8-1976

Effect of Descriptive Information on Accuracy of Interpersonal Perception

Sung Soo Park
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations

Part of the Experimental Analysis of Behavior Commons

Recommended Citation
https://scholarworks.wmich.edu/dissertations/2805

This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact maira.bundza@wmich.edu.
EFFECT OF DESCRIPTIVE INFORMATION ON ACCURACY OF INTERPERSONAL PERCEPTION

by

Sung Soo Park

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment
of the
Degree of Doctor of Education

Western Michigan University
Kalamazoo, Michigan
August 1976
ACKNOWLEDGEMENTS

I have been encouraged, assisted, and guided by many others in this work. Dr. Kenneth Bullmer has spent very much time and effort. He has given invaluable advice and constructive criticism for this work as well as for my intellectual and professional growth throughout all phases of my doctoral study. Drs. Robert Betz, William Carlson, and Malcolm Robertson have given much needed help in many ways in the completion of this work. Dr. William Martinson has always been instrumental in working out academic and financial problems.

Also many other faculty members and colleagues in the Department of Counseling and Personnel have stimulated and helped me in numerous ways in designing, implementing, and completing this study. The financial benefits of a Fulbright-Hayes Scholarship from the U.S. Department of State and of a Fellowship from the Graduate College have made my study a pleasure and a privilege in a country that is not my own.

I would like to express my sincere appreciation for their assistance, stimulation, and love. To all of them, I am forever grateful.

Finally, I acknowledge assistance, encouragement, and love from my wife and from my son who often asked, "when do you finish your dissertation?"

Sung Soo Park
INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in “sectioning” the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from “photographs” if essential to the understanding of the dissertation. Silver prints of “photographs” may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106
PARK, Sung Soo, 1942-
EFFECT OF DESCRIPTIVE INFORMATION ON ACCURACY OF INTERPERSONAL PERCEPTION.

Western Michigan University, Ed.D., 1976
Psychology, experimental

Xerox University Microfilms, Ann Arbor, Michigan 48106

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I PROBLEM AND BACKGROUND</td>
<td>1</td>
</tr>
<tr>
<td>Review of Related Research and Literature</td>
<td>6</td>
</tr>
<tr>
<td>Process of Interpersonal Perception</td>
<td>6</td>
</tr>
<tr>
<td>Individual Differences in Interpersonal Perception</td>
<td>14</td>
</tr>
<tr>
<td>Training Methods for Improving Accuracy of Interpersonal Perception</td>
<td>21</td>
</tr>
<tr>
<td>Transfer of Knowledge in Training Interpersonal Perceptual Skills</td>
<td>35</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>46</td>
</tr>
<tr>
<td>Research Problem</td>
<td>47</td>
</tr>
<tr>
<td>II METHOD</td>
<td>49</td>
</tr>
<tr>
<td>Instructional Material</td>
<td>49</td>
</tr>
<tr>
<td>Subjects</td>
<td>55</td>
</tr>
<tr>
<td>Measuring Instrument</td>
<td>57</td>
</tr>
<tr>
<td>Research Design</td>
<td>59</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>61</td>
</tr>
<tr>
<td>Procedure</td>
<td>62</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>63</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>64</td>
</tr>
<tr>
<td>III RESULTS</td>
<td>66</td>
</tr>
<tr>
<td>IV DISCUSSION</td>
<td>70</td>
</tr>
<tr>
<td>V SUMMARY</td>
<td>77</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>81</td>
</tr>
</tbody>
</table>
# LIST OF APPENDICES

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>95</td>
</tr>
<tr>
<td>B</td>
<td>103</td>
</tr>
<tr>
<td>C</td>
<td>114</td>
</tr>
</tbody>
</table>

