CL 1</th>
<th>CL 3</th>
<th>CL 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.42</td>
<td>2.44</td>
<td>2.71</td>
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</table>

*Significant at .05 level.
Table 9
Multiple Comparison of Communication of Empathy Posttest Scores by Conceptual Level

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Significance</th>
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<td>none</td>
</tr>
<tr>
<td>CL 1 - CL 4</td>
<td>p less than .05</td>
</tr>
<tr>
<td>CL 3 - CL 4</td>
<td>p less than .05</td>
</tr>
</tbody>
</table>

Subjects scored significantly higher than CL 1 and CL 3 subjects.

To test hypothesis 11 (no significant difference exists in the distribution of Conceptual Level for workers and nonworkers) Chi-square was used. Tables 10, 11, 12, and 13 summarize this analysis.

The above Chi-square test for independence for Treatment Groups 1 and 2 was significant at the .02 level. Hypothesis 11 was rejected. There was a significant difference in the distribution of Conceptual Level for workers and nonworkers. To discover the source of the significance a Chi-square was tested between workers and nonworkers for each Conceptual Level. Table 13 shows this analysis.

Table 13 indicates that for CL 1 individuals the number who elect to work and the number who elect not to work are not significantly different. For CL 3 individuals there was significance at the .05 level. More CL 3 individuals work than do not work. Significance at the .05 level was also found for CL 4 individuals. More CL 4 individuals were nonworkers than were workers. In summary, the number of CL 1 persons who work and who do not work on Help-Line is about equal. Most CL 1 individuals do work, and most CL 4 individuals do not work.
### Table 10
Frequency and Percentage of Conceptual Levels by Population

<table>
<thead>
<tr>
<th>Population</th>
<th>CL 1</th>
<th>CL 2</th>
<th>CL 3</th>
<th>CL 4</th>
<th>CL 0&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>7</td>
<td>0</td>
<td>12</td>
<td>5</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>0%</td>
<td>50%</td>
<td>21%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Nonworkers</td>
<td>10</td>
<td>0</td>
<td>4</td>
<td>15</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>34%</td>
<td>0%</td>
<td>14%</td>
<td>52%</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<sup>a</sup>There was one CL 0 individual who began training but did not complete the sessions and was thus eliminated from the study.

### Table 11
Frequency and Percentage of Workers and Nonworkers by Conceptual Level

<table>
<thead>
<tr>
<th>Conceptual Level</th>
<th>Workers</th>
<th>Nonworkers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL 1</td>
<td>7</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>41%</td>
<td>59%</td>
<td>100%</td>
</tr>
<tr>
<td>CL 3</td>
<td>12</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>75%</td>
<td>25%</td>
<td>100%</td>
</tr>
<tr>
<td>CL 4</td>
<td>5</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>75%</td>
<td>100%</td>
</tr>
</tbody>
</table>
### Table 12
Chi-square Summary for Data in Table 11

<table>
<thead>
<tr>
<th>Conceptual Level</th>
<th>Workers</th>
<th>Nonworkers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL 1</td>
<td>7.0</td>
<td>10.0</td>
<td>17</td>
</tr>
<tr>
<td>Observed</td>
<td>7.7</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>Expected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL 3</td>
<td>12.0</td>
<td>4.0</td>
<td>16</td>
</tr>
<tr>
<td>Observed</td>
<td>7.2</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>Expected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL 4</td>
<td>5.0</td>
<td>15.0</td>
<td>20</td>
</tr>
<tr>
<td>Observed</td>
<td>9.1</td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Expected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24.0</td>
<td>29.0</td>
<td>53</td>
</tr>
</tbody>
</table>

Chi-square = 9.14
Degree of freedom = 2
p less than .02

### Table 13
Chi-square Summary for Each Conceptual Level Between Workers and Nonworkers

<table>
<thead>
<tr>
<th>Workers--Nonworkers</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL 1</td>
<td>none</td>
</tr>
<tr>
<td>CL 3</td>
<td>p less than .05</td>
</tr>
<tr>
<td>CL 4</td>
<td>p less than .05</td>
</tr>
</tbody>
</table>
Discussion

Evaluation of Findings

Each objective of this study will be discussed separately with an overview of the entire study at the end.

