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EMPATHY TRAINING VIA COGNITIVE
AND AFFECTIVE-COGNITIVE MODES

BY



J. WAYNE THOMPSON

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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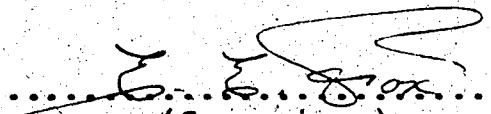
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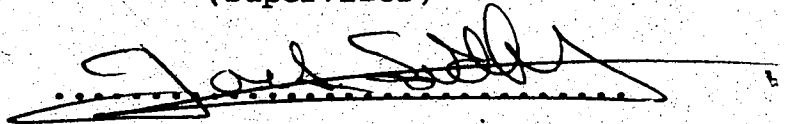
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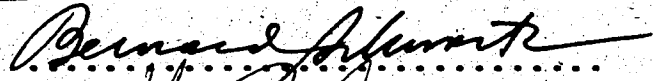
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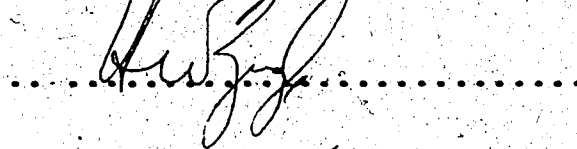
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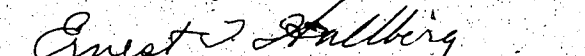
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ABSTRACT

Two approaches to empathy training, designated as cognitive (à la Bullmer) and designated affective-cognitive (à la Carkhuff) together with an author-generated placebo treatment were given a programmed text format. The purpose was to determine whether empathic abilities are cognitive or affective-cognitive in nature.

The study involved 68 undergraduate education students registered in an education psychology course during a winter semester. The sample had an average age of 23 years and 2.9 years of post-secondary education. Approximately 78 percent were female and 22 percent were male. Approximately 28 percent were married and 72 percent were single.

The three distinct empathy training systems were randomly assigned to 3 separate but comparable university classes. Pre-treatment testing involved an empathy measure designed by Hogan, the Social Insight scale (SI) and cognitive complexity via the Paragraph Completion Test (PCT). Post-treatment testing involved the film-based Affective Sensitivity Scale (ASS), the SI and the Hogan measure. Moreover, data were collected on the demographic variables, sex, age, education and marital status.

Results indicated that the Bullmer group recognized a significantly greater number of emotions on the ASS than did either the Carkhuff or placebo groups. As for the number of

emotions recognized in complex situations, the Bullmer group approached significance in contrast to the placebo and Carkhuff groups. The groups were not significantly different from each other in the recognition of emotion with similar persons. The Bullmer group recognized a greater number of emotions with dissimilar persons in contrast to the placebo and Carkhuff groups. Moreover, the Bullmer group also recognized a significantly greater number of emotions in simple situations in contrast to the placebo and Carkhuff groups.

The Bullmer and Carkhuff groups both increased their scores significantly on the Hogan scale over and above the placebo group. However, there was not a significant difference in the amount of increase on the Hogan scale when the Bullmer and Carkhuff groups were compared alone.

The groups did not increase their scores on the SI. However, the differences approached significance. Scores on the SI increase, significantly, as a function of time and the interaction of treatment and time.

Cognitive complexity as measured by the PCT, was not significantly related to ASS scores, Hogan's score or the SI score.

Sex, marital status, years of post-secondary education, and age were not related to the recognition of emotion, empathy or social insight.

The Bullmer cognitive approach operates on the assump-

tion that empathic abilities are a function of the cognitions which operate in the situation in which emotion is experienced. The Carkhuff affective-cognitive approach to empathy training operates on the assumption that empathic abilities are a function of identification between persons and the cognitive response to persons. Conclusions were drawn to the effect that the cognitive processes a la Bullmer account for recognition of immediate affective states in a more effective manner than either the affective-cognitive processes a la Carkhuff or the placebo condition. Both the Bullmer and Carkhuff programs effected participants empathic orientation--which is comprised of social skill, tolerance and humanistic attitudes. Implications for the use of programmed text instruction as a means of increasing one's recognition of emotion were explored.

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CHAPTER I

INTRODUCTION

Wherever people live and work together sensitivity to what others think and feel and the ability to appraise the complexities and nuances of interpersonal relationships constitute basic skills. Psychologists, psychiatrists, social workers, and others who work with clients face numerous occasions when such appraisals must be made. Political, social, industrial and religious leaders must comprehend what their followers want and need. Even the average man in his everyday life encounters many situations in which his ability to understand what others need, think and feel plays a part.

Social scientists who investigate interpersonal behavior, refer to the ability to know and understand the inner states of another, particularly, feeling states as empathy (Hoffman, 1977a; Hogan, 1975; Katz, 1963; Mead, 1934; Piaget and Inhelder, 1969; Weinstein, 1969). The literature views prosocial relationships as facilitated by the ability to understand the feelings, thoughts, and requirements of others (Carkhuff and Berenson, 1977; Deutsch and Madle, 1975; Hoffman, 1977a; Hogan, 1975; Kagan, 1973). The absence of empathic ability hinders the development of successful interpersonal relationships (Hoffman, 1977a; Hogan, 1975; Weinstein, 1969). However, there

is little agreement as to the nature and process of empathy.

THREE APPROACHES TO EMPATHY TRAINING

Various explanations as to the nature of empathy and as to how it works, exist within the professional literature. Many social psychologists and developmentalists view empathy as an essentially cognitive skill which involves the ability to assume another's point of view to determine how the other individual is thinking and feeling (Borke, 1971, 1973; Bullmer, 1972, 1975; Deutsch and Madle, 1975; Dymond, 1950; Grief and Hogan, 1973; Hogan, 1969; Mead, 1934; Piaget and Inhelder, 1969). The cognitive school defines empathy as the ability to think and feel like others do by conscious role taking or by viewing the situation from the other's role perspective rather than from one's own role perspective.

An alternative position views empathy as an affective skill which involves feeling the same as or similar to the other with whom one interacts (Aronfreed, 1969; Feshbach, 1975; Stotland, 1969). The affective school defines empathy as feeling like the other person feels not as one himself would feel in a particular social context. A person feels like another by identification wherein the person matches the other's affective cues. For example, one might assume another person's facial expression in order to feel like the other person feels.

A third view synthesizes the cognitive and affective positions into an affective-cognitive explanation. To be empathic requires a person to know what the other feels, why he feels this way and share a similar feeling with the other individual (Gribble and Oliver, 1973; Peters, 1969, 1972; Rogers, 1957, 1975; Smither, 1977; Truax and Carkhuff, 1967). A person knows what another person feels and why he feels as he does through role taking. Moreover, he also feels similarly through the process of identification.

Empathy training programs can be categorized according to the emphasis. Thus, there are cognitive, affective and affective-cognitive oriented empathy training schemes. Bullmer's (1975) empathy training program, for instance, is most closely associated with the cognitive mode of empathy. Sensory awareness style of training programs patterned after a combination of Esalen-styled experiences, for instance, Gunther's Sense Relation (1968) and Schutz' Joy (1969), are categorized with the affective mode of empathy. Carkhuff's (1969a) empathy training program is associated with the affective-cognitive mode (Gladstein, 1977). Two other major empathy training programs are Kagan's (1973) Interpersonal Process Recall (IPR) and Ivey's (1971) Micro-counseling. The IPR assists people to become sensitively aware of their own reactions and their effect upon others and seems to be based on an affective-cognitive mode. Micro-

counseling is an effort to unite important facilitative conditions for the warm, empathic relationship with the current demands for directly observable behaviors and, thus, seems to be based on the affective-cognitive mode.

Not only do empathy training programs differ in terms of cognitive and affective emphasis but, also, the skills or abilities believed to constitute empathy vary. Bullmer claims empathy is the ability to discriminate among various feeling states, for example fear and anxiety, and among various methods of disguising one's real feeling, for example, by rationalization and projection (Bullmer, 1975).

The ability to identify and discriminate among various feeling states accurately is what constitutes empathy for Bullmer. Schutz (1969), as an example of the affective mode, defines empathy in a five-stage model: (1) A person must be aware of his own internal feelings; (2) The person must relate his various internal feelings into a united product; (3) The person must express the united feeling elements in spoken, written or bodily expressive form; (4) The person must distinguish his mundane from his creative feelings; (5) Detailed work is usually in order to bring the creative feelings to the fore. Carkhuff claims the skills of empathy, respect, concreteness and genuineness, together, constitute empathy (Muehlberg, Pierce and Drasgow, 1969).

Beside differences in cognitive and affective emphasis and differences in definitions of what abilities constitute empathy, differences exist among programs in the delivery system used to train participants. For instance, Bullmer (1975) uses a programmed learning approach, based on Skinnerian learning principles, which entails approximately six to eight hours to complete. The Esalen-styled training approaches use a small group format, an expert trainer, structured experiences used at the discretion of the trainer, group members' "spontaneous" feeling expressions, and varies from ten to thirty hours of marathon styled training time. Carkhuff (1969a) uses a small group format, an expert trainer, didactic presentations, rating scales, overt practice and requires sixty to one hundred hours of participant time to complete.

Since empathy training programs use different rationales, different skills and different delivery systems, comparisons between programs are difficult. Comparing different empathy training programs is one means of ascertaining whether or not empathy is a cognitive, affective or affective-cognitive process. Comparison studies, also, would assist in defining the skills which constitute empathy. However, the intent of the few comparisons within the literature is to determine which training techniques are most effective in teaching specifically defined empathy skills rather than attempting to discover the nature and

process of empathy. For example, DiMattia and Zimmer (1972) found a programmed text treatment to be more effective in teaching discrimination of depressive cues than a video presentation. DiMattia and Arndt (1974) found that microcounseling and reflective listening techniques were equally effective in training introductory counselling students in attending behavior. Gulanick and Schmeck (1977) found modeling to be more effective than praise or criticism in teaching empathic responding to counsellor trainees. Ronnestand (1977) found modeling and feedback were more effective than experiential methods in helping beginning counsellors communicate empathy.

The purpose of the above comparisons is to discover which methods of instruction are most effective in teaching a particular empathic ability. Secondly, the control groups are no treatment types rather than placebo groups which are more effective in ascertaining the effectiveness of training strategies (Gormally and Hill, 1974; Lambert and DeJulio, 1977). The purpose of this study is to select two empathy training programs based on different rationales with different skill definitions and compare them with placebo effects to determine the nature and process of empathy. The two programs selected are Bullmer's (1975) program which is based on a cognitive rationale and Carkhuff's (1969a) program which is based on an affective-cognitive rationale.

THE OBJECT AND DIRECTION OF THIS INVESTIGATION

A valid comparison of empathy training programs is difficult. Programs vary in terms of whether there is a cognitive, affective or affective-cognitive emphasis. Programs define empathic abilities in a variety of ways. Also, the delivery systems vary. For example, programs vary in time required to train; the skill of trainer personnel differs; the amount of didactic and experiential practice varies; and the use of small group formats vary. Delivery system differences readily confound investigations of different empathy training programs (Gormally and Hill, 1974; Lambert and DeJulio, 1977). For example, one program may be better than another because the trainer is more skillful in one of the programs rather than the program being more effective.

The wide disparity of approaches in existing program formats must be regularized, somewhat. For example, Bullmer's (1975) empathy training program is based upon a cognitive rationale and uses a programmed learning format as a means of instruction. Carkhuff's (1969a) training program is based upon an affective-cognitive rationale and uses a didactic-experiential method of instruction. Transposing Carkhuff's program into a programmed learning format makes it possible to compare it with Bullmer's as differences in training would reflect the different definitions

of empathic abilities and rationales rather than differences in delivery systems. Using the same method of training, eliminates trainer effects, equalizes training time, and eliminates other differences in instructional delivery.

An additional problem in evaluating empathy training programs is the type of control groups used. Generally, evaluation studies employ "no treatment" control groups and do not specify what procedures are used. Conclusions can only be drawn that training is better or worse than no training (Gormally and Hill, 1974; Lambert and DeJulio, 1977). To enhance the findings beyond a training-no training simplistic investigation, one must standardize the delivery and also offer a plausible placebo as well. Placebo effects include similar participant expectations and motivations, equivalent time, similar materials and methodology (Gormally and Hill, 1974; Lambert and DeJulio, 1977). No treatment control groups are not as effective in establishing the nature of training effects as placebo control groups. This study employs a placebo group.

A related problem in evaluating empathy training programs is how and what to measure in order to know whether empathic abilities are influenced by training programs. Guilford (1959) has reflected upon this problem:

"One error possibly made thus far in conventional research on empathy is too much dependence upon verbal material...it would be well to seek types

of test materials that emphasize behavioral content and this may often require motion picture presentation" (p. 396).

During the last fifteen years, work has proceeded on the development and refinement of a media based measure of empathy. The Affective Sensitivity Scale (ASS) is being developed by Kagan and his coworkers at Michigan State University. The ASS defines empathy as: "the ability to detect and describe the immediate affective state of another, or in terms of communication theory, the ability to receive and decode affective communication" (Kagan, Krathwohl and Farquhar, 1965). The ASS is used as a criterion measure in this study to assess the effect of Carkhuff's and Bullmer's empathy training programs on the recognition of immediate feelings expressed by another.

While the ASS assesses one's ability to recognize and distinguish various feeling states, interpretative problems still exist in terms of concluding how empathy works. Cronbach (1955) indicates that empathy scores reflect two different abilities -- stereotype accuracy and differential accuracy. Stereotype accuracy reflects a person's understanding of normative behavior (Cronbach, 1955). Thus, a person could score high on the ASS not because of the effects of empathy training but because he is similar to or assumes similarity with the person who is expressing emotion. To conclude that empathy scores reflect differential empathy, the examinee needs to recognize the feelings of persons dissimilar to himself.

Differential accuracy, in Cronbach's view, reflects "real" empathy. The assessment procedures section of this study outlines the method used to score the ASS for similarity/dissimilarity of persons.