Summary of Pilot Study

Test of Knowledge of Interpersonal Perceptual Skills

Affective Sensitivity Scale

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
LIST OF TABLES

TABLE PAGE

1. Results of Content Analysis of *The Art of Empathy* ....... 53
2. The Posttest-Only Two-Group Design ..................... 60
3. Means of Theoretical Information Measured by the 
   TOKOIPS in the Groups .................................. 67
4. Means of Descriptive Information Measured by the 
   TOKOIPS in the Groups .................................. 68
5. The _t_ Test of Posttreated ASS Scores for the Group 
   With and Without Descriptive Information ............... 69
6. Means and Standard Deviations of Theoretical 
   Information Subtest as Measured by the Pretest of 
   TOKOIPS ................................................ 98
7. Means and Standard Deviations of Descriptive 
   Information Subtest as Measured by the Pretest of 
   TOKOIPS ................................................ 99
8. Means and Standard Deviations of Theoretical 
   Information Subtest as Measured by the Posttest of 
   TOKOIPS ................................................. 100
9. Means and Standard Deviations of Descriptive 
   Information Subtest as Measured by the Posttest of 
   TOKOIPS ................................................. 101
10. Result of _t_ Test of the Affective Sensitivity Scale 
    Scores for the Group Without Descriptive Information 
    and for the Group With Descriptive Information ....... 102
CHAPTER I
Problem and Background

The primary purpose of this study is to substantiate the effect of descriptive knowledge on accuracy in interpersonal perception. Cronbach (1962) defines descriptive knowledge as information which represents direct and personal experience or observation. Accuracy in interpersonal perception has been recognized as an important variable for effective social interaction of people as well as for effectiveness of professional workers in human service fields. It is generally accepted that the ability to perceive client affect accurately is an important counseling skill and that to perceive a client's emotion or affect and to understand the meaning of reality as perceived by the client is an important ingredient of successful counseling (Carkuff, Kratochvil & Friel, 1968; Sarbin, Taft, & Bailey, 1960; Truax & Carkhuff, 1967).

Although accurate perception of the client's emotions and meanings is not generally accepted as a sufficient condition for effective counseling and psychotherapy (Avery, 1973; Ivey, 1974; Payne, Weiss, & Knapp, 1972), it is accepted as the first step in a communication process which can lead the counselor to an empathic and
effective response. If the counselor perceives the client inaccurately, the counselor has little possibility of making appropriate responses which are needed for successful counseling and psychotherapy. Truax (1970) discussed the importance of teaching interpersonal skills and concluded that expert knowledge and specialized techniques are secondary. He maintained that effective counselors are experts in interpersonal relations and that the counselors' interpersonal skills in relating to clients have much to do with inducing positive behavior change. An effective counselor is first and foremost an expert in interpersonal relations.

Developing a trainee's ability to perceive and to understand a client has always been a goal of education in counseling and psychotherapy, and teaching and training methods have widely varied over the past decades. Training methods employed in counseling and psychotherapy seem to have two essential aspects: didactic-intellectual and experiential-therapeutic. Truax, Carkhuff, and Douds (1964) reviewed literature regarding training methods in counseling and psychotherapy and dissected training methods into didactic and experiential approaches. The didactic-intellectual approach is predominantly based on explicit and direct teaching of preestablished knowledge as to processes and skills of counseling; the
experiential-therapeutic approach is based on experiencing therapeutic or facilitative relationships of counseling (Rogers, 1957; Truax, Carkhuff, & Douds, 1964). Truax and Carkhuff (1967) developed a training program which they considered a combination of the didactic approach and the therapeutic approach.

Other investigators (Bullmer, 1970; Smith, 1973) have also shown that accuracy in interpersonal perception, or sensitivity, can be improved through direct teaching. Bullmer (1970, 1972) programmed material on interpersonal perceptual skills and Smith (1973) teaching clinical cases were both effective in improving accuracy in interpersonal perception. Jakubowski-Spector, Dustin, and George (1971) noted the transfer of training is as vital in counselor training as in any other education. It can be concluded that students' mastery of these learning materials was transferred to their practical skills of accurate perception.

On the other hand, Smith (1973) reviewed literature regarding the training of sensitivity and concluded:

Are undergraduates who had psychology courses more sensitive than those who have not? No. Are professional psychologists more sensitive than graduate students in psychology? No. Are clinical psychologists more sensitive than experimental psychologists? No. Are professional psychologists more sensitive than physical scientists, actors, personnel managers, and members of other professional groups? No. (p. 33)
While some investigators (Estes, 1938; Kelley & Fiske, 1951; Levy & Ulman, 1967; Luft, 1950; Soskin, 1954; Wedell & Smith, 1951; Weiss, 1963) have shown that teaching of psychology did fail in the improvement of sensitivity, other researchers (Bullmer, 1970, 1972; DiMattia & Zimmer, 1973; Smith, 1973; Truax & Lister, 1971) have demonstrated that interpersonal perceptual skills and other interpersonal skills can be improved through direct teaching methods.