Objective A. The first objective was to test the effectiveness of the Help-Line training program at Utah State University with regards to the discrimination of core conditions and the communication of empathy.

Significance was found at the .01 level for the discrimination of core conditions as measured by the CCDI. The mean score on the discrimination index was 52.41 for the volunteers who were trained and 74.92 for the control group. Carkhuff (1969, vol. I, p. 127) indicates that a score of 52.41 is about the same as entering graduate students in psychology, about 25 points better than the lay counselors he tested, and about 20 points worse than the professionals he tested. The investigator feels that the volunteers reached a reasonably adequate level in the discrimination of core conditions.

Significance was obtained at the .05 level for the communication of empathy as measured by the CCCI. The mean score of empathy for the volunteers after training was 2.41. The mean score for the control group was 2.09. Carkhuff and Berenson (1967) indicate that the mean score of the volunteers after training was just below the highest rated professionals. This was encouraging as the training program is now more accountable to the issue of effective training procedures.
As empathy was only one of the variables taught during training and the volunteers were not told that the instruments were designed to measure empathy the data is even more encouraging. The volunteers were instructed to assume a helpful frame of reference when completing the instruments and thus there is the implication that they consider empathy to be a helpful mode of response to persons in need of help. Help-Line training at Utah State University seems adequate in teaching the volunteers a facilitative means of responding to the callers. The investigator is not asserting that the average Help-Line worker is as competent as the professional, but rather on this measure they may be.

Help-Line training teaches a "non-directive" counseling model and incorporates experiential sensitivity type exercises, didactic discussion, and role playing. The literature reveals that this type of training is common to most services and the above data give support to this type of training being accountable to the issue of effectiveness. The investigator would recommend Help-Line training procedures as an effective means of training hotline volunteers.

Objective B. The second objective of the study was to test for any differences between those persons who after training elected to work on the line (workers) and those persons who after training elected not to work on the lines (nonworkers).

The present study indicated that as measured by the CCDI and CCCI no essential differences exist between the two groups on the dimensions of discrimination of core conditions and the communication of empathy. As over 50% of those persons trained did not go on to work on Help-Line
this data is somewhat distressful. Help-Line loses many trainees who would probably make good workers. These findings suggest that a volunteer's ability to discriminate core conditions and communicate empathy does not affect a decision regarding whether or not to donate time to working on Help-Line. The investigator had hypothesized that maybe those persons who do not go on to work on the lines realize a limited potential in themselves but the data from this study suggest this is not the case.

The investigator feels that this would be a fruitful area of research. A questionnaire utilizing an open-ended question regarding the matter may provide some answers. The variables which do operate should be investigated with a view towards implementing solutions to the problem.

Objective C. The third objective was to test the effects of Conceptual Level on the ability to discriminate core conditions and communicate empathy.

The data indicated that as measured by the CCDI Conceptual Level does not affect a person's ability to discriminate core conditions either before or after training.

With respect to the communication of empathy, the data suggested that Conceptual Level does not affect a person's ability before training but does have an effect after training. CL 1 and CL 3 individuals were found not to be different from each other in the ability to be empathetic as measured by the CCCI after training but had less ability than CL 4 individuals after training. This data
implies that CL 4 persons are able to benefit most from training. The mean score of 2.71 for CL 4 subjects was significantly higher (.05 level) than the mean score of 2.44 for CL 3 subjects, and 2.42 for CL 1 subjects. The results give some support to Conceptual Systems Theory which would predict CL 4 subjects to have the greatest ability to be empathetic as they are the most flexible of the Conceptual Levels. Conceptual Systems Theory would also predict CL 3 persons to be more empathetic than CL 1 persons but this relationship was not supported. The investigator would make the post hoc hypotheses that the dependency needs of the CL 3 person act as a block in their ability to be empathetic. Whereas the CL 1 person may be impaired because of concreteness and rigidity, the CL 3 person may find his high need for others acting as an impetus to give advice and retard his ability to be empathetic.