Investigations of Cronbach's stereotype and differential empathy components find the two are largely independent abilities (Bronfenbrenner, Harding and Galliwey, 1958; Stone, Gage and Leavitt, 1957; Crow and Hammond, 1957; Cline and Richards, 1960). The research indicates that differential empathy differs from stereotype empathy in the type of discrimination required. For instance, normative empathy occurs in a situation where the person is asked to indicate how the average college student answers a personality test. Differential empathy occurs in a situation where the person is asked to indicate how a particular college student answers a personality test. Thus, the normative empathy discrimination is simpler since it only requires familiarity with the characteristics of the "average" college student. The differential empathy discrimination is more complex since it requires familiarity with the characteristics of the "particular" college student. The assessment procedures section of this study outlines the method used to score the ASS for simple/complex discriminations.

Gladstein (1977), in a review of empathy research, recommends the inclusion of predictive measures of empathy

in addition to objective measures, such as the ASS, in empathy investigations. Predictive measures approach the problem of assessing empathic abilities from a cognitive or role perspective and such measures are concerned with the accuracy of response. Predictive measures attempt to assess whether persons can predict, accurately, what others think, feel or require in various social contexts (Dymond, 1950; Gladstein, 1977; Hogan, 1969). As the cognitive explanation of how empathy works is a concern of this study, two predictive measures of empathy are employed as criteria measures in this study.

Hogan (1969) has developed an empirically-keyed empathy scale which uses sets of personality scale items that separate those who are judged empathic from those persons who are judged nonempathic. To score high on Hogan's scale a person must be oriented toward others and be acceptant of their views (Grief and Hogan, 1973). In effect, Hogan uses a cognitive model of empathy to predict how high empathizers will behave in social situations. A further strength of Hogan's measure is that it does not pose questions which are directly related to empathic behavior (Gladstein, 1977). Hogan's empathy test is one of the predictive measures used as a criterion measure in this study.

The second predictive measure, which is used as a criterion measure in this study, is Chapin's (1942) Social Insight test (SI). Its purpose is to measure the ability to

recognize, in any situation the psychological dynamics underlying a particular behavior and the stimulus, compromise, or innovation necessary to resolve the situation or to carry it through to a constructive conclusion (Gough, 1965). Chapin's formulation stresses the diagnostic capacity of the individual and not his capacities to behave in a more or less adaptive manner. In short, social insight is defined as "a person's ability to appraise others, to sense what they feel and think, and to predict what they may say or do" (Gough, 1967). Chapin's test is based upon a cognitive explanation of how empathy functions in social contexts.

The major problem which this study investigates is whether or not the Bullmer cognitive mode, the Carkhuff affective-cognitive mode or placebo mode effect recognition of emotion (i.e. ASS) in a differential manner. Secondly, the investigation attempts to ascertain the training effects on Hogan's empathy scale and Chapin's social insight measure. In this manner, the investigation is attempting to determine whether empathy is a cognitive or affective-cognitive process. Also, the investigation is an attempt to discover whether Bullmer's empathy skills or Carkhuff's empathy skills best define the nature of empathy.

CHAPTER II

REVIEW OF THE LITERATURE

Recognition of Emotion

Historically, the problem of recognition of emotion had philosophical origins in the question concerning the existence of other minds or, at least, the knowing of another's inner feelings. In this connection, Bain (1895) brought forward his theory of reasoning by analogy and Lipps (1905) his notion of *Einfühlung* or empathy as it became known.

The theory of analogy was defined as a "cognitive process in which characteristics of a general class were attributed to an individual taken as an example of that class" (Sabrin, Taft and Bailey, 1960, p.5). The theory maintained that people inferred other's feelings by matching their behavior, situation, history and expressive structure with their own remembered behavior, and expressions in the same or similar situations. People know how others feel because, in the past, they felt the same way, in the same situation, and expressed it in a similar manner. The probability of accurate emotional inference was proportional to the degree of similarity (Adams, 1928).

The contrasting explanation of recognition of emotion was Lipps' *Einfühlung*. Literally, the term meant motor mimicry or kinesthetic inference (Allport, 1961; Deutsch and Madle, 1975). Lipps' conceptualization advanced an isomorphic involuntary

mimicry of other's motor behavior as the means of recognizing another's feeling (Allport, 1961; Deutsch and Madle, 1975; Hoffman, 1977b). Thus, when a person observed another experiencing a feeling, he automatically imitated the other, which produced inner, kinesthetic cues which contributed to his recognition of the other's feeling (Hoffman, 1977b). To the degree that motor mimicry operates, cognitive assessment of the other's feelings should not be necessary for empathic arousal to occur (Hoffman, 1977b).

How compatible were these theoretical explanations with the empirical investigations of recognition of emotion?

Recognition studies typically involved the presentation of a stimulus person expressing anger, fear, sadness or other emotion (Frijda, 1969; Hastorf, Schneider and Polefka, 1970; Tagiuri, 1969). Stimulus materials varied from photographs, voice recordings, sound films, to in vivo presentations (Frijda, 1969; Hastorf et al., 1970; Tagiuri, 1969). The task required the observer to indicate by verbal statement, adjective check list or other psychometric procedure what feeling was expressed from the cues provided by the stimulus materials.

Generally, the literature found people were able to identify emotions from facial, vocal and nonverbal cues (Davitz, 1964; Frijda, 1969; Izard, 1971; Tagiuri, 1969). Frijda (1969) in a series of recognition studies conducted over a ten year period, estimated that forty percent of the variance in recognition of emotions was accounted for by facial features. Other

experiments demonstrated that movements or postures of other parts of the body, other than the face, contributed to recognition of emotion, particularly, estimating the intensity of an emotion (Ekman, 1965; Ekman and Frieser, 1967; Dittmann, Parloff and Boomer, 1965). However, the evidence indicated that the more complete the information about the interpersonal situation in which the emotional cues were embedded, particularly, as the stimulus materials approached in vivo sequences of interpersonal behavior, the more valid and reliable were judgments of emotion (Davitz, 1964; Frijda, 1969; Izard, 1971; Hastorf et al., 1969). A person who smiled at his convocation, for instance, expressed the feeling of pride while a smile when meeting a stranger expressed friendliness. Thus, cognitive factors as well as kinesthetic factors appeared to be involved in recognition of emotion.

Schachter's (1964, 1971) two factor theory of emotion emphasized the interaction of cognitive and physiological factors in defining emotions. Schachter (1964) maintained that differences in emotions were accounted for by the person's cognitive interpretation of the situation in which the person experienced a state of activation. Physiological symptoms of tremor, for example, were labelled as unpleasant feelings in the presence of an unpleasant behaving person and pleasant in the presence of a pleasant behaving person when one had no immediate explanation of one's physical symptoms (Schachter and Singer, 1962). However, when the

tremors were explained to the person as a drug reaction, the person did not perceive himself as experiencing a feeling regardless of the behavior of the person he was with at the time (Schachter and Singer, 1962). Schachter's (1971) research demonstrated that cognitions arising from the immediate situation, as interpreted by past experience, provide the framework within which a person understood and labeled his feelings. It was the cognition which determined whether a state of arousal was labelled fear, joy, or whatever. If then, emotion can largely be defined by cognition, it follows that emotion cannot be inferred on the basis of overt expression because of the cognitive component (Frijda, 1969).

Stotland (1969), investigated affective empathy or the extent to which kinesthetic factors were involved in recognition of emotion. Stotland's paradigm involved an observer viewing another person in a painful, pleasurable, or neutral situation. The observers were told either to imagine themselves in the situation; imagine the other person in the situation; or, simply, to watch the other. He hypothesized more empathy, measured physiologically, would occur in the imagine-self condition than in the other two imagining conditions. Stotland's rationale implied more identification would take place in the imagine-self condition than in the imagine-him or watch-him conditions. He found significantly more palm sweating in the imagine-self-pain condition than in the imagine-him-pain condition. No significant differences occurred be-

tween the same two conditions upon vasoconstriction measures. However, no significant differences occurred between the various imagining sets and neutral and pleasurable conditions. He concluded affective empathy was more likely to occur if the observer's set was to imagine himself as experiencing what he observed the other person experiencing in a situation.

The recognition literature attempted to learn what abilities of people were associated with recognition of emotion. Personality correlates were independent of overall estimates of recognition of emotion (Davitz, 1964; Warr and Knapper, 1968; Tagiuri, 1969). However, there was consistent evidence in support of cognitive correlates of recognition of emotion. Verbal intelligence and abstract symbol ability were related to recognition of emotion (Davitz, 1964; Warr and Knapper, 1968). Also, the ability to recognize emotion was correlated with experience and maturity (Bieri, 1955; Taft, 1955). Finally, the evidence supported the hypothesis that training increased a person's comprehension of emotion (Davitz, 1964; Hastorf et al, 1970).

How the recognition of emotion relates to this study

As mentioned previously, the concept of empathy refers to the ability to comprehend the feeling states of another. This study uses recognition of emotion as a dependent measure of empathy. The test is the ASS, a film, complete with sound, which the literature supports as an acceptable method of presenting emotional material which engenders valid and reliable

recognition of emotion. The measure is discussed more fully in the assessment procedure section. The ASS does not, however, indicate how it is possible to recognize others' emotions.

If we ask ourselves the question, "what do we mean by the term emotion?", we are likely to give a long list which would include fear, guilt, shame, pride, wonder and the like. The criterion which underlies this list is the class of cognitions called appraisals (Gribble and Oliver, 1973; Peters, 1969, 1972; Smither, 1977). To feel fear is, for instance, to appraise a situation as dangerous; to feel pride is to appraise with pleasure something that we bring about through our own efforts. Envy is connected with appraising someone else as possessing what we want; jealousy with appraising an individual as possessing someone to whom we think we have right, and so on. Emotions have in common the fact that they involve appraisals elicited by external conditions which are of concern to us (Gribble and Oliver, 1973; Peters, 1969, 1972; Smither, 1977).

Schachter's work suggests that cognitive appraisal is involved in recognition of emotions. Frijda (1969) echoes Schachter stating that most emotions cannot be initiated without intellectual participation. Contrary to the kinesthetic inference theory, observation of involuntary imitative movement made to expressive behavior shows that often a movement is made which is different, although simi-

lar, for example, grasping one's pipe in response to the stimulus person's tightening lips (Frijda, 1969). When persons are asked to imitate facial expressions, they first start interpreting and only then move their faces (Frijda, 1969). In fact, it appears that if the person's verbal interpretations differ from the intended meaning of the model expression, their imitation resembles their own interpretation rather than the intended meaning (Frijda, 1969). Even Stotland's evidence in support of the kinaesthetic theory, is questionable.

Male galvanic skin responses and female galvanic skin responses differ at baseline and throughout intervention and monitoring phases (Fisher and Kotses, 1974). Other differences exist, between males and females, on measures of physiological arousal (Berger, 1962; Craig and Lowery, 1969; Craig and Weinstein, 1965). As Stotland did not control for sex differences in physiological arousal, his results may not be too generally valid.

The evidence is strongly in favour of a cognitive explanation of the recognition of emotion. This conclusion is buttressed by the finding that intellectual factors correlate with recognition of emotion. It appears that some type of synthesis activity involving past learning, the interpersonal setting and expressive cues is involved in recognition of emotion.

A body of psychological investigation which concerns itself with synthesis of information is conceptual complex-

ity theory (Bieri, Atkins, Briar, Leaman, Miller and Tripodi, 1966; Harvey, and Hunt, 1961; Vannoy, 1965). Essentially, conceptual complexity theory suggests a person who is conceptually simplistic is characterized by few categories in which to place events, discriminates poorly within his categories and has few rules which govern the synthesis of incoming information (Shroeder, Driver and Streufert, 1967). The person who is conceptually complex has a large number of categories with which to order incoming events, makes subtle discriminations among his categories, and has a variety of synthesis rules (Shroeder et al., 1967).

This study employs the Paragraph Completion Test (PCT) as a measure of cognitive complexity. If the cognitive explanation of recognition of emotion is more accurate than the kinesthetic explanation then persons who are cognitively complex should identify more emotions than less complex persons. Also, training should make a greater impact upon cognitively complex persons than upon cognitively simpler persons.

Predictive empathy

Empathy refers to more than recognition of emotion. In addition to knowing how another feels, empathy requires an understanding of others' thoughts and needs in social situations (Dymond, 1950; Hogan, 1975; Sabrin, 1954; Piaget, 1950, 1962). The literature shifts to an exploration of the pro-

cesses which help persons to know how others are thinking and what they require in social interaction. The empathic question becomes a matter of attempting to identify whether people can make accurate judgments about dispositional traits and what types of persons are most proficient at such tasks. The rationale views the accurate prediction of another's qualities as reflecting an understanding of how others think and feel and what they need.

Empathy was defined theoretically as "the imaginative transposing of oneself into the thinking, feeling, and acting of another" (Dymond, 1949, p. 127). Operationally, empathy was defined as the difference between a person's self-rating and the rating an observer thought the person would use (Cottrell and Dymond, 1949; Dymond, 1948, 1949, 1950).

Dymond (1949) created the classic paradigm used in predictive empathy studies with another individual. Using Dymond's approach, two people interacted with each other for a period of time and then completed a series of rating scales based upon items from the Minnesota Multiphasic Personality Inventory. The ratings involved in deriving a measure of empathy for a member of the dyad were as follows: (1) A rated himself; (2) A then rated himself as he thought B rated him; (3) B rated A; (4) and then B rated A as he thought A rated himself. The process was reversed in order to get an empathy measure for B. Ratings (1) and (2) were combined as well as ratings (3) and (4). If the difference between the two sets of scores was

small, then, empathy was reflected as A and B agreed upon the trait rating.

Dymond (1950) concluded high empathizers were: outgoing, optimistic, warm, with a strong interest in others; low empathizers were: introverted, rigid, and self-centered. She reported high empathizers were more easily judged. Serious criticisms of Dymond's approach were proffered.