The failure of direct teaching of interpersonal skills can be ascribed to diverse reasons. Smith (1973) has criticized lack of effective attention to idiographic understanding in sensitivity training and stated:

It is largely limited to theoretical and nomothetic sensitivity. No effective attention is paid to either observation or idiographic understanding. Students are given neither practice nor feedback on their ability to apply what they have learned to specific persons. (p. 33)

Therefore, according to Smith (1973), mastery of abstract concepts and theories acquired through lectures, textbooks, and term papers is not a sufficient condition for transfer of knowledge to real counseling situations.

Although the acquisition of knowledge is not the entire scope of education, it is a vital part of most education. There are several kinds of knowledge and each of the different kinds has its own significance to behavior
Cronbach contended that, "descriptive knowledge provides a substitute for direct, personal experience" (p. 58). Descriptive knowledge refers to characteristics of a single event or object and to impressions which an individual might form for himself if he were to observe it. Descriptive knowledge functions as a means of transfer from verbal knowledge to preverbal or perceptual knowledge. This descriptive knowledge can be found in many case studies and statements of behavioral referents (Broudy, 1961; Cronbach, 1962).

Lack of descriptive knowledge in teaching interpersonal perceptual skills may be one of the important causes of failures in training for accurate interpersonal perception and other interpersonal skills. Although the importance of descriptive knowledge has been recognized, its effect on teaching accurate interpersonal perceptual skills has not been identified. The problem to be attacked in this study is identifying the effect of using descriptive knowledge for training interpersonal perceptual skills. Teaching theoretical knowledge alone has not been proven conclusively to be an effective way for training interpersonal perceptual skills, since it has not always been transferred to preverbal skills. Teaching descriptive knowledge and theoretical knowledge is hypothesized to
be an effective way to train accurate interpersonal perceptual skills.

Review of Related Research and Literature

Research and literature pertinent to this study are concerned primarily with four areas: process of interpersonal perception, individual differences in interpersonal perception, training for improvement of interpersonal perception skills, and transferring knowledge to application of interpersonal skills.

Process of Interpersonal Perception. The primary concern of this study is types of knowledge as determinants of accurate interpersonal perception in the field of counselor and psychotherapist education. Interpersonal perception, or person perception, refers to the processes involved in knowing the external and internal states of other people (Warr & Knapper, 1968). Tagiuri (1969) stated that, "person perception refers to the processes by which man comes to know and to think about other persons, their characteristics, qualities, and internal states" (p. 395). Although the process of interpersonal perception has been variously named social perception, person perception, and person cognition, and has been without a universally accepted specification, we must be able to point out at least the essentials of the process of interpersonal perception. The process of interpersonal
perception can be inferred from the processes of perception in general if we accept that interpersonal perception is basically a matter of perception. Forgus (1966) defined perception as, "the process of information extraction" (p. 1) and contended that the process of information extraction is the core process in the acquisition of knowledge. Emphasizing the relationship between perception, learning and thinking, Forgus (1966) conceived perception as a superset, and learning and thinking as subsumed subsets. He asserted that an individual becomes capable of extracting more information from environments as the perceptual set is broadened, and becomes more complex and richly patterned with experience. He refuted the notion of unconsciousness in perception and stated, "what we call unconscious is merely the condition wherein the subject is extracting very little information from the stimulus" (p. 266). He also made it clear that such factors as values and anxiety influence ability to perceive by affecting discrimination, or judgement, of already perceived stimuli by making a perceiver more or less sensitive to certain attributes of the stimulus complex or by accentuating certain parts of errors when the stimuli is unclear. He viewed that this sensitivity is developed by such experiential factors as conditioning and familiarity. By explaining that an individual can, through learning, extract information differently from potential cues or information
carried by unclear or impoverished stimulus complexes, Forgus (1966) tried to clear away the mystery and mysticism in interpersonal perception.