One of the difficulties regarding the validity of this data is that both of the Help-Line trainers were CL 4 individuals. The trainers may have been more adept at teaching CL 4 individuals who have a similar cognitive system. No research into this area has been done. If the relationship were found to be true, there would be tremendous implications for the teaching of paraprofessional and even professional counselors. Persons of similar cognitive structure and belief systems should logically be more inclined to learn from each other. For instance, a trainer who was CL 1 may stress that empathy has been unequivocally demonstrated to be the best mode of responding. A CL 3 trainer with his need for others may stress how a person
seeking help desperately needs an empathetic listener. CL 4 trainers may just present empathy as the best way to get the job done. The possibility that the different systems would give very different credence and importance to the three messages seems tenable. If this relationship was found to be true, then training programs could implement means to differentially teach each Conceptual Level and maybe bridge the disparity of learning that this study produced.

Objective D. The fourth objective was to test the effect of Conceptual Level on whether or not a person works on Help-Line after training. A Chi-square test for independence showed that Conceptual Level was one of the factors operating. Of the CL 1 individuals, 41% were workers and 59% were nonworkers. This difference was not significant. Seventy-five percent of CL 3 subjects were workers and 25% were nonworkers (significant at .05 level). Twenty-five percent of CL 4 subjects were workers and 75% were nonworkers (significant at .05 level). These findings would support Conceptual Systems Theory. The theory makes no predictions about CL 1 persons in this regard and Conceptual Level was found not to be an influence. Conceptual Systems Theory would predict CL 3 individuals to work because of their high orientation towards others. For CL 4 persons the theory would predict individuals to be somewhat independent and not highly aligned to groups. These findings add more construct validity to Conceptual Systems Theory.

What is distressing about this data is that CL 4 persons were shown to be the most adequate of the trainees and the persons least
likely to work on the lines. Help-Line is not only losing volunteers who are as competent as the ones who do decide to work but is also losing the most competent volunteers. This data gives even stronger support for the need of research investigating why some persons elect to work on Help-Line and others do not.

Overview

With regards to Help-Line at Utah State University two major conclusions seem to stem from the study. The first was that Help-Line training was effective in producing a change in the volunteer's ability to discriminate core conditions and communicate empathy. The study also demonstrated that the level of empathy reached by the trainees was as good as most professionals. The knowledge that empathy produces constructive client change in persons seeking help indicates that Help-Line can be an effective mental health service. Persons calling Help-Line will most likely find an empathetic listener who can effectively help them to explore their area of concern. The implications of this data to other hotlines are that the training procedures described in Appendix B are effective in the training of paraprofessional hotline workers. Experiential sensitivity exercises, didactic discussion, and role playing are effective modes for training hotline volunteers.

The second major conclusion to be drawn from this study is that Help-Line loses many of the most effective trainees, namely, CL 4 individuals. These persons were shown to have the ability to be the
most empathetic of the volunteers and were the most likely never to actually work on the lines after training. CL 3 individuals were the most likely to work on Help-Line and these persons were significantly less able to be empathetic than the CL 4 person. (The mean empathy score for CL 3 subjects was 2.44 and for CL 4 subjects 2.71.) The investigator feels that this difference is not only statistically significant but practically significant as well. A mean score of 2.71 is as high as any professional group Carkhuff and Berenson (1967) have tested. These results have implications for Help-Line at Utah State University as well as all counselor training programs. Harvey (1970a) states that there is some evidence to suggest that most persons in the mental health field are CL 3 individuals. The present study not only supports this data but also shows CL 4 persons to have a much better ability to be empathetic. A confounding variable was present in that both of the trainers were CL 4 individuals. These results indicate that further research would be productive. First, a study to determine the effects of similar and different Conceptual Level trainers on students' ability to learn would clarify the results of this study. If the results indicated no effect, a replication of this research in similar or other counseling settings seems most warranted. If the results of that study are in accordance with this study, then research looking at how to attract and keep CL 4 individuals in the mental health field would be most productive.

This study also demonstrated some construct validity for Conceptual Systems Theory. Conceptual Systems theory would predict an
ascending order relative to Conceptual Level in a person's ability to be empathetic. Although the order was not shown to be entirely correct, CL 4 persons were shown to have higher mean scores of communication of empathy than CL 1 and CL 3 individuals who were not significantly different from each other.