Cronbach (1955) argued that the scoring procedures used in predictive studies were not reflecting a singular empathic ability but reflected three response set components, an empathy component and projection. The components were: elevation (E), differential elevation (DE), stereotype accuracy (SA), and differential accuracy (DA). The E and DE scores Cronbach defined as response sets in which observers tended to rate persons at high or low levels on measurement scales (i.e. E) and/or tended to spread their scores around or at some distance from their mean (DE) ratings. The SA score reflected the observer's understanding of normative behavior or knowledge of traits generally associated with various groups, for example, teachers and psychologists. Finally, DA was defined as the ability to predict "real" differences among persons of the same group which reflected "true" empathy in Cronbach's view. Further, if two persons assumed similarity or were similar in their use of the four components, then their empathy scores increased which reflected projection or identification rather than insight.

Research, which concerned itself with the relationship between Cronbach's stereotype and differential empathy components, found the two were largely independent abilities.

Bronfrenbrenner, Harding, and Galliwey (1958) investigated the relationship between normative and individual accuracy. Sensitivity to the generalized other was assessed by requiring judges to predict such phenomenon as the results of public-opinion polls, the typical response of college students on items in a personality test. Differential accuracy was measured by predicting what a given person in a group felt about an issue or about the leader of a group. The authors concluded that the two abilities were largely independent. Those who were accurate judges of particular individuals, were not necessarily accurate judges of the public and vice versa. In a like manner, Stone, Gage, and Leavitt (1957) found that the ability to judge the generalized other and sensitivity to individual differences correlated negatively. Crow and Hammond (1957) found that various normative response sets were more stable over time for individual judges than were their differential accuracy scores. Cline and Richards (1960) drew the same conclusion from their investigation that normative accuracy was the most stable empathy component among judges. Also, the literature found a number of correlates associated with differential empathic ability.

The ability to distinguish between persons in the same

normative group was correlated with cognitive complexity and intelligence (Bieri, 1955; Taft, 1955). Further, a person who was good at making accurate distinctions between persons tended to be well adjusted, effective in groups, detached and high in esthetic values (Allport, 1961; Bieri, 1955; Bieri et al., 1966; Chance and Meaders, 1960).

How the predictive empathy literature relates to this study

Two measures of empathy are used in this study which are based upon the predictive rationale--to predict another's qualities reflects comprehension of how another person thinks and feels. Hogan's (1969) empirically keyed empathy scale represents what people believe about their own empathic orientation. An empathic person is described by Hogan's scale as a person who is oriented toward others, tolerant of their views, socially ascendent, and has humanistic socio-political attitudes (Grief and Hogan, 1973). Theoretically, Hogan's high empathizers are more likely to recognize others' feelings than low empathizers. Secondly, empathy training, if effective, is likely to effect a person's empathic disposition in a positive direction.

The second predictive measure is Chapin's (1942) social insight test. The SI rationale maintains that the ability to know what is required to improve a social situation, or to rectify interpersonal conflicts is indicative of empathic skill.

Theoretically, persons high in social insight are likely to recognize many more feelings than persons low in social insight. Also, empathy training, if effective, is likely to effect a person's social insight in a positive direction.

The effect of Cronbach's criticisms of the predictive empathy makes questionable the use of predictive measures of empathy and the recognition of emotion measure. Within Cronbach's component empathy model are the components: elevation (E) and differential elevation (DE). These two components are a function of statistical response sets--response sets which function in testing situations which use rating procedures (Smith, 1966). The ASS and SI scales require persons to match the correct response to the stimulus situation which avoids the E and DE response sets (Smith, 1966). Hogan's scale requires persons to respond to items as either true or false for themselves which mitigates the E and DE components (Smith, 1966). The stereotype accuracy (SA) and differential accuracy (DA) components present interpretative problems.

Cronbach (1955) reasons that SA or normative empathy is a function of assumed similarity and/or similarity. As a person develops, he learns how he is similar or dissimilar to various people. He becomes familiar with how these similar people, in particular, behave, think and feel in a variety of situations. A person is more likely to understand what another needs, thinks and feels if he is similar to the person with whom he interacts. Inversely, as a person per-

ceives himself as different from the other the more likely he is not to understand what the other needs, thinks and feels.

The developmental literature, under the rubric of social cognition, adds support to Cronbach's argument. Social cognition refers to the concepts a person uses to describe others and with which he makes inferences about their covert, inner psychological experiences (Shantz, 1975). In general, social cognition investigations find that recognition of simple emotions, for example, fear, anger, happiness, sadness, is achieved by children when the stimulus persons are similar to the child (Borke, 1971, 1973; Hoffman, 1977a; Rothenberg, 1970; Shantz, 1975). Recognition of emotions with dissimilar persons is not achieved until middle or late childhood (Hoffman, 1977a; Rothenberg, 1970; Shantz, 1975). A child's ability to infer what another needs and how he thinks in social situations increases with age and improved performance is related to familiarity with the feelings expressed and similarity of person (Flavel, Botkin, Fry, Wright and Jarvis, 1968; Glucksberg and Krauss, 1967). Additionally, adults who perform well on social interaction tasks have interpersonal tactics by which they take into account the needs, motivations and expectations of others (Affleck, 1975, 1976; Feffer and Suchotliff, 1966).

In this study the ASS is scored for simple/complex

discriminations and similarity/dissimilarity of persons. The procedure is defined in the assessment procedures section. If the differential empathy process of how empathy works is valid then empathic training, if effective, would increase empathy scores in terms of the dimensions dissimilarity-complexity. If empathy scores do not show an increase for person's recognition of emotion with both dissimilar persons and complex situations then normative empathy is a more useful explanation of how empathy works.

The predictive empathy literature indicates cognitive complexity is associated with predictive empathy as well as with recognition of emotion. Cognitive complexity, if associated with high scores on the three criterion measures, would lend support to the cognitive inference explanation of how empathy functions within interpersonal contexts.

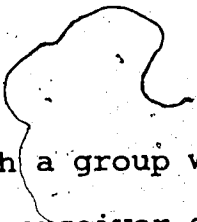
Empathy Training

Empathy training received impetus from psychotherapy outcome research, which found that the related skills of empathy, genuineness, and warmth distinguished effective from ineffective counsellors (Truax and Carkhuff, 1967). A number of training programs were developed, for example, Carkhuff's (1969a) discrimination-communication program, Kagan's (1973) IPR, and Ivey's (1971) microcounselling which purport to effect empathic abilities in a positive direction. Since this study used Bullmer's and Carkhuff's programs, these programs, alone, are reviewed.

The Bullmer Program: Cognitive Emphasis

Bullmer (1972, 1975) defined empathy as the ability to accurately perceive feelings and the meanings of these affective states for another (Bullmer, 1975). Bullmer used a programmed self-instructional text, based upon Skinnerian learning principles, to teach the concepts involved in his empathy program. The subject matter was presented in six units with a proficiency test following each unit. The first unit, entitled "interpersonal perception", provided the learner with a basic understanding of the concepts of person perception. For example, the concepts, implicit personality theory, percepts, inferences, and the like are examined. Unit two identified major sources of error in empathic perception as a function of implicit theories of personality. For instance, the trainee learned how normative inferences and inferences based upon assumed similarity distorted perception. Units three and four were concerned with identifying common emotions and how various defence mechanisms distorted emotional expression. Unit five involved learning how to comprehend the other's behavior from the other's frame of reference. For example, to perceive the other person's frame of reference, regarding his communication, meant perceiving his needs, motives, and emotions. Unit six entailed integrating the material used in previous units.

Bullmer (1971) investigated the efficacy of his model. He trained a group with the text materials and compared them



with a group who received no treatment. He found the empathic perceiver group were significantly better in identifying feeling states on the Affective Sensitivity Scale, and upon a measure he developed, than the control group. Further investigations of the utility of Bullmer's model have not been published to this investigator's knowledge.

The Carkhuff Program: Affective-Cognitive Emphasis

The initial work on the development of Carkhuff's program was conducted by Carkhuff, Rogers and Truax. They defined empathy as the dual ability "to sense the [person's] fear, his anger or his rage as if it were a feeling [the therapist] might have [and] to communicate this perception in a language that allows him more clearly to sense his confusion, his fear and his rage..." (Rogers and Truax, 1967, p. 104). Empathic behavior required both affective and cognitive skills.

Carkhuff (1969a) refined the initial work developed by Truax and himself into a discrimination-communication instructional methodology. A rating scale was developed which defined empathy at five different levels. Levels one and two were considered subtractive empathic responses as they ignored or distorted the feeling expressions made by others. Level three was considered an interchangeable empathic response as it reflected accurately the surface feelings expressed by another. Levels four and five were defined as additive empathic responses as they reflected deeper feelings expressed by another.

First the trainee learned to discriminate among the five levels of empathy in order to understand the various levels of empathy. Second, the trainee learned to identify, consistently, interchangeable responses which involved judging whether a written statement reflected the surface feelings of the speaker. Third, the trainee learned to make interchangeable statements in response to speakers which accurately reflected the feelings expressed. Further phases of training enabled the trainee to make statements which reflected higher levels of empathy to facilitate speaker self-exploration. Many empirical investigations have been conducted to ascertain the utility of Carkhuff's systematic human relations training program.

Truax and Carkhuff (1967) and Carkhuff (1969b) reviewed several studies which demonstrated empathic increments with various populations. Pagell, Carkhuff, and Berenson (1967) found counselor empathy related to clients' empathy changes. Carkhuff, Friel, Berenson, Bebermyers, Mahrt, Mallory and Forrest (1977) found high levels of empathy were related to clients favorable rating of guidance services. Clients, who received service from counselors with low rated empathy, indicated the services were unhelpful. Vitalo (1971) found improved patient behavior, on several indices, was associated with high empathy levels. Students learned more when their teachers were rated high in empathy skills (Ashby, 1975). Pierce and Schauble (1970) found improvement in interpersonal functioning among graduate practicum students related to the

empathy levels of their supervisors. Finally, research demonstrated empathy skills were taught, successfully, to teachers (Ashby, 1975), clinical psychology graduates (Carkhuff and Truax, 1965), lay counsellors (Carkhuff and Truax, 1965), undergraduate students (Berenson, Carkhuff, and Myrus, 1966), parents of disturbed children (Carkhuff and Bierman, 1970) and neuropsychiatric patients (Pierce and Drasgow, 1969). The results of Carkhuff's empathy model were challenged.

The accurate empathy scale (AE), used to assess empathy level, measured language style and communication commitment rather than empathy (Chinsky and Rappaport, 1970; Rappaport and Chinsky, 1972). AE ratings failed to demonstrate construct validity or reliability (Rappaport and Chinsky, 1972). Training procedures were not specified in many studies, thus, the results may well have been a function of unspecified trainer behaviors (Gormally and Hill, 1974). The AE scale was used to train persons in empathic responses; increments were a function of practice effects (Gormally and Hill, 1974; Lambert and DeJulio, 1977). In short, Carkhuff's empathy program was questioned as to its validity.

How the Carkhuff and Bullmer programs are related to this study

The Bullmer program is based upon a cognitive rationale of how empathy functions while the Carkhuff program is based upon an affective-cognitive rationale (Gladstein, 1977).

Besides different rationales, the programs differ in instructional methodology. The Bullmer program uses a self-instructional text and requires approximately six hours to complete (Bullmer, 1975). The Carkhuff program requires an expert trainer, a small group format, overt rehearsal and many hours to complete (Carkhuff, 1969a). The instructional differences confound outcomes as the different methods of instruction can account for the changes as well as the programs themselves (Gormally and Hill, 1974).

This study transposes the Carkhuff program into a self-instructional format in order to make a more valid comparison with the Bullmer program by eliminating instructional differences. In this manner, differential effects between the programs are more likely to be a function of different program rationales than instructional differences.

The Carkhuff program in systematic human relations instructs persons in a variety of skills which are identified as facilitating human relationships. The skills, empathy, respect, concreteness and genuineness are used in this study as research demonstrates the four skills are highly interrelated (Muehlberg, Pierce and Drasgow, 1969). Since empathy is concerned primarily with understanding emotions, the four identified skills of empathy, respect, concreteness and genuineness are used as they are associated with comprehension of emotional messages. The four

skills are defined as follows:

"Empathy is the ability to recognize, sense, and to understand the feelings that another person has associated with his behavioral and verbal expressions and to accurately communicate this understanding to him. Respect consists of expressing to a second person an honest concern that what he does is of real importance to the first person....Concreteness involves the first person helping the second person to explore and develop fully in definite and specific terms, the areas of life which are important to him.... Genuineness consists in presenting ourselves as authentic persons who can share honestly with others what we feel and think" (Carkhuff, 1971, p. 266).

The skills, which appear most directly concerned with comprehension of emotional messages, are selected from the Bullmer program to parallel the skills selection from the Carkhuff program. The four skills are interpersonal perception, identifying common feelings, identifying hidden feelings and the perceptual approach to understanding others. Interpersonal perception is defined as a dynamic process by which persons assign internal meaning to the external signs of meaning which we observe in others (Bullmer, 1975). Interpersonal perception deals mainly with inferences concerning the feelings and other internal properties of the perceived person. Identifying common emotions instructs trainees in the characteristics which are common to specific feelings (Bullmer, 1975). Identifying hidden emotions instructs trainees in how to recognize and interpret feeling signs which are disguised or distorted (Bullmer, 1975). The perceptual approach to understanding others involves using

the aforementioned skills to understand the others experiences in terms of how the other person perceives them (Bulmer, 1975).

The criteria measures, ASS, SI and Hogan's empathy scale are not used in the training, thus the practice effect explanation is eliminated. The inclusion of similarity/dissimilarity and simple/complex scoring procedures assists in determining the nature of the processes which may help to explain how training effects occur. The empathy literature indicates similar persons empathize better with each other than with persons who are dissimilar to themselves. Cronbach (1955) refers to high empathy scores between similar persons as normative empathy, wherein, the individual person is similar to the person he is empathizing with. High dissimilarity scores would indicate the functioning of differential empathy processes which require familiarity with the characteristics of a person who is not like oneself. High similarity scores would indicate the functioning of normative empathy processes.