Theories of inference, in addition to theories of information, add impetus to speculation about the process of interpersonal perception. Inference theories of interpersonal perception are strongly based on a variety of psychological traditions that are concerned with the cognitive process of interpersonal perception (Tagiuri, 1969). The most extensive and thoroughgoing application of this type of cognitive theory to interpersonal perception has been done by Sarbin, Taft, and Bailey (1960), in their work on clinical inference. They viewed the process of interpersonal perception as reducible to the logical model of inference. Intuition and empathy were viewed as unnecessary elements in explaining how we perceive others. Inference was defined as, "cognitive transformation of one set of events through another set of events which produces new knowledge about the first, (p. 45) and as, "a process in which a particular instance is assigned characteristics of a universal class on the basis of its being a member of that class" (p. 45). Accordingly, inference in perception is a process whereby specific sensory events are transmuted to instances by being compared or collated with some form of residual such as an exemplar, a memory image, a trace, or a class. They proposed
that the classical syllogism is the vehicle for this process and that a broadened syllogistic inference model, with both major and minor premises, stated in probabilistic terms can adequately explain the process of clinical inference and interpersonal perception.

Sarbin, Taft, and Bailey (1960) identified six stages in this process of clinical inference: a postulate system, a syllogistic major premise, observation, instantiation, conclusion, and prediction. In the stage of postulate system of inferrer, the inferential process is guided by presumed axioms which have many other names such as interlocking cognitive dimension, categorical systems, taxonomies, beliefs, assumptions, concepts, schemata, expectancies, attitudes, rules of syntax, primitive terms and so on. In the second stage, the inferrer constructs a syllogistic major premise which in clinical inference nearly always begins with the particularistic "some" and which has a "class" character. This major premise is constructed under the instigation and direction of the requirements of the inferrer's roles and on the basis of his postulate system. In the stage of search for and observation of occurrences relevant to the major premise, the inferrer observes a person object and makes an inference on the basis of a sampling of occurrences. Because the perceiver must rely on samples, inferences are
probabilistically determined. In the stage of instantiation, or the conversion of an occurrence into an instance of a general class, occurrences are sorted into species or classes. This sorting is necessary in order to construct the minor premise for the syllogism, such as, Jones is a member of species M.

In clinical inference, instantiations are also probabilistic because they are based on samples from a universe of occurrences. In the stage of inferential product or conclusion, the attribution of characteristics of the general class to the instance is made. The conclusion, however, may be either logically or factually incorrect because inferences are subject to several types of fallacies which can be classified as formal fallacies and material fallacies. In the final stage of prediction, the inferrer converts conclusions into prediction and statements with a future reference. The predictive statement is also of a probabilistic nature.

This cognitive theory, into which is fitted person cognition, also deals with the elements of the clinical process: the distal attribute, the cues, the proximal attributes, the inferred proximal attribute, and the inferred distal attributes. This theory of inference and interpersonal perception can not only accommodate the components of interpersonal perception, but can also bring
clinicians into profitable contact with the contributions of a broadened formal logic.

Theories of information and inference seem to have made the processes of information extraction and logical inference in interpersonal perception explicitly clear. However, while the concepts of information and logical inference might fruitfully be applied to social relations and social perception, it seems clear that many concepts and principles within these theories cannot be used in the context of interpersonal perception. It is doubtful that those concepts and principles can be treated as more than loose analogies by the two theories. But there is another reason for doubting that the language of information theory and logical inference theory is completely sufficient for an understanding of interpersonal perception. In interpersonal perception, we certainly extract information and make inference, but we also respond by deriving expectancies about others and their relationship to us. Interpersonal perceptions have affective components such as attraction, anxiety, love, hate, happiness, despair, and so on. As a result, it is not clear that these expectancies and affective components of interpersonal perception can be completely woven into the texture of inference and information theory (Warr & Knapper, 1968).

Warr and Knapper (1968) presented a different view
of the process of interpersonal perception. They viewed the process of interpersonal perception as having three different components: the attributive, the expectancy, and the affective components. These three components interact with each other in a complex fashion and may ultimately be resolved into an independent concept. The attribute component refers to the process of attributing certain overt and covert characteristics to a person object. This attribute component involves classifying and comparing sets of stimulus inputs. Attributive judgments of other people can be placed in one of two categories—episodic judgments or dispositional judgments. Episodic judgments are those made about someone’s state during a particular sequence or episode of behaviors. Dispositional judgments are those made about permanent characteristics which are relatively independent of a particular episode.