Construct validity was also demonstrated in the assessment of which individuals work on Help-Line after training. Chi-square tests showed no significant difference for CL 1 subjects choosing to work or not work, significance at the .05 level favoring CL 3 subjects choosing to work, and significance at the .05 level favoring CL 4 subjects choosing not to work.

Observations

The present research exposed some measurement problems concerning empathy. Besides the requirement that raters must be employed to ascertain the level of empathy, what was actually being measured was the subject's ability to make an empathetic response. There were no provisions to determine whether or not a subject would actually respond in this manner once the subject was under a high stress situation while working on Help-Line.

Another observation was that some responses which seemed very different in facilitativeness (at least to the investigator) were given the same empathy rating score. For instance, in response to excerpt 15 of the CCCI which presents a girl having a conflict about having sexual relations with her boyfriend, many subjects flatly
stated that she should not if she thinks it would be wrong. Other subjects responded that she ought to have a very open and honest talk with her boyfriend about the conflict. As both of these responses were of the advice giving category they were rated a 2 on the empathy scale. This investigator feels that the two responses are very different in nature with regards to the judgmentalness and direction of the advice. Had this aspect been measured, this study may have shed even more light on the effect of Conceptual Level in interpersonal relationships.

Recommendations for Further Research

1. A study of the effects of the relationship between teachers and students with respect to similar and different Conceptual Levels would clarify the results of this study and might possibly lead to better training techniques dependent upon Conceptual Level.

2. A replication of this study in similar and other counseling situations would greatly enhance the generalizability of this study.

3. Research concerning the recruitment and retainment of CL 4 persons for mental health would be most productive.

4. Other categorization variables besides Conceptual Level may predict empathy related scores. Numerous predictors may be found to be accurate screening devices.

5. A measuring device with regards to judgmentalness and direction of advice may be fruitful research.

6. Research concerning empathy with regards to age and year in school may provide further predictive data.
7. A study of the differences between using paper and pencil instruments and assessment during actual working conditions would add validity to this research.
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APPENDICES
Appendix A

Training Procedures for Help-Line

Winter Quarter, 1975

First Session—January 22, 1975

1. The training directors introduced themselves to the volunteers and introduced the student directors. There were two training directors and two student directors.

2. The training directors gave a brief history and description of Help-Line and answered any questions of the volunteers with regard to expectations that the volunteers had of Help-Line.

3. The directors explained to the volunteers that research was being done on the training program and if any of the volunteers had any objections they should so state. None of the volunteers objected to being subjects for the research.

4. Each volunteer was given a sheet of paper and a pencil and asked to complete the sentence "I am" eight times giving a different answer each time. The volunteers were instructed to decide upon the three most important statements and three statements that they would be willing to share with other members of the group. The three statements that they were to share could be the three most important or any other three.

5. The volunteers were asked to get out of their seats and mill around the room introducing themselves to other members whom they did not know.
6. After a few minutes of introduction the volunteers were told to find four persons whom they did not know and sit down somewhere in the room with them. They were instructed to share the statements they wrote in response to "I am" and discuss their responses in the group.

7. The volunteers were instructed to discuss their reasons for joining Help-Line within their group.

8. The volunteers were told to move to a central area in the room, find a person whom they did not know, stand back to back, and interlock arms. The person who did not have a partner was instructed to yell "switch" at which time all persons were to find a new partner. This "switch" was repeated nine times.

9. The volunteers all sat in a circle in the center of the room and discussed the experience. The directors instructed them to discuss what they liked and disliked.

10. The volunteers were told to divide into two groups--instate and out-of-state students. They were told to find a person from the opposite group and sit anywhere in the room with that person. The out-of-state male students were told to role play a guy who is his local high school football star and who is being pressured to go on a mission for the Mormon Church. He does not want to go as he just met a girl whom he really loves and he wants to get married to her. The female out-of-state students were asked to role play a cheerleader at a high school who is waiting for the return of her missionary boyfriend but who is being hassled by another guy. She is very confused
about what to do. The instate students were told to role play being lonely freshmen from California who just arrived at Utah State University. They are being hassled by the Mormons and cannot relate to the local culture. The person is scared and wants to go home but is afraid because they want to appear grown-up.