The empathy literature indicates differential empathy is associated with cognitive complexity and above average intelligence. Thus, those high in cognitive complexity should recognize a greater number of emotions in situations which require complex discriminations, than those who are low in cognitive complexity. High empathy scores in complex situations would indicate the functioning of differential empathy pro-

cesses. High empathy scores in simple situations would indicate the functioning of normative empathy processes.

Hypotheses

Many hypotheses are implicit in the previous literature review. Those to be examined empirically are enumerated hereafter.

1. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo group will differ in the number of emotions recognized on the ASS.

2. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will not differ in the number of emotions recognized in simple discrimination situations on the ASS.

3. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the number of emotions recognized in complex discrimination situations on the ASS.

4. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will not differ in the number of emotions recognized with similar persons on the ASS.

5. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the number of emotions recognized with dissimilar persons on the ASS.

6. The Bullmer (cognitive), Carkhuff (affective-cog-

nitive) and placebo groups will differ in the amount of change on Hogan's empathy scale.

7. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the amount of change on the social insight scale.

8. The paragraph completion test will be related to scores on the recognition of emotion scale of the ASS, Hogan's empathy scale and the social insight scale.

9. Sex, marital status, years of post-secondary education and age will not be related to the various ASS measures, Hogan's empathy scale and the social insight scale.

CHAPTER III

PROCEDURE AND DESIGN

The Samples

The study involved 68 undergraduate students registered in the winter semester of Education Psychology 411 (introduction to guidance). The undergraduate student group had an average age of 23.0 and 2.9 years of post secondary education. Approximately 78 percent were female and 22 percent were males. About 28 percent were married and 72 percent were single.

Procedure

Three education psychology instructors agreed to permit this researcher to use their classes as subjects for the empirical investigation. All classes were informed that the researcher would be conducting an empathy training program during their regularly scheduled classes for one week. All groups received training during the latter part of January, 1978 and the first two weeks of February 1978.

Treatment programs were randomly assigned to the intact classes in order to reduce the awareness of being in an experiment (Campbell and Stanley, 1966). During the first session, the empathy training program was explained,

and the SI, Hogan's empathy scale and the cognitive complexity measure were administered. The programed text was distributed with instructions to complete the program and return it at the final session. In the last session, the SI, Hogan's empathy scale and the ASS were completed. The ASS was not given at pretest as it is an unusual testing procedure and could sensitize the groups in such a manner as to increase the educational effect of the treatments and, thus, confound the results (Campbell and Stanley, 1966).

Bullmer Treatment Group: Cognitive Emphasis

Students in this group received a programed text instructing them in four skills: interpersonal perception, identifying common emotions, identifying hidden emotions and perceptual approach to understanding others. Appendix A has an abstract of the text.

Carkhuff Treatment Group: Affective-Cognitive Emphasis

Students in this group received a programed text instructing them in four skills: empathy, respect, concreteness and genuineness. Appendix B has an abstract of the text.

Placebo Treatment Group

Students in this group received a manual instructing them to read the short story contained in it. Second, they were to use the emotional check list provided to identify the various feelings expressed by the principle characters. Third, they were to write an emotional summary for

each character using their checklists as a guide. Appendix C has an abstract of the text.

Assessment Procedures

Paragraph completion test

The Paragraph Completion test (PCT) is constructed to measure cognitive complexity. It consists of six sentence stems which call for a subject to write two or three sentences in response. The PCT can be obtained from Schroeder et al., 1967, p. 190. Adult subjects are allowed 10 minutes to complete the test. A weighting of 1, 2, 3, 4, 5, 6 or 7 is awarded the response according to the level of conceptual structure which generated the response. Schroeder et al., (1967) report typical inter-rater reliability correlations in the .80 to .95 range. Internal consistency over the six items is high (.57 to .75) according to Schroeder et al. An estimate of inter-judge reliability calculated between the ratings of the present author and a fellow graduate student was .87 for 30 observations.

Typical responses at the 1, 3, 5, and 7 levels of conceptual complexity derived from the responses of the subjects to the stem "When I am in doubt ..." are found in Appendix D. The PCT can be found in Appendix F.

Social Insight Test

The Social Insight test (SI) is constructed to measure social insight. Social insight is defined as a person's

ability to appraise others, to sense what they feel and think, and to predict what they may say and do (Gough, 1967). The SI consists of 25 short paragraphs describing situations in which a problem in interpersonal relations or personality dynamics is posed. The respondent is asked to choose, from among four multiple choice options, the one which offers the most insightful commentary or the wisest course of action. For example:

Mrs. Thompson constantly consulted physicians about her daughter's health at the slightest sign of illness. She bought her expensive clothing and toys. She regularly irritated the child with excessive attention. She complained that the child would not obey her, and at times she punished her severely for slight misbehavior. Mrs. Thompson's reactions toward her daughter would indicate that:

- a. She was inclined to be a hypochondriac.
- b. She was trying to do for her daughter things which she had been denied as a child.
- c. Because her daughter was the only child, she expected too much of her.
- d. She has resentments toward the child which she was trying to cover up.

The test takes 20-30 minutes to administer and items are scored 1, 2, or 3 according to their differentiating power. The SI can be obtained from Consulting Psychologist Press and in Appendix F.

Internal consistency reliabilities are in the range of .68 to .78, which is adequate for the use of the test in its present research status (Buros, 1975).

Gough (1965) conducted a series of validation studies with the SI. The SI was found to correlate significantly with various indices of social sensitivity and social acuity and to identify persons who impress others as insightful, perceptive, imaginative and resourceful. The validity data suggest that a multi-faced concept termed social insight is being measured (Buros, 1975).

Hogan's Empathy Scale.

Hogan's (1969) test of empathy is used in this study. The test consists of sixty-four items. Thirty-one are from the California Psychological inventory (CPI), twenty-five are from the Minnesota Multiphasic Personality Inventory (MMPI), and the remaining eight items come from various experimental testing forms used in developing the empathy measure. Items are scored true or false. For example those with empathic orientations answer questions, like the following, as the response in the brackets indicates.

4. I usually take an active part in the entertainment at parties. (T)
14. I usually don't like to talk much unless I am with people I know very well. (F)
18. I like to talk before groups of people. (T)
28. I have a natural talent for influencing people. (T)

The scale can be found in the Journal of Consulting and Clinical Psychology, 1969, 33, 307-316, and in Appendix F.

With a sample of fifty college undergraduates, the reliability of the empathy scale estimated by a test-retest

correlation after a two month interval was .84. A Kuder Richardson reliability coefficient, on the scores of one hundred military officers, yielded a coefficient of .71. Another test-retest reliability coefficient of .84 was found over a three month interval with a group of college students.

The validity of the empathy test was investigated. The empathy test correlates .58 with rated social acuity; in a sample of medical school applicants the value was .42. The scale discriminated between junior high school students with high and low teacher's ratings for social acuity. The empathy scale correlated .60 with measures of attractive interpersonal style defined as likeability and effective communication style.

A factor analysis of the scale indicated three factors which account for twelve percent of the total variance. The first factor suggested a tolerant, even-tempered disposition was a major component of empathy. The second component suggested that the empathic person was self possessed, outgoing, and socially ascendant. The third factor indicated that empathic persons had a humanistic and tolerant set of socio-political attitudes.

Sex differences were not significant in the analysis of empathy scale items.

Affective Sensitivity Scale

The Affective Sensitivity test is used to assess recognition of emotion (Campbell, 1967; Danish and Kagan, 1971; Kagan, Krathwohl, Goldberg, Campbell, Schauble, Greenberg,

Danish, Resnikoff, Bowes, and Bondy, 1967). The instrument is composed of a videotape with an accompanying multiple-choice questionnaire. The videotape consists of short excerpts from recorded interpersonal encounters between teachers and students, husbands and wives, doctors and patients etc. There are sixty-five multiple-choice items designed to elicit response concerning the feelings of the persons in videotaped sessions. Specifically, questions related to the client's feelings about himself are included. The following item serves as an illustration:

Item 7

1. I feel a little uneasy and self-conscious, but not too much.
2. This scares me. I feel frightened!
3. I feel flirtatious. I like this!

The reliability of the scale was assessed in two ways. Internal consistency reliability coefficients ranged between .58 and .77 with the majority of coefficients in the .70s. A test-retest coefficient of correlation was .75 over a two week period.

Several studies have assessed the validity of the scale. A validity study, using two one year long National Defense Educational Act Institute groups, indicated the groups did increase in their measured affective sensitivity. The scale effectively discriminated between groups involved in sensitivity training.

The scale can be obtained from Mason Media, Inc., Box C, Mason, Michigan, 48854.

Simple/Complex Situation Scoring Procedure

Schneider, Kagan and Werner (1977) have developed a set of subscales, in addition to the full scale, for the ASS. The subscale scores which are used in this study are: within person, between person, male and female scales.

The within person scale represents scores on the ASS in response to the question: "What is the [person] feeling at that point?" In contrast, the between person scale represents scores on the ASS in response to the question: "What is the [person] feeling about the [other person] at that point?" and vice versa. The within person score represents the simple situation variable in this study. The simple situation question asks the participant to identify what a single individual is feeling about oneself or one's concerns. The between person score represents the complex situation variable in this study. The complex situation question asks the participant to identify what two people feel toward one another.

The rationale for the use of the scales in this manner is analogous to the research findings on the discrimination task differences which are involved in stereotype and differential empathy. When participants are asked to identify how a single person feels is analogous to having familiarity with how oneself would feel about oneself in the obser-

ved situation. Simple situation discrimination is, also, analogous to having familiarity with how the "average person" feels about themselves in the observed situation. When participants are asked to identify how two people feel toward one another is analogous to having familiarity with the characteristics of the particular people who are being observed.

Similarity/Dissimilarity Scoring Procedure

For the similarity score, a participant's appropriate score on the male and female scale is used. In other words, male participant scores on the male scale are treated as similarity scores. Female participant scores on the female scale are treated as similarity scores. Male scores on the female scale are treated as dissimilarity scores. Female scores on the male scale are treated as dissimilarity scores.

Statistical Procedures

For hypotheses one through five, one-way analysis of variance procedures were used. The Scheffé test for multiple comparison of means was employed where the analysis of variance was significant. For hypotheses six and seven, two-factor analysis of variance with repeated measures was used. The Scheffé multiple comparison of means was employed where the analysis of variance was significant. For hypotheses eight and nine, Pearson product moment correlations were used.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

Five criteria were employed to determine the effectiveness of the Bullmer (cognitive), the Carkhuff (affective-cognitive) and the placebo empathy training programs. Firstly, the relationship between empathy training and recognition of emotion was examined. Secondly, the relationship between empathy training and Hogan's empathy measure was examined. Thirdly, the relationship between empathy training and social insight was examined. Fourthly, the relationship between cognitive complexity and recognition of emotion, Hogan's empathy measure and social insight was examined. Lastly, the relationship of sex, marital status, years of post-secondary education and age with recognition of emotion, Hogan's empathy measure and social insight was examined.

Hypotheses relevant to each of these five procedures are related, hereafter, followed by the pertinent findings and conclusions.

Hypotheses Related to Recognition of Emotion

1. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the number of

emotions recognized on the ASS.

2. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will not differ in the number of emotions recognized in simple discrimination situations on the ASS.

3. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the number of emotions recognized in complex discrimination situations on the ASS.

4. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will not differ in the number of emotions recognized with similar persons on the ASS.

5. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the number of emotions recognized with dissimilar persons on the ASS.

Findings related to recognition of
emotion - ASS full scale score

To test hypothesis one, data were collected on the ASS full scale score. Table 1 provides the means and standard deviations of the ASS full scale scores for Bullmer, Carkhuff and placebo groups.

An analysis of variance was performed to ascertain if the differences in ASS scores were significant. The groups differed in the number of emotions recognized on the ASS. Table 2 provides the summary of the analysis of variance.

TABLE 1

Means and Standard Deviations of ASS Full Scale Scores for Bullmer, Carkhuff and Placebo Groups

Group	N	ASS Mean	ASS SD
Bullmer	21	33.90	3.24
Carkhuff	27	30.67	4.80
Placebo	20	29.75	4.76

TABLE 2

Summary of Analysis of Variance of ASS Full Scale Scores

Source	MS	df	F-ratio	P
Groups	100.38	2	5.26	<.008
Error	19.07	25		

As the analysis of variance was significant, Scheffe multiple comparison of means were performed to ascertain which groups recognized a greater number of emotions. The Bullmer group differed significantly from the placebo group in the recognition of emotion on the full scale ASS ($p < .01$). The Carkhuff group did not differ significantly from the placebo group in the recognition of emotion on the full scale ASS ($p < .78$). The Bullmer group differed significantly from the Carkhuff group in the recognition of emotion on the full scale ASS ($p < .05$).

Thus, hypothesis one is confirmed as the groups differed in the recognition of emotion on the full scale ASS. The Bullmer group recognized a greater number of emotions on the ASS than did either the Carkhuff group or the placebo group. The Carkhuff group did not recognize a greater number of emotions on the ASS than did the placebo group.

Findings relevant to recognition of emotion
in simple situations on the ASS

To test hypothesis two, data were collected on the simple situation scale of the ASS. Table 3 provides the means and standard deviations for the Bullmer, Carkhuff and placebo groups.

An analysis of variance was performed to ascertain if the differences in simple situation scores on the ASS were significant. The groups differed in the number of emotions recognized in simple situations on the ASS. Table 4 provides the summary of the analysis of variance.

TABLE 3

Means and Standard Deviations of ASS Simple Situation Scores for Bullmer, Carkhuff and Placebo Groups

Group	N	Simple Situation Mean	Simple Situation SD
Bullmer	21	17.86	2.10
Carkhuff	27	16.11	3.51
Placebo	20	15.35	3.44

TABLE 4

Summary of Analysis of Variance of Simple Situation Scores on the ASS

Source	MS	df	F-ratio	P
Groups	34.42	2	3.53	<.035
Error	9.75	65		

As the analysis of variance was significant, Scheffé multiple comparison of means were performed to ascertain which groups recognized a greater number of emotions in simple situations on the ASS. The Bullmer group differed significantly from the placebo group in the recognition of emotion in simple situations on the ASS ($p < .04$). The Carkhuff group did not differ significantly from the placebo group in the recognition of emotion in simple situations on the ASS ($p < .71$). The Bullmer group did not differ significantly from the Carkhuff group in the recognition of emotion in simple situations on the ASS ($p < .17$).