In the process of interpersonal perception, expectancies concern the potential predictions about episodic and dispositional attribution. The perceivers’ expectancies are often identified with perceptual readiness, goals, and intentions. The dimensions of categories and classifications are influenced by these expectancies. The attributive components contain within themselves the expectancy components, which are likely to affect later attributions about a person object. These expectancies seem to be
related with perceiver values and personality. When we perceive a man, we not only have expectancies about him but also emotions about him. The affective component of interpersonal perception involves attraction, liking, respect, sympathy and other emotions which strongly influence the other components of person perception. This affective component of interpersonal perception is important in determining the selection and processing of stimulus inputs and in evaluating characteristics of a person object.

In summary, the process of interpersonal perception has been reviewed from three points of view: as a process of extracting information, as a process of making an inference about a person, and as the interplay of three components; attribution, expectancy, and affection. These preceding reviews of literature on processes of interpersonal perception show that anxiety, values, personality, formal and material fallacies, and so on interfere with accurate perception of person objects. Accuracy in interpersonal perception, which can be defined as the discrepancy between a perceptual judgment and a criterion (Allport, 1961; Bruner & Taiguri, 1954; Cline, 1964; Shrauger & Altrocchi, 1964; Taft, 1955), is an aim which counselors and psychotherapists have desired to reach. However, the counselor's interpersonal perception seems to
be subject to various sources of inaccuracy, such as emotional states, expectations, values, fallacies in inferential processes, and so on. Consequently, accuracy and individual perceivers' differences in interpersonal perception emerge as important issues.

**Individual Differences In Interpersonal Perception.**

In the previous review, emphasis was placed on processes which are common to most perceivers. In this review, major differences in accuracy in interpersonal perception, which result from various characteristics of the perceiver and the objects to be perceived, will be dealt with. Sarbin, Taft, and Bailey (1960) divided sources of variation in inference into two classes: variations due to the analyst and variations due to ecology. Variations in inference due to the analyst include the characteristics of personal equation, past experience, authority, construction, analogy, assimilative projections, needs, biases, prejudices, beliefs, expectations, and motivations. One characteristic of the ecology that influences inference about interpersonal characteristics is the context in which a person object appears. This interaction between the perceiver and the ecological context includes the psychological relationship between the observer and the person object, the social interaction, personal knowledge and mutual evaluation. An example of this interaction
is found in the clinical process where reciprocal interactions, i.e., assessment, interviewing, and diagnosis, reflect the demands of roles played by both parties and affect accuracy in interpersonal perception. Individual difference in perceiving people has also been explored to answer the question, "Do some personality characteristics consistently contribute to accuracy more than others?" Sex, age, culture, class, intelligence, cognitive structure, attitude, and information are examples of characteristics that have been employed in studies on individual differences in interpersonal perception.

The literature concerning sex differences is not always consistent. Some studies (Buzby, 1924; Cline, 1964; Jenness, 1932; Levy & Schlossberg, 1960; Murstein, 1966; Vinacke, 1949; Weisberger, 1956) have reported that females are more accurate than males in perceiving other people. Other studies (Kanner, 1931; Moore, 1966) have found that men are superior to women in perceiving other people. Jenness (1932) concluded after his review of literature that women slightly excel men in judging emotions based on facial expression. Also, Olesker and Balter (1972) found that individuals show more empathy when judging people of the same sex than when judging persons of the opposite sex. However, no significant differences between males and females have been shown by many recent
investigators (Breisinger, 1976; McDonald & Gynther, 1965; Taft, 1955; Wertheimer, 1960; Wylie, 1961). These inconsistent results of studies on sexual differences in perceiving other people have led to the conclusion that other variables are intervening. There are indications that the relative sensitivity of men and women to emotional expression may be related to the sex of the person expressing the affect and to the particular emotions to be perceived (Avery, 1973; Tagiuri, 1969).