Each person was given 5 minutes to role play their situation. After the role playing the volunteers were asked to talk with their partner about how it felt to have someone else's problem and to talk about how it felt to try and feel how another person feels.

11. While the volunteers were discussing the role playing, the directors passed out the instruments used in this study. The directors explained the directions to the instruments. As the volunteers completed the instruments they were dismissed.

Second Session—January 29, 1975

1. The directors asked that any volunteers who were not present at the previous training session to identify themselves. These volunteers were taken to another room and the director explained that they could not partake in training but could serve as control subjects for a research project. The subjects agreed and were given the instruments.

2. The volunteers who were present for the first training session formed two circles, one inside the other. The inside circle was told to revolve within the outside circle and make eye contact with each person. The volunteers were also told to try and learn each others' names.
3. The director recalled each person's name and asked if any of the volunteers would like to try. Two of the volunteers did try.

4. The volunteers were instructed to pair up with the person nearest them and sit anywhere in the room. They were told that one of the pair should be the focus. The focus person was to do any body movements that they wanted and the partner was to try and mirror those body movements. After two minutes of doing this, the volunteers were told to switch roles. The volunteers were regrouped and asked to discuss what they liked, disliked, or felt about the experience.

5. The volunteers were instructed to find a new partner, sit down in the room somewhere, pick a focus person, and have the focus person talk about themselves for two minutes. The partner was told to paraphrase what was said. After two minutes they were instructed to switch roles and repeat the exercise. The volunteers were regrouped and asked what they liked, disliked, or felt during the exercise.

6. The volunteers were given a didactic discussion about communication. The director explained that there are two parts to communication—verbal and nonverbal. They were told about overt and covert messages and how the verbal and nonverbal communication can be detected by use of these messages. Internal and external frames of reference were discussed with the statement that a good listener tries to relate from the other person's frame of reference. Examples of external frames of reference were given as follows:

(a) Probe: "Well why did you do that?"

(b) Interpret: "Well it sounds like you have an Oedipal problem to me."
(c) Evaluate: "You should never do that, it would be a sin."
(d) Support: "Don't worry, everything will turn out all right."

7. The volunteers were told to pick a partner for role playing. One person was to have a study skill problem and the other person was to have a vocational problem such as what to major in or what career to pursue. The listener was to be as helpful as he/she knew how.

8. The volunteers were regrouped and they discussed the role playing.

9. The last part of the session was a didactic discussion about the pitfalls of giving advice and how the volunteers needed to learn to explore alternative ways of solving a problem. The volunteers were told that they should give several suggestions to a caller and that each should be explored. The volunteers were told that if they could only think of one solution to a problem then they should not give the solution as they have no distance from the problem.

Third Session--February 5, 1975

1. The director discussed the acceptance of another person's values. The director explained that what someone else wants to do may be o.k. for them even though it would not be o.k. for you. "Put your values in your pocket" when you work on the lines was the core of the discussion. The volunteers were told not to be judgmental but rather to be authentic. The example was given that if a person calls and says they are having roommate troubles and then goes on to
describe how they are always having to lock them out of the house as punishment for coming home late a person does not have to say, "If you do dumb things like that, I wouldn't like you either," but instead could say, "I can see why others may say you are a difficult person to live with."

2. The director gave a didactic discussion of empathy. Word messages (content) and feeling messages (emotions) were explained. The 5-point Carkhuff scale of empathy was then explained as follows:

(a) A level 3 response shows the same content and feeling.

(b) A level 2 response shows the same content but misses the feelings.

(c) A level 1 response misses both the content and feelings.

(d) A level 4 response is accurate in terms of content and feelings and is also exactly correct.

(e) A level 5 response is accurate with regards to content and feelings. You are so much with the person that you know almost exactly what they mean in total and you even seem to know what is coming next.

3. The volunteers were told that there were slow nights when almost no one calls and they could choose to feel bored, or happy that no one is feeling bad enough to need to call.