Thus, hypothesis two is not supported as the groups differed in the recognition of emotion in simple situations on the ASS. The Bullmer group recognized a greater number of emotions in simple situations on the ASS than did the placebo group. However, the Bullmer group did not recognize a greater number of emotions in simple situations on the ASS than did the Carkhuff group. The Carkhuff group did not recognize a greater number of emotions in simple situations on the ASS than did the placebo group.

Findings relevant to recognition of emotion
in complex situations on the ASS

To test hypothesis three, data were collected on the complex situation scale of the ASS. Table 5 provides the means and standard deviations for the Bullmer, Carkhuff and placebo groups.

TABLE 5

Means and Standard Deviations of ASS Complex Situation Scores for Bullmer, Carkhuff and Placebo Groups

Group	N	Complex Situation Mean	Complex Situation SD
Bullmer	21	16.05	5.25
Carkhuff	27	14.56	5.87
Placebo	20	14.40	6.15

An analysis of variance was performed to ascertain if the differences in complex situation scores on the ASS were significant. The groups differed in the number of emotions recognized in complex situations on the ASS. Table 6 provides the summary of the analysis of variance.

TABLE 6

Summary of Analysis of Variance of Complex Situation Scores on the ASS

Source	MS	df	F-ratio	P
Groups	17.76	2	3.08	<.053
Error	5.76	65		

As the analysis of variance was significant, Scheffé multiple comparison of means were performed to ascertain which groups recognized a greater number of emotions in complex situations on the ASS. Significant differences between the groups were not found. However, the Bullmer group approached significance when compared with the placebo ($p < .10$) and Carkhuff groups ($p < .11$).

Thus, hypothesis three is supported as the groups differed in the recognition of emotion in complex situations on the ASS. But, none of the groups differed from each other in the recognition of emotion in complex situations on the ASS. However, the Bullmer group approached significance when compared with both the placebo and Carkhuff groups.

Findings related to the recognition of emotion with similar persons on the ASS

To test hypothesis four, data were collected on the similarity scale of the ASS. Table 7 provides the means and standard deviations for the Bullmer, Carkhuff and placebo groups.

An analysis of variance was performed to ascertain if differences in similarity scores were significant. The groups did not differ in the recognition of emotion for similar persons on the ASS. Table 8 provides the summary of the analysis of variance.

TABLE 7

Means and Standard Deviations of ASS Similarity Scores for Bullmer, Carkhuff and Placebo Groups

Group	N	Similarity Mean	Similarity SD
Bullmer	21	16.19	5.96
Carkhuff	27	15.30	8.89
Placebo	20	14.45	8.29

TABLE 8

Summary of Analysis of Variance of Similarity Scores on the ASS

Source	MS	df	F-ratio	P
Group	15.53	2	2.00	<.14
Errors	7.75	65		

As the analysis of variance was not significant, Scheffe' multiple comparison of means were not performed.

Thus, hypothesis four is supported as the groups did not differ in the recognition of emotions for similar persons on the ASS.

Findings related to the recognition of emotion with dissimilar persons on the ASS

To test hypothesis five, data were collected on the dissimilarity scale of the ASS. Table 9 provides the means and standard deviations for the Bullmer, Carkhuff and placebo groups.

TABLE 9

Means and Standard Deviations of ASS Dissimilarity Scores for Bullmer, Carkhuff and Placebo Groups

Group	N	Dissimilarity Mean	Dissimilarity SD
Bullmer	21	17.71	2.57
Carkhuff	27	15.37	3.18
Placebo	20	15.30	3.56

An analysis of variance was performed to ascertain if the differences in dissimilarity scores were significant. The groups did differ in the recognition of emotion for dissimilar persons on the ASS. Table 10 provides the summary of the analysis of variance.

TABLE 10

Summary of Analysis of Variance of
Dissimilarity Scores on the ASS

Source	MS	df	F-ratio	P
Groups	40.92	2	4.19	< .
Error	9.77	65		

As the analysis of variance was significant, Scheffé multiple comparison of means were performed to ascertain which groups recognized a greater number of emotions for dissimilar persons on the ASS. The Bullmer group differed significantly from both the placebo ($p < .04$) and Carkhuff ($p < .05$) groups in the recognition of emotion for dissimilar persons on the ASS. The Carkhuff group did not differ from the placebo group in the recognition of emotion for dissimilar persons on the ASS ($p < .99$).

Thus, hypothesis five is supported as the groups differed in the recognition of emotion for dissimilar persons on the ASS. The Bullmer group recognized a greater number of emotions for dissimilar persons on the ASS than did either the Carkhuff group or the placebo group. The Carkhuff group did not recognize a greater number of emotions for dissimilar persons on the ASS than did the placebo group.

Conclusions related to recognition of emotions

The conclusions possible on the basis of these results are:

- a. The full scale ASS scores of the three groups were significantly different.
- b. The full scale ASS scores of the Bullmer group were significantly different from the full scale ASS scores of the placebo and Carkhuff groups.
- c. The full scale ASS scores of the Carkhuff group were not significantly different from the full scale ASS scores of the placebo group.
- d. The simple situation ASS scores of the three groups were significantly different.
- e. The simple situation ASS scores of the Bullmer group were significantly different from the simple situation ASS scores of the placebo group.
- f. The simple situation ASS scores of the Carkhuff group were not significantly different from the simple situation ASS scores of the placebo group.
- g. The simple situation scores of the Bullmer group were not significantly different from the simple situation ASS scores of the Carkhuff group.
- h. The complex situation ASS scores of the three groups were significantly different.

- i. The complex situation ASS scores of the Bullmer, Carkhuff and placebo groups were not significantly different from each other using Scheffe tests.
- j. The similarity ASS scores of the three groups were not significantly different.
- k. The dissimilarity ASS scores of the three groups were significantly different.
- l. The dissimilarity ASS scores of the Bullmer group were significantly different from both the dissimilarity ASS scores of the placebo and Carkhuff groups.
- m. The dissimilarity ASS scores of the Carkhuff group were not significantly different from the dissimilarity ASS scores of the placebo group.

Hypotheses 1, 3, 4, and 5 were supported. Hypothesis 2 was not supported.

The Bullmer (cognitive) empathy training program effects an overall measure of recognition of emotion in a manner different from either placebo effects or the effects of the Carkhuff (affective-cognitive) empathy training program. The programs differ in their effect on recognition of emotion in complex situations. While the Scheffe tests are not significant, the Bullmer (cognitive) program approaches significant effects in contrast to placebo effects or the

effects of the Carkhuff (affective-cognitive) program on the recognition of emotion in complex situations. Placebo effects are as effective as either the Bullmer (cognitive) or Carkhuff (affective-cognitive) programs in effecting the recognition of emotion with similar persons. The Bullmer (cognitive) program effects recognition of emotion with dissimilar persons in a manner different from either placebo effects or the effects of the Carkhuff (affective-cognitive) program. However, the Bullmer program effects recognition of emotion in simple situations in a manner different from placebo effects but not from the effects of the Carkhuff program.

Hypothesis Related to Hogan's Empathy Scale

6. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the amount of change on Hogan's empathy scale.

Findings related to Hogan's empathy scale

To test hypothesis 6 data were collected on Hogan's empathy scale on two different occasions. Table 11 provides the means on the two different occasions and their total average for the Bullmer, Carkhuff and placebo groups on Hogan's empathy scale.

TABLE 11

Means of Hogan's Empathy Scale Scores for
Bullmer, Carkhuff and Placebo Groups

Group	N	Hogan Mean (Time 1)	Hogan Mean (Time 2)	Total (Treatment)
Carkhuff	27	40.96	42.22	41.59
Bullmer	21	39.38	40.33	39.86
Placebo	20	36.90	36.40	36.65
Total (Time)		39.28	39.93	

A two-way analysis of variance, with repeated measures was performed to ascertain if the differences in Hogan's scores were significant. Table 12 provides the summary of the analysis of variance.

TABLE 12

Summary of Analysis of Variance - Repeated
Measures - of Hogan's Empathy Scale

Source	MS	df	F-Ratio	P
<u>Between Subjects</u>				
Groups	280.14	2	5.47	<.006
Error	51.25	65		
<u>Within Subjects</u>				
Time	10.88	1	2.37	<.128
Treatment/time	9.79	2	2.13	<.126
Error	4.54	65		

The analysis of variance was significant. The groups differed in the amount of increase on Hogan's empathy scale, thus, the increase, in Hogan scores, was related, significantly, to treatment differences. The increase in Hogan scores was not related, significantly, to either time or to the interaction of the treatments and time.

As group differences were significant, Scheffé multiple comparison of means were performed to ascertain which groups changed on Hogan's empathy scale. Both the Carkhuff ($p < .01$) and Bullmer ($p < .05$) groups differed significantly from the placebo group in the amount of increase on Hogan's scale. The Carkhuff group did not differ significantly from the Bullmer group in the amount of increase on Hogan's scale ($p < .31$).

Thus, hypothesis six is supported as the groups differed in the amount of change on Hogan's scale. Both the Carkhuff and Bullmer groups increased their scores on Hogan's scale in contrast to the placebo group, who did not increase their scores on Hogan's scale. Neither the Carkhuff nor the Bullmer group differed from each other in the amount of increase on Hogan's scale.

Conclusions related to Hogan's empathy scale.

The conclusions possible on the basis of these results are:

- a. The Hogan empathy scores of the three groups differed significantly.

- b. The increase in Hogan scores was related to differences between the treatments.
- c. The increase in Hogan scores was not related to time or the interaction of time and treatment.
- d. The Hogan scores of both the Bullmer and Carkhuff groups differed significantly from the Hogan scores of the placebo group.
- e. The Hogan scores of the Bullmer group did not differ significantly from the Hogan scores of the Carkhuff group.

Hypothesis six is supported. The Bullmer (cognitive) and the Carkhuff (affective-cognitive) empathy training programs effect Hogan's measure of empathy in a manner different from placebo effects. However, there is no difference between the effectiveness of both the Bullmer (cognitive) and Carkhuff (affective-cognitive) programs on Hogan's measure of empathy.

Hypothesis Related to Social Insight Scale

7. The Bullmer (cognitive), Carkhuff (affective-cognitive) and placebo groups will differ in the amount of change on the social insight scale.

Findings related to the social insight scale

To test hypothesis seven, data were collected on the social insight scale on two different occasions. Table

13 provides the means on the two occasions and their total average for the Bullmer, Carkhuff and placebo groups on the social insight scale.

TABLE 13

Means of Social Insight Scores for
Bullmer, Carkhuff and Placebo Groups

Group	N	Social Insight Mean (Time 1)	Social Insight Mean (Time 2)	Total (Treatment)
Bullmer	21	23.24	26.86	25.05
Placebo	20	22.70	22.60	22.65
Carkhuff	27	20.74	22.40	21.59
Total (Time)		22.09	23.85	

A two-way analysis of variance, with repeated measures, was performed to ascertain if the differences in social insight scores were significant. Table 14 provides the summary of the analysis of variance.

The analysis of variance was not significant for groups, although, group differences approached significance ($p < .06$). Thus, the change in social insight scores was not related, significantly, to treatment differences. The increase in social insight scores was related, significantly, to both time and to the interaction of the treatments and time.

Thus, hypothesis seven is not supported as the groups

TABLE 14

Summary of Analysis of Variance - Repeated
Measures - on Social Insight Scores

Source	MS	df	F-ratio	P
<u>Between Subjects</u>				
Groups	139.64	2	2.85	<.064
Error	48.94	65		
<u>Within Subjects</u>				
Time	101.26	1	11.23	<.001
Treatment/Time	38.54	2	4.27	<.02
Error	9.02	65		

did not differ in the amount of change on the social insight scale. However, the group differences approached significance ($p < .06$).

Conclusions related to social insight scale

- a. The social insight scores of the three groups were not significantly different.
- b. The difference in social insight scores was related to the effects of time.
- c. The difference in social insight scores was related to the interaction of time and treatments.

Hypothesis seven is not supported. The three groups

did not increase their scores on the social insight scale as a function of treatment alone but as a function of time and the interaction of time and treatment.

Hypothesis Related to Cognitive Complexity

8. The paragraph completion test will be related to scores on the recognition of emotion scales of the ASS, Hogan's empathy scale and the social insight scale.

Findings related to cognitive complexity

To test hypothesis eight, data were collected on the paragraph completion test (PCT). Table 15 provides the Pearson product moment correlations between scores on the PCT and recognition of emotion scales, Hogan's scale and the social insight scale.

TABLE 15

Correlation Matrix Between PCT, Recognition of Emotion Scales, Hogan's Scale and the Social Insight Scale

ASS FS	ASS SS	ASS CS	ASS S	ASS DS	Hogan Pre	Social Insight Pre
-.02	-.02	-.01	-.01	-.02	.27	-.05
n = 68						

r = significance at .236, from Ferguson, S.S. Statistical analysis in psychology and education (4th ed.). New

York: McGraw Hill, 1976, p. 494.

Most correlations were very low and negative. Thus, the PCT was not related to recognition of emotion scales or to the social insight scale. Hogan's empathy test had a modest relationship with the PCT. Thus, high scores on the PCT were related modestly to high scores on the Hogan scale. Thus, hypothesis eight was not supported.

Conclusions related to cognitive complexity

The conclusions possible on the basis of these results are:

- a. The PCT was not related to the various scales of recognition of emotion.
- b. The PCT was not related to the social insight scale.
- c. The PCT was related modestly to Hogan's scale ($p < .03$).

Hypothesis eight is not supported. Cognitive complexity is not related to recognition of emotion, Hogan's empathy scale or social insight.

Hypothesis Related to Demographic Variables

9. Sex, marital status, years of post-secondary education and age will not be related to the various ASS measures, Hogan's empathy scale and the social insight scale.

Findings related to demographic variables

To test hypothesis nine, data were collected on the sex, marital-status, years of education and age of the

participants. Table 16 provides the Pearson product moment correlation matrix between sex, marital status, years of post-secondary education, age and the ASS, Hogan's empathy scale and the social insight scale.

TABLE 16

Correlations Between Demographic Variables and ASS Scales, Hogan Scale and Social Insight Scale

	ASS FS	ASS SS	ASS CS	ASS S	ASS DS	Hogan Pre	Social Insight Pre
Sex	.20	.27	.02	.22	.12	-.30	.03
Marital status	-.12	-.21	.05	-.06	-.13	-.08	-.29
Education	.11	-.01	.22	.19	-.01	-.01	.14
Age	.15	.13	.11	.05	.17	.07	.27
N = 68							

r = significance at .236, from Ferguson, G.A. Statistical analysis in psychology and education (4th ed.). New York: McGraw-Hill, 1976, p. 494.

Most correlations were very low. Sex had no relationship with ASS full scale score, ASS complex situation score, ASS similar person score, ASS dissimilar person score and social insight score. Sex had a modest relation-

ship with ASS similar situation score and Hogan score, although, the relationship with Hogan's score is negative. Marital status had no relationship with any of the recognition of emotion scores or Hogan score. Marital status had a modest, negative relationship with the social insight score. Education had no relationship with recognition of emotion scores, Hogan's score and social insight score. Age had no relationship with recognition of emotion scores or Hogan scores. Age had a modest relationship with the social insight score. Thus, hypothesis nine is supported.

Conclusions related to demographic variables

The conclusions possible on the basis of these results are:

- a. Sex was not related to the recognition of emotion.
- b. Sex was related modestly to the ASS simple situation scale ($p < .03$). Thus, females tended to score higher on the simple situation scale than did males.
- c. Sex was related negatively and modestly to the Hogan scale ($p < .01$). Thus, females tended to score lower on the Hogan scale than did males.
- d. Sex was not related to the social insight scale.
- e. Marital status was not related to the recognition of emotion scales nor the Hogan scale.

- f. Marital status was related negatively and modestly to the social insight scale ($p < .02$). Thus, single persons tended to score lower on the social insight scale than did married persons.
- g. Years of formal education were not related to the recognition of emotion scales, Hogan scale nor the social insight scale.
- h. Age was not related to the recognition of emotion scales nor the Hogan scale.
- i. Age was related modestly to the social insight scale ($p < .03$). Thus, older persons tended to score higher on the social insight scale than did younger persons.

Hypothesis nine is supported. Sex, marital status, years of formal education, and age are not related to the recognition of emotion scales, Hogan scale nor the social insight scale.

The correlation matrix for all variables is contained in Appendix E.

CHAPTER V

DISCUSSION AND IMPLICATIONS

Introduction

The general purpose of this study was to compare two empathy training programs, based on different rationales and different skills, and a placebo condition in order to ascertain the specific constitution of empathic behavior. The study used five types of criteria to assess the effects of both the Bullmer (cognitive) and Carkhuff (affective-cognitive) empathy training programs in relationship to the effects of a placebo condition and each other.

The discussion is organized via the criteria. The discussion proceeds from recognition of emotion, both supported and contraindicated findings, to discussion of the findings which relate to the demographic criteria. Following the discussion of the five criteria, the limitations, the implications and further possibilities for research are presented.

The nature and process of empathic behavior in relationship to recognition of emotion

The Bullmer program appears more effective than either the placebo condition or Carkhuff program in facilitating greater recognition of immediate affective states of another person, as measured by the ASS full scale score. Bullmer

(1972) found his program more effective than a no treatment control group on a measure of emotional recognition. The present investigation supports Bullmer's findings as his program appears more effective than either the Carkhuff program or the placebo condition in facilitating greater recognition of emotion. The different skills, used in the three training approaches, may account for the findings.

The Carkhuff program requires participants to use the skills empathy, respect, concreteness and genuineness to empathize with other persons. The placebo program requires the participants to identify another person's need state in order to empathize with another person. As an example, placebo participants were instructed that a person who feels anxious likely needs to seek relief or escape from his present situation. The Bullmer program requires participants to use the situations which induce, for example, fear and anxiety, to empathize with other persons.

The ASS requires the participant to describe the immediate affective state of another. The Carkhuff skills are, primarily, response skills. Carkhuff assumes participants recognize what another person is feeling and his skills are designed to assist participants in responding to another person's feeling states in an empathic manner (Carkhuff and Berenson, 1977). The Bullmer skills are, primarily, diagnostic skills. Bullmer does not assume participants recognize what another person is feeling. The

Bullmer skills are designed to assist participants in recognizing different types of emotion, for example, anger, fear and sadness before they respond to persons in an empathic manner. The skill, perceptual approach to understanding others, instructs participants to check their emotional diagnosis with the person with whom they are interacting at the time. The instruction to check one's emotional diagnosis is analogous to the skills approach of Carkhuff.

The ASS assesses one's emotional diagnostic skills rather than one's emotional response skills. The Bullmer skills are, thus, more conducive to higher scores on the ASS. The ASS does not assess the Carkhuff emotional response skills or the Bullmer emotional response skill. However, the Bullmer emotional diagnostic skills effectively increase participant's ability to recognize emotions. The Carkhuff assumption that one recognizes, readily, another person's emotions, without training, appears unsubstantiated by this investigation. If one recognizes, accurately, what another person is feeling, responding empathically to another person seems more likely to occur.

Contrary to hypothetical expectations, the programs do differ in their effect on recognition of emotion in simple situations. The Bullmer program appears more effective than the placebo condition but not the Carkhuff program in facilitating the recognition of emotion in simple situations. This finding suggests normative empathy processes

may account for the effectiveness of the Bullmer skills.

Cronbach (1955) indicated normative empathy is a function of actual similarity between persons or assumed similarity between persons. Shantz (1975) indicates assumed similarity is an "average expectancy" process. One recognizes how another individual is feeling by generalizing from one's own experience based ideas of how the "average person" in one's experience would feel in the situation. In contrast, similarity is a "self expectancy" process (Shantz, 1975). One recognizes how another individual is feeling by generalizing from one's own experience in such situations.

The Bullmer skills appear to influence recognition of the "average situation" which induces, for instance, anger and fear. Knowledge of the "average situation" which induces a particular feeling is a generalization process likely to be more accurate than "average person" expectancies. "Average person" expectancies do not generalize as well as "average situation" expectancies because one may not have an "average person" expectancy to match the situation. For example, a person may not have experiences with feelings of jealousy and envy and, thus, no "average person" expectancy exists with which to recognize when a person feels jealous or envious.

Schachter's (1964, 1971) research, also, appears to support "average situation" generalization as more accurate

than "average person" generalization in terms of the recognition of emotion. Schachter's research indicates physiological and emotional arousal signs are similar for a variety of emotions. Thus, cognitive appraisal of the situation in which emotional arousal occurs appears to account for different states of emotion. As the Bullmer program instructs participants in how to cognitively appraise situations which induce various emotions, the participant is more likely to look to the situation as a means of recognizing feelings rather than looking to generalize from his own phenomenologically created, average person.

While the programs effect recognition of emotion in complex situations, none of the programs is any more effective than the other. However, the Bullmer program approaches significance in comparison with both the placebo condition ($p < .10$) and the Carkhuff program ($p < .11$). The findings do not, however, provide support for differential empathy processes. Differential empathy is defined in this investigation as the ability to identify how two people feel toward one another. Also, differential empathy is the ability to recognize how a person dissimilar to oneself feels.

Cognitive complexity is not related to the complex situation scale of the ASS. The empathy literature indicates cognitive complexity is associated with differential empathy processes (Bieri, 1955; Taft, 1953). Thus, differential empathy processes may not be required for recog-

inition of emotion in complex situations as defined by this investigation. Also, the use of Bullmer's skills on recognition of emotion in complex situations would seem to suggest "average situation" generalization has an effect in complex situations but not as great as in simple situations. Thus, normative empathy processes are insufficient to assist an individual in recognizing what two people feel toward another person.

The three programs did not effect the recognition of emotion with similar persons. Thus, the process of self-expectancy is sufficient to effect recognition of emotion with similar persons.

The Bullmer program is more effective than either the placebo condition or Carkhuff program in increasing recognition of emotion with dissimilar persons. Again, this finding is not evidence in support of differential empathy processes. The effect of the Bullmer skills with dissimilar persons may be indicative of improved normative empathy generalization via average situation generalization. While differential empathy requires, in Cronbach's view, the ability to recognize how persons unlike oneself feel, average situation generalization may account for recognition of emotion with dissimilar persons whereas average person generalization may not. Thus, normative empathy has three levels or alternative processes: actual similarity, average person similarity and average situation simi-

larity. It is proposed that a differential empathy task, in terms of recognition of emotion, requires one to distinguish between phenomenological experiences of, for example, fear for dissimilar persons. In other words, differential "emotional" empathy requires one to distinguish the degree of fear experienced by persons who are dissimilar to oneself.

In summary, the Bullmer program is more effective than either the placebo condition or the Carkhuff program in facilitating recognition of immediate affective states. However, the Bullmer skills are diagnostic while the Carkhuff skills are response type. Carkhuff's assumption, that training in the diagnosis of emotional states is unnecessary, appears incorrect as the Bullmer skills do increase the accuracy of emotional recognition. The Bullmer skills appear to be based on normative empathy processes rather than upon differential empathy processes. The Bullmer skills appear to facilitate accurate recognition of emotion through the process of average situation expectancy which may be less prone to error than is average person expectancy.

The nature and process of empathic behavior
in relationship to Hogan's empathy construct

Both the Bullmer and Carkhuff programs increase Hogan scores while placebo effects do not. However, the Bullmer program is no more effective than the Carkhuff program in increasing Hogan scores.

Grief and Hogan (1973) indicate Hogan's scale measures an empathic orientation which is defined as a person who is socially facile, tolerant of another's viewpoint and humanistic in his socio-political attitudes. Hogan maintains his scale is also, assessing two different aspects of an empathic orientation. The first is role structure which is the set of self-presentations each person develops and alters in order to interact effectively with other persons (Hogan, 1975). The second is character structure which is the residue of accommodations that each person makes to the demands and expectations of their family and culture in childhood (Hogan, 1975). Role structure is relatively sensitive to situational influences while character structure is insensitive to situational influences (Hogan, 1975). Thus, those aspects of social skill, tolerance and humanistic attitudes, which are part of a participant's role structure, are effected by the Bullmer and Carkhuff empathy training programs. Those aspects of social skill, tolerance and humanistic attitudes, which are part of a participant's character structure, are not effected by the Bullmer and Carkhuff empathy training programs. The effect of the Bullmer and Carkhuff programs on empathic role structures appears similar.

In summary, empathy appears to be an orientation toward others which is comprised of social skill, tolerance and humanistic attitudes. The Bullmer and Carkhuff programs

effect those aspects of an empathic orientation which are part of one's role structures. The placebo condition does not effect those aspects of an empathic orientation which are part of one's role structures.

The nature and process of empathic behavior in relationship to social insight

Neither the empathy training programs nor the placebo condition effect social insight. Time and the interaction of time and treatment appear to be more effective in increasing social insight.

The participants stated, in follow-up sessions, that the Bullmer and Carkhuff skills helped them to increase their scores on the SI scale. Gough (1965) indicates high scores on the SI are dependent upon skill in recognizing when persons are using defence mechanisms to disguise the true intent of their behavior. The Bullmer skill, recognition of hidden emotion, instructs the participant in how to recognize defense mechanisms. Thus, increases in SI scores for the Bullmer group may be a function of such instruction. Also, the Carkhuff skills appear to have some effect on increasing SI scores. Participants, in the Carkhuff program, stated the program helped them to understand better what was happening in the SI interaction paragraphs. In summary, social insight, which is defined as the ability to appraise what another person thinks and feels, is not strongly effected by the empathy training

programs used in this investigation.

The nature and process of empathic behavior
in relationship to cognitive complexity

Cognitive complexity is not related to any of the criteria used to assess the programs in this investigation. To reiterate, cognitive complexity is associated with differential empathy processes (Bierei, 1955; Taft, 1955). Thus, differential empathy processes may not be assessed by any of the criteria used in this investigation.

The nature and process of empathic behavior
in relationship to demographic criteria

The demographic variables sex, marital status, years of post-secondary education are not strongly associated with any of the criteria used in this investigation. Thus, empathic behavior, as assessed in this study, is not dependent upon the participants sex, age, marital status or years of post-secondary education.

Limitations

The effect of, for example, Kagan's IPR, on empathic processes is not revealed by this investigation. The findings regarding the nature and process of empathy pertains to the Bullmer and Carkhuff programs solely. Also, the findings are limited by the didactic delivery system used. It may be that the Carkhuff program in an experiential training or didactic-experiential training format does effect recognition of emotions in a manner different from

a didactic format.

Implications

Emotional discrimination may be best taught by a programmed text approach. DiMattia and Zimmer (1972) found a programmed text approach was more effective in teaching discrimination of depressive behavior than a video approach. Thus, counsellors-in-training and other professional groups who require skill in emotional recognition may best benefit from programmed text instruction. The method has the additional advantage of being relatively inexpensive in comparison with other methods.

Perhaps, emotional recognition training needs to precede empathic response training. The assumption that professional groups can discriminate various emotions, thus, require training in response behaviors, solely, seems untenable. The combination of emotional discrimination and response discrimination training would appear to be the components of skillful empathic behavior rather than either set of skills alone.

Further research

This investigation failed to assess differential empathy processes. Differential empathy tasks would require an observer to differentiate the degree of, for example, fear, being experienced by two or more persons dissimilar to the observer in order to demonstrate the functioning of

differential empathy processes. Second, empirical investigation is needed to assess whether the Carkhuff response skills are more effective than the Bullmer response skill.

Further research will reveal, in all probability, that the nature and process of empathic behavior are cognitive not affective processes. Piaget has demonstrated that children cannot form certain concepts unless they have first formed others. Thus, cognition is a developmental process. In a similar manner the experience of simple emotions precedes more complex emotions. For example, one could not experience pride unless one had a concept of oneself, so one probably has to be able to experience pride before one can be subject to ambition and shame. To know what another person feels, and why, requires complex cognitive skills.