4. Further discussion about the difference between giving advice and exploring alternatives followed.

5. The director role played a call about a guy who has five roommates and none of them will listen to him even though he knows
just what they should do. The assistant director responded empathetically to the problem.

6. There was didactic discussion about how some persons are very dependent and might hang up because you won't give them advice. The volunteers were told that this was all right and that advice is easy to get. The director explained that Help-Line is sometimes a frustrating job because you never have any further contact with a caller and you never know if you are helpful or not.

7. Obscene telephone calls were discussed and the volunteers were told that they can either be reflective and talk about the caller's anger or simply hang up if they cannot handle the call.

8. The director then attempted to recall each member's name.

9. The volunteers were instructed to pair up for role playing and role play any calls they wanted except suicide, drugs, or bizarre calls. The director and assistant director then randomly listened to the volunteers role play and offered modeling or suggestions. After approximately 45 minutes the volunteers were dismissed.

Fourth Session--February 12, 1975

1. The director recalled each person's name.

2. The volunteers were split into two groups and half went with the student directors to where Help-Line is located and half stayed for the following training session.

3. Reciprocal inhibition was modeled by the director and assistant director with respect to giving advice, i.e. the director role
played a call about having roommate trouble and the assistant director gave nothing but advice.

4. The volunteers were instructed to pair up with someone who had the same color eyes and role play giving nothing but advice for two minutes and then switch roles.

5. The volunteers were regrouped and discussed the experience.

6. The volunteers were asked if any of them had any experience with suicide and would like to talk about it (either their own or someone else's).

7. Two persons discussed suicide attempts of friends.

8. The suicide call was discussed as follows:

   (a) Establish a relationship.

   (b) Assess the probability of the person actually committing suicide in terms of (1) method, (2) previous attempts, (3) seriousness of the threat, and (4) emotional state of the caller.

   (c) Discuss the person's present environment and life situation.

   (d) Discuss the person's resources.

9. The volunteers role played suicide calls until the group that went to Help-Line returned (20 minutes). The directors listened to the role playing and modeled or offered suggestions.

10. When the volunteers who went to Help-Line returned the group that stayed went to Help-Line and the above training procedures were repeated for the returning group.
Fifth Session—February 19, 1975

1. The volunteers were given a referral manual which lists all of the community resources available to a person.

2. The volunteers were instructed in the use of the referral manual.

3. The student directors explained how the volunteers could sign up to work on Help-Line and explained how they would help with any internal problems.

4. The volunteers took the posttesting for this study and were dismissed as they completed the instruments.
Raters trained in the assessment of empathetic understanding were required for scoring the subjects' responses to the CCCI. The level of empathy was scored according to Carkhuff's instructions (1969, vol. I, pp. 174-175). The raters were trained in four sessions.

The first session began with a discussion of the concept of empathy as defined by Carkhuff. When both raters agreed that they understood the construct and its purpose, the content of each of the five levels was reviewed. The raters discussed the five levels until the criteria for each level were memorized and the raters agreed upon the meaning of each level. The raters listened to an audio tape demonstrating the various levels of empathy. This tape was developed by Carkhuff for the training of raters. Both raters felt that they were in close agreement with the ratings of empathy as demonstrated by various examples in the audio tape.

The second training session consisted of both raters taking the Crisis Center Discrimination Index to familiarize the raters with the helpee stimulus expressions for the CCCI and to test the rater's discrimination ability. Both raters scored the instruments and discussed their ratings on this instrument.

The third session consisted of the raters independently rating 20 responses made by subjects in this study to the CCCI. These
responses were drawn at random. The raters discussed any differences in their ratings.

The fourth session consisted of both raters taking the discrimination index of Carkhuff (1969, vol. I, pp. 114-125) to test the raters' accuracy in rating levels of empathy. Rater A correlated +.91 with Carkhuff's ratings and Rater B correlated +.96 with Carkhuff's ratings.

The interrater reliability for all of the subjects' protocols in this study was +.96 (Ferguson, 1971).
VITA

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Doctor of Philosophy

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Major Field: Psychology

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