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ABSTRACT OF THE BULLMER PROGRAM

The program has an introduction, four skill units and a proficiency test. The introduction stresses the importance of empathic behavior in the process of understanding another person's feelings and outlines the skills which are to be presented. Also, the introduction indicates the manual is a programmed, self-instructional text and provides instructions on how to use the manual successfully.

Unit 1, defines what is interpersonal perception and how it relates to understanding what other person's feel. Practice is provided to master the major concepts of interpersonal perception and the concepts relationship to empathic behavior.

Unit 2, defines the general cognitive process involved in recognizing, accurately, common emotions. Section 1, Unit 2, provides practice in distinguishing the concepts need, desire, motive, emotion and how the concepts relate to identifying common emotions. Section 2, Unit 2, provides detailed instruction in how to identify common emotions. Section 3, Unit 2, provides practice in identifying common emotions.

Unit 2 introduces the idea that people can disguise or be unaware of their feelings. Section 1, Unit 3, provides instruction and practice in identifying the mechanism of rationalization. Section 2, Unit 3, provides instruc-

tion and practice in identifying the mechanism of compensation. Section 3, Unit 3, provides instruction and practice in identifying the mechanism of identification. Section 4, Unit 3, provides instruction and practice in identifying the mechanism of projection. Section 5, Unit 3, provides instruction and practice in identifying the mechanism of reaction formation.

Unit 4, attempts to integrate the previous three units into the perceptual approach to understanding which involves consideration of how the other person perceives his own behavior. Section 1, Unit 4, provides practice in identifying how the other person perceives their own emotional behavior.

The proficiency test assesses the participant's comprehension of the skills instruction.

ABSTRACT OF THE CARHUFF PROGRAM

The program has an introduction, four skill units and proficiency test. The introduction stresses the importance of empathic behavior in the process of understanding another person's feelings and outlines the skills which are to be presented. Also, the introduction indicates the manual is a programmed, self-instructional text and provides instruction on how to use the manual successfully.

Unit 1, defines what empathy is and it's importance to interpersonal behavior. Section 1, Unit 1, provides instruction and practice in identifying nonempathic response styles. Section 2, Unit 1 provides instruction and practice in identifying the four levels of empathic behavior. Section 3, Unit 1, provides illustrations of the four levels of empathic behavior and why the illustrations are rated as they are. Section 4, Unit 1, provides practice in writing interchangeable or level three empathic responses.

Unit 2, defines what respect is and it's importance to interpersonal behavior. Section 1, Unit 2, provides instruction and practice in identifying the four levels of respectful behavior. Section 2, Unit 2, provides illustrations of the four levels of respect and why the illustrations are rated as they are. Section 3, Unit 2, provides practice in writing level three respect responses.

Unit 3, defines what concreteness is and it's impor-

tance to interpersonal behavior. Section 1, Unit 3, provides instruction and practice in identifying the four levels of concreteness. Section 2, Unit 3, provides illustrations of the four levels of concreteness and why the illustrations are rated as they are. Section 3, Unit 3, provides practice in writing level three concrete responses.

Unit 4, defines what genuineness is and its importance to interpersonal behavior. Section 1, Unit 4, provides instruction and practice in identifying the four levels of genuineness. Section 2, Unit 4, provides illustrations of the four levels of genuineness and why the illustrations are rated as they are. Section 3, Unit 4, provides practice in writing level three concrete responses.

The proficiency test assesses the participant's comprehension of the skills instruction.

ABSTRACT OF THE PLACEBO PROGRAM

The program has an introduction, and two skill units. The introduction stresses the importance of correctly identifying how another person is feeling in order to interact, successfully, with others.

Unit 1, provides a vocabulary of affective adjectives and asks the participant to use the list in identifying the emotions experienced by the two leading characters in the short story in Unit 2. The participant is asked to check each feeling experienced by one of the characters on the affective checklist.

Unit 2, requires the participant to write an emotional summary for each of the leading characters using the affective checklist as a guide.

EXAMPLE RESPONSES ON THE PCT AT LEVELS 1, 3, 5, 7

When I am in doubt

"When I am in doubt I pray. Prayer doesn't give me an immediate resolution of my doubt, but it makes me feel more confident that I can come up with the right solution."

1

"I sit and review all the points and alternatives I have at hand. I try to reflect what the consequences of each alternative will be and then try to choose the most logical and reasonable action. I don't always choose the right one and must rethink the alternatives"

3

"I think the situation out and then consult others. This allows me to utilize the experience and expertise of those around me"

5

"I try to retreat to a place where I can be alone with myself. Then I try to begin a methodical process of analyzing the various aspects of my doubt which invariably results in some new angles or facets to a recurring doubt which I have not adequately perceived in the past. Severe doubts, I find have no immediate clear-cut resolution, therefore, I try to adjust myself to accommodate the doubt as further light may be shed on the issue. Above all, doubts must not be rationalized away, for sometimes the pain and hurt which they instil are the seeds of a more profound understanding of reality."

7

APPENDIX E

CORRELATION MATRIX BETWEEN ALL CRITERION MEASURES USED IN THIS INVESTIGATION OF EMPATHY TRAINING

	ASS FS	ASS SS	ASS CS	ASS S	ASS DS	H Pre	H Post	SI Pre	SI Post	PCT	AGE	SEX	MS	EDU
ASS FS	-.86													
ASS SS	.86	-.86												
ASS CS	.75	.31	-.86											
ASS S	.74	.59	.31	-.86										
ASS DS	.83	.76	.63	.59	-.86									
H Pre	-.01	-.13	.15	-.04	-.01	-.86								
H Post	-.01	-.16	.19	-.01	-.01	.86	-.86							
SI Pre	.16	.11	.17	.06	.06	.06	.06	-.86						
SI Post	.28	.15	.24	.22	.20	.07	.06	.11	-.86					
PCT	-.02	-.02	-.01	-.05	-.02	.27	.25	.25	.27	-.86				
AGE	.15	.13	.11	.05	.17	.07	.10	.10	.36	.27	-.86			
SEX	.20	.27	.02	.22	.11	.07	.30	.03	.02	.01	.10	-.86		
MS	-.12	-.21	.05	-.06	-.13	-.08	-.08	-.29	-.09	-.09	-.60	.03	-.86	
EDU	.11	-.01	.22	.19	-.01	-.04	.14	.17	-.17	-.17	.06	.01	.06	-.86

N = 68

r = significance at .236 from Ferguson, G. A. Statistical analysis in psychology and education (4th ed.). New York; McGraw-Hill, 1976, p.494.

NAME: _____

PCT

Complete the following sentence stems. Use a brief paragraph or more to complete your thoughts.

1. "Rules.... "

2. "When I am in doubt ..."

3. "Confusion ..."

4. "Parents ..."

5. "When I am criticized ..."

6. "When others criticize me it usually means ..."

THE SOCIAL INSIGHT TEST

INSTRUCTIONS:

In this test 25 "problem situations" will be presented. For each situation the Response Booklet provides four comments that seem to offer alternative explanations. Social insight involves the ability to "see into" such situations, in which individuals are trying to avoid embarrassment or to achieve some satisfaction as an offset to frustration.

You are asked to consider each situation on its own merits. Then, in the Response Booklet mark an X in the blank beside the statement (a, b, c, or d) that in your judgement presents the most appropriate, intelligent, or logical comment on the situation. There are no absolutely right or wrong answers ... each problem is a matter for analysis and inference, and judgements by different persons on the same question may differ. As a guide, you should ask yourself the question, "Which of the four comments is most accurate, or would represent the wisest thing to do in each situation?"

EXAMPLE:

Mr. Asher, when told that an acquaintance had purchased a new automobile, was heard to criticize him very strongly for spending so much money for a car when he probably could not afford one. Not long after this incident, Mr. Asher himself bought an expensive new automobile. About the same time he placed another mortgage on his house. Why did Mr. Asher criticize his acquaintance for an act he afterwards performed himself?

- a. Because he probably had "money left to him" upon the death of a near relative.
- b. Criticism of his acquaintance got rid of an "uneasy feeling" about something he contemplated doing himself.
- c. His acquaintance was probably an unsafe driver.
- d. In sections of the country long settled and in which Mr. Asher lived, most houses were heavily mortgaged.

PLEASE DO NOT MAKE ANY MARKS ON THIS BOOKLET. MARK YOUR ANSWERS ONLY IN THE RESPONSE BOOKLET.

1. Joseph Runway occasionally drinks too much. He has a steady job, but has never succeeded in all the years of continuous employment in getting the promotion to a better paid assistant managership, which he deeply desires in the firm for which he works. His younger brother had been the "apple of his mother's eye," and now Joseph's wife is very partial to the one son in the family otherwise consisting of three girls. To help Mr. Runway, a friend of the family:
2. Mr. H. left school before graduation to take a job as a clerk in a store. Although still a clerk, he has always had steady work and an income sufficient to enable him to marry, buy a home, equip and maintain it in a very comfortable manner, although this has required him to do without many other things (e.g., children, social-recreational activities, etc.). When Mr. H. is with other people in an informal group, his chief topic of conversation is the quality and cost of the various articles he has purchased for his home. The reason for Mr. H's chief topic of conversation is:
3. Mr. Smith, a business man, is strongly opposed to suggestions favoring social planning and control of business by government, because he says, "World conditions have caused our depressions" and "Industrial cycles are normal and if the government interferes it will be worse." His opposition to government planning and control probably is the result of:
4. The principal of the school attended by James reported that he showed generally bad behavior in the schoolroom, constant teasing and bullying of younger children, and occasional petty thieving. He was conspicuous in classes for his lack of attention and concentration. He was a pale, slim boy, rather tall for his twelve years. Out of school, he played little with boys of his own age and was frequently found bullying and teasing younger children. His father was a travelling salesman. James' right arm was broken twice when he was seven and eight years old. When he was nine, his left leg was fractured while in rough play with children. His mother discouraged his playing with older boys. He had a real passion for movies that showed western and adventure stories. His reading consisted of two to three books a week, preferably of the boy adventure type. James' behavior is due to the fact that:
5. Martha, an overconscientious girl of 19 years, is given to self-analysis. She is always concerned with what others think about her and the things she has done. Martha finds it difficult to start conversations with strangers and

frequently analyzes the motives of others. Another trait which is characteristic of Martha's behavior is:

6. Mr. Jenks when in a restaurant sharply orders the waiters about and is rude and critical about the service he receives. He has not many friends because of his tendency to be bossy and critical toward them. In the office in which he works he:
7. Mr. A.'s son is in danger of flunking out of medical school because of low grades and apparent lack of interest and ability in medical courses, but Mr. A. insists that his son stay in the medical course and put more effort into his studies. The son, however, would prefer to take a business course, but Mr. A. persistently blocks all attempts to make this change. Mr. A.'s attitude suggests that:
8. A man bought an expensive automobile after some hesitation because it cost more than he could well afford to pay. Later, when a friend questioned him as to why he bought such an expensive car, he gave several reasons, but the one reason he did not give was:
9. A boy, aged ten, had temper tantrums and was disobedient to his parents. In school, he refused to follow directions, was a trouble maker, and was often fighting. Both parents were living, and he had one younger sister. He told imaginary stories about his parents' wealth and about all his toys and travels. He interrupted others to talk about himself. Frequently, he reported to teachers that other children were picking on him. In order to overcome these behavior difficulties, this boy should be placed:
10. Mr. Thomas frequently protests against the irreligious attitudes of others, asserts the religious depravity of persons with religious beliefs conflicting with his own, is ardent in uncovering and crusading against vice and immorality in his community, and is held up by the members of his church as a model and virtuous person. Mr. Thomas's conduct indicates that:
11. A younger man reacted with intense emotion to any indulgence in alcoholic drinks. If any of his friends as much as took a single drink, he went out of his way to denounce them in most emphatic terms. The explanation was:
12. A weakly child was overprotected by his parents and other adult relatives, who were the only persons with

whom he came into frequent contact. On entering school, he was ignored or rebuffed by his classmates. To this situation he reacted by:

13. Mrs. Thompson constantly consulted physicians about her daughter's health at the slightest sign of illness. She bought her expensive clothing and toys. She frequently irritated the child with excessive attention. She complained that the child would not obey her, and at times she punished her severely for slight misbehavior. Mrs. Thompson's reactions toward her daughter would indicate that:
14. Mrs. Harvey, age 22, disapproved of smoking especially by her husband or by women. She also disapproved of card playing and refused to attend many movies because the love scenes were "immorally presented." She is socially isolated, taking part in few activities with other people. She often asserts that people are more lax in moral matters in present times than they were in earlier times. Her attitudes on these matters suggest that:
15. A boy, 10, dominated his brother, 12, and his sister, 14. When he was opposed in his domineering behavior, he became abusive and destructive. In school, he refused to abide by ordinary routine activities and directions and he:
16. A boy, age 15, is complained about by his parents and teachers. He stays out late at night, is irresponsible, uncooperative, apathetic, and inconsiderate. He is unpopular and annoys other children. He has tendencies to lie and steal whenever he can "get away with it." He has little or no interest in school. In the following list of factors, indicate the one which probably would be most closely associated with this boy's misbehavior.
17. In an executive staff meeting, Mr. Goodrich, sales manager and a loyal and respected man, hears for the first time of a new "selling point" recently introduced by a competitor of the firm in the eastern sales area. This information was supplied to the staff conference by Mr. White, the brilliant young production manager. The managing director is presiding over the staff conference as chairman. Should he:
18. A Community Fund in a large city is faced with the problem of preserving good working relations among the social agencies which are members of the Fund, to preserve the advantages of a single common campaign of

soliciting for financial support, and to promote the idea of cooperative planning for the community. In this situation, the financial campaign falls short by 10 percent of the goal needed to keep the agencies operating at the existing rate of efficiency and skilled services. Cuts in the budgets of all agencies are made, but one large and powerful member agency, X, refuses to take its proportionate cut and maintains through the Chairman of its Board of Directors and through its Executive, that it meets a special need and should not be cut at all, but rather have its budget raised. Which of the following procedures should the Chest adopt in order to preserve its function in the city?

19. During a conference, the discussion becomes so argumentative and heated that everyone seems to be angry at someone else. Finally, one member who seems to be getting the worst of the argument angrily stalks out. The chairman of the group should then:
20. The manager and his chief associates in a high grade employment agency are considering the problem of recommending James Smith for a position. How much information about Smith should go into the letter of recommendation? Smith became unemployed when the printing company for which he had been working continuously for the past five years closed because its funds were tied up by a bank failure. Smith has the technical qualifications for filling a more important position in any one of three vacant positions in other firms. Assuming that the letter of recommendation should mention the fact that ten years ago Smith had been discharged from another firm for an unexplained cause, to which one of the four following firms should he be recommended?
21. A large organization is faced with the need of adapting its policies to changed conditions in the community. In order to supply the Directors of the organization with unbiased facts for the determination of major policies, a research bureau is set up as a special department within the organization. After consideration of the ways and means of making the best use of the new fact-finding function, the Directors decided to establish the research bureau:
22. A dispute arose among the employees and officers of a small manufacturing company as to the use of an adjoining parking lot owned by the company. Some held that favoritism was shown in the assignment of the better parking spaces. The procedure for the manager to follow would be:

23. A committee was appointed by a club to draft a formula that would solve a problem of conflict among the members due to the opposition led by a wealthy Mr. Jones to plans for locating the new club house. The committee met and carefully considered the problem; after discussion, it was decided to:
24. A group of citizens of X assemble to hear a visiting architect describe a new plan for the location and construction of a needed high school building for the town. A main highway cuts through the town. Homes are located in sections on both sides of the highway and some persons who live on one side also own property on the other side. Should the chairman of the meeting, who was asked by the School Board to obtain a judgment on public opinion:
25. The Directors of a settlement house and those who contributed largely to its support were concerned about reports of radical meetings held in its rooms by residents of the slum neighborhood, some communistic and some fascist. It was decided to hold a meeting with Board members to ask questions of the resident staff of social workers. Some feeling developed on the part of the social workers who felt embarrassed or resentful and on the part of the Board members who felt that something was being withheld. The situation grew more and more strained until the tension was suddenly broken by the following remark of a staff member:

THE SOCIAL INSIGHT TEST
RESPONSE BOOKLET

NAME _____ DATE _____
AGE _____ SEX _____ MARITAL STATUS _____
OCCUPATION _____ YEARS OF EDUCATION _____
PLACE OF TESTING _____ CODE _____
OTHER _____

This Response Booklet must be used in conjunction with the Situations Booklet. First, fill in carefully the information requested above. Then study the directions on the Situations Booklet, and proceed to answer the questions by marking an X in the appropriate blanks on the next couple of pages. There is no time limit, but try not to debate too long over any particular item.

1. a. Takes strong measures to deprive him of access to all liquor and strong drink.
- b. Advises that he leave home and "take the cure" to correct his tendency to drink.
- c. Sympathetically hears his story and recognizes the contribution to the security of his family that he has made by steadiness on the job.
- d. Secretly urges Mrs. Runway to take the children and go away, thus to establish a separate residence leading to ultimate divorce.

2. a. He has ideals of quality and believes "production should be for use rather than for profit."
- b. He wishes to keep conversation limited to subjects on which he is informed.
- c. By talking about subjects on which he is informed, he diverts conversation from subjects he is ignorant of, but which most people are informed about and interested in.
- d. He wishes to appear pleasant, to make conversation, and to avoid giving offense.

3. a. His belief in individual initiative.
- b. His opposition to any form of socialism.
- c. His own business activities which just manage to "keep within" the law.
- d. His experience, which has shown that private business is more efficient than government.

4. a. He is discontented because he cannot go on trips and see the country with his father.
- b. He feels the need to make up for his weak physical condition by gaining mastery and attention of his playmates.
- c. He is an incipient criminal of the "moral imbecile" type.
- d. He is a moron and can never hope to develop a superior intelligence because his parents have mediocre minds.

5. a. Worrying over possible misfortunes.
- b. Frequent craving for excitement.
- c. Showing consideration of others' feelings.
- d. Preference for reading about something rather than experiencing it.

6. a. Agitates for better working conditions.
- b. Is ingratiating and subservient to his employer.
- c. Is openly critical of the many rules and regulations governing his work.
- d. Tries to give orders to his fellow workers which are only supposed to be given by his superior.

7. ___ a. Mr. A. in his youth wanted to become a doctor, but circumstances prevented it.
 ___ b. Mr. A. believes that the medical profession is better than that of pharmacy.
 ___ c. Mr. A. believes that the income of his son will be more secure as a doctor.
 ___ d. Mr. A. believes that it is "education in character" to force one's self to do a distasteful task.
8. ___ a. His wife and children needed to get out into the country and he bought a big car so that they could all drive together.
 ___ b. The car would save him money in the long run because it would not need the repairs that an older or cheaper car would.
 ___ c. The friend had bought a car almost as expensive although his income was not much greater.
 ___ d. He expected to receive some money from an estate by the death of a critically ill relative.
9. ___ a. In activities with children who are older or more mature than he.
 ___ b. In activities at home and school in which he can more easily and immediately succeed.
 ___ c. In activities at home and school with more responsibility.
 ___ d. In activities with children who will accept him as a leader.
10. ___ a. He has been brought up in an extremely religious family.
 ___ b. He is trying to become a leader in his community.
 ___ c. He has impulses to do the things he publicly is fighting against.
 ___ d. He feels he must "save" others.
11. ___ a. That his mother had been a leader in the Woman's Christian Temperance Union.
 ___ b. That his father had been a drunkard, who had treated his mother brutally and finally deserted her.
 ___ c. He was himself a secret drunkard at late parties.
 ___ d. His ancestors came from strict Puritan stock.
12. ___ a. Avoiding other children and spending his time in daydreaming.
 ___ b. Fighting with or bullying other children.
 ___ c. Trying to attract attention by competing in games played by the group of children.
 ___ d. Attempting to get other children to accept him by persistently "hanging around" or "tagging along" with them.

13. a. She was inclined to be a hypochondriac.
 b. She was trying to do for her daughter things which she had been denied as a child
 c. Because her daughter was the only child, she expected too much of her.
 d. She had resentments toward the child which she was trying to cover up.
14. a. She was morally superior to her associates.
 b. As a young girl on several occasions she had been severely scolded by her parents for repeating "sex" stories heard from other girls.
 c. As a girl, she had been taught that such activities as card playing, etc., were not approved of by her church.
 d. As a girl, she had been isolated from such activities and therefore had not learned to enjoy them.
15. a. Asserted that the teachers were picking on him.
 b. Said he had no interest in any of his school work.
 c. Would not play or take part in competitive games in which he might be defeated.
 d. Was well behaved and did his work only in his manual training class.
16. a. He is lazy.
 b. He is openly disobedient in school.
 c. He has an introverted personality.
 d. He has an extroverted personality.
17. a. Ask Mr. Goodrich to discuss the point in detail so that others may profit by his ideas?
 b. Ask Mr. Goodrich to elaborate the point in detail and give his views?
 c. Ask Mr. Goodrich to report on the results of his recent and extended trip of inspection of the Far West sales territory?
 d. In the interests of sales efficiency and promotion, require Mr. Goodrich then and there to explain why he did not know of this new point?
18. a. Allow the agency X to withdraw from the Fund and try to raise its budget by a separate financial campaign.
 b. Give the agency X the amount it needs and distribute the cut to other fellow agencies.
 c. Call a conference of the Chairman of the Boards and the Executives of all other agencies to hear the officials of agency X, and try by amicable discussion to reach a mutual understanding.
 d. Reprimand the officials of agency X for lack of consideration of fellow agency needs and threaten to drop it from the Fund unless it conforms.

19. a. Immediately declare the meeting adjourned.
 b. Send someone to ask the departed member to return.
 c. Ask for a vote whether the meeting should be adjourned.
 d. Ignore the departure and continue with the order of business remaining.
20. a. A firm with an unknown personnel policy.
 b. A firm with an established and respected personnel policy.
 c. A firm whose personnel policy has been questioned on grounds of ethical dealings with employees.
 d. A firm with a strict "no nonsense" personnel policy.
21. a. With authority immediately to carry out in practice its own recommendations derived from fact-finding.
 b. With responsibility to report its findings to the Board of Directors.
 c. With responsibility to report its findings to the chief executive only.
 d. With the stipulation that its findings be reported to a subcommittee of the Board on planning, of which the chief executive is to be a member, but not the chairman.
22. a. To ignore a trivial dispute of this sort on the assumption that it would clear up of itself, given time.
 b. To adjudicate the dispute promptly and carefully.
 c. To terminate the parking facilities upon due notice.
 d. To reprimand both parties to the dispute.
23. a. Appoint Mr. Jones as a member of the committee.
 b. Take a caucus and force a favorable vote.
 c. Delay action until the opposition could be converted.
 d. Expel Mr. Jones from membership in the club.
24. a. Limit the meeting to the architect's presentation?
 b. Summarize the architect's address and give the summary to the School Board.
 c. Declare an open discussion of the address, record how the individual votes were cast, and transmit this information to the School Board?
 d. Limit comments on the address to neutral persons who live outside the town, thus avoiding undue acrimony?

25. — a. "A young resident of the house confessed to making inflammatory remarks at a meeting a month ago, but was not reappointed at the expiration of her contract because she had a nervous breakdown and had to go to a convalescent home for rest."
- b. "The executive of the settlement spotted a notorious labor racketeer two weeks ago attending a meeting and talking too much. Since the man had a police record and this was called to his attention, he dropped out of subsequent meetings."
- c. "I remember one man distinctly, who was very radical in his statements at meetings, but he has moved away to another city."
- d. "Oh, you know, there was someone around here who talked against the government, but she was a Republican."

HOGAN'S EMPATHY SCALEINSTRUCTIONS:

This booklet contains a series of statements. Read each one, decide how you feel about it and then CIRCLE your answer. If you agree with a statement, or feel that it is TRUE about you, CIRCLE T. If you disagree with a statement, or feel that it is not true about you, CIRCLE F. Answer all questions.

1. A person needs to "show off" a little now and then.
T F
2. I liked "Alice in Wonderland" by Lewis Carroll.
T F
3. Clever, sarcastic people make me feel very uncomfortable.
T F
4. I usually take an active part in the entertainment at parties.
T F
5. I feel sure that there is only one true religion.
T F
6. I am afraid of deep water.
T F
7. I must admit I often try to get my own way regardless of what others may want.
T F
8. I have at one time or another in my life tried my hand at writing poetry.
T F
9. Most of the arguments or quarrels I get into are over matters of principle.
T F
10. I would like the job of a foreign correspondent for a newspaper.
T F
11. People today have forgotten how to feel properly ashamed of themselves.
T F

12. I prefer a shower to a bathtub.

T F

13. I always try to consider the other fellow's feelings before I do something.

T F

14. I usually don't like to talk much unless I am with people I know very well.

T F

15. I can remember "playing sick" to get out of something.

T F

16. I like to keep people guessing what I'm going to do next.

T F

17. Before I do something I try to consider how my friends will react to it.

T F

18. I like to talk before groups of people.

T F

19. When a man is with a woman he is usually thinking about things related to her sex.

T F

20. Only a fool would try to change our American way of life.

T F

21. My parents were always very strict and stern with me.

T F

22. Sometimes I rather enjoy going against the rules and doing things I'm not supposed to.

T F

23. I think I would like to belong to a singing club.
T F
24. I think I am usually a leader in my group.
T F
25. I like to have a place for everything and everything
in its place.
T F
26. I don't like to work on a problem unless there is the
possibility of coming out with a clear-cut and unam-
biguous answer.
T F
27. It bother me when something unexpected interrupts my
daily routine.
T F
28. I have a natural talent for influencing people.
T F
29. I don't really care whether people like me or dislike
me.
T F
30. The trouble with many people is that they don't take
things seriously enough.
T F
31. It is hard for me just to sit still and relax.
T F
32. Once in a while I think of things too bad to talk about.
T F
33. I feel that it is certainly best to keep my mouth shut
when I'm in trouble.
T F

34. I am a good mixer.

T F

35. I am an important person.

T F

36. I like poetry.

T F

37. My feelings are not easily hurt.

T F

38. I have met problems so full of possibilities that I have been unable to make up my mind about them.

T F

39. Often I can't understand why I have been so cross and grouchy.

T F

40. What others think of me does not bother me.

T F

41. I would like to be a journalist.

T F

42. I like to talk about sex.

T F

43. My way of doing things is apt to be misunderstood by others.

T F

44. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world".

T F

45. I like to be with a crowd who plays jokes on one another.

T F

46. My mother or father often made me obey even when I though that it was unreasonable.

T F

47. I easily become impatient with people.

T F

48. Sometimes I enjoy hurting persons I love.

T F

49. I tend to be interested in several different hobbies rather than to stick to one of them for a long time.

T F

50. I am not easily angered.

T F

51. People have often misunderstood my intentions when I was trying to put them right and be helpful.

T F

52. I am usually calm and not easily upset.

T F

53. I would certainly enjoy beating a crook at his own game.

T F

54. I am often so annoyed when someone tries to get ahead of me in a line of people that I speak to him about it.

T F

55. I used to like hopscotch.

T F

56. I have never been made especially nervous over trouble that any members of my family have gotten into.

T F

57. As a rule I have little difficulty in "putting myself into other people's shoes".

T F

58. I have seen some things so sad that I almost felt like crying.

T F

59. Disobedience to the government is never justified.

T F

60. It is the duty of a citizen to support his country, right or wrong.

T F

61. I am usually rather short-tempered with people who come around and bother me with foolish questions.

T F

62. I have a pretty clear idea of what I would try to impart to my students if I were a teacher.

T F

63. I enjoy the company of strong-willed people.

T F

64. I frequently undertake more than I can accomplish.

T F