Although psychological aspects of aging have aroused considerable interest in the human service fields, little research has resulted on the relationship between aging and interpersonal perception. One study by Secord and Muthard (1955), with subjects who varied in age from 18 to 49, showed that older persons judged females to be more temperamental, aggressive, easygoing, and talkative. Also, older persons tended to make more positive responses. Studies of interpersonal perception with children have been done by a number of investigators who have shown that the ability to perceive other people accurately increases with age (Brooks & Goldstein, 1963; Chance, Goldstein, & Schicht, 1967; Ghent, 1960, 1961). It is generally anticipated that children's perceptions of other people and events will, with increased age, become more articulated, more differentiated and more integrated.
People of different aspects of the stimulus information are selected. Haufmann and Getzels (1955) have observed variations in category usage between American and Russian judges of other people. Martin (1964) emphasized that cultural standards can be more important than racial differences. He investigated the judged beauty of ten negro women represented photographically. The responses of the negro Americans and white Americans were very similar, whereas the negro Africans applied a quite different set of standards. Although a different language system in different cultures provides a perceiver with different categories of perceptual stimuli inputs, Triandis (1964) found that the identification of emotions appears to be largely unaffected by the cultural background of the perceiver. Fiedler and Hoffman's (1962) studies of children's perceptions yield the same results for different cultures. These results were explained on the basis that the cues used in perceiving emotions were facial expressions, which appear to be the same in different cultures.

Intelligence is another characteristic which has attracted the attention of investigators studying person perception. Taft's (1955) review of literature presented consistent evidence for positive correlations between
high intelligence and the ability to perceive personal characteristics accurately. Lack of adequate intelligence contributes to inaccuracy in interpersonal perception. Gollin (1958) found that more intelligent judges inferred more from filmed presentations and were better able to account for conflicting information about stimuli than were judges with lesser intelligence. Gates (1923), Kanner (1931), and Weisberger (1956) have reported more moderate correlations. Levy, Orr, and Rosenzweig (1960), however, were unable to show that college students were superior to mental retardates in judging photographs of facial expressions scaled happiness-unhappiness. The more intelligent perceivers appear to utilize cues more efficiently for making inference about the states or conditions of person objects (Tagiuri, 1969).

A perceiver characteristic which has stimulated considerable interest is the complexity-simplicity dimension of cognitive structure. It appears that a perceiver with complex cognitive structure employs a wide variety of ways to process information about a person object and that the cognitively simple individual makes use of a limited set of processing techniques (Warr & Knapper, 1968). For example, therapists with simple cognitive structures may tend to view clients along limited dimensions and be unable to look at clients from a number of alternative
perspectives, whereas therapists with complex cognitive structures may tend to be adept at generating a variety of perspectives for looking at clients (Miller & Harvey, 1973). Heck and Davis (1973) reported that therapists with complex cognitive structure obtained higher empathy rating in a counseling analogue situation. On the other hand, LeConn (1969) failed to show that the dimension of cognitive simplicity is correlated with accuracy in interpersonal perception. The results of the studies on the relationship between cognitive structure and accuracy in interpersonal perception are somewhat inconsistent.

Consistent and negative association between authoritarianism and accuracy in interpersonal perception has emerged (Cline, 1964; Foulds, 1969; Jones, 1954; Rabinowitz, 1956; Simons, 1966). Dogmatism is closely related to authoritarianism (Rokeach, 1960), and has been used as a variable in research. Burke (1966) and Jacoby (1971) demonstrated that accuracy in interpersonal perception is a function of the degree of dogmatism, with low dogmatic subjects tending to be more accurate than highly dogmatic subjects. The negative correlation between authoritarianism and perceptual accuracy has, however, been explained with some qualifications:

1. Because an authoritarian perceiver is more apt to employ assumed similarity as a basis for perceiving
others, his percept will tend to be more accurate when
the stimulus person is also an authoritarian (Newcomb,
1961).

2. Authoritarians exhibit a high degree of stereotypic accuracy, but are low on differential accuracy (Danielian, 1964).

3. Intolerance of ambiguity is a basic perceptual variable which limits the ability to perceive inconsistencies. Low accuracy in interpersonal perception appears to be explained by an authoritarian's tendency to employ premature perceptual closure, which limits both the quality and the quantity of person stimuli inputs.

Warr and Knapper (1968) presented a model of person perception in which they emphasized the importance of information in interpersonal perception. Information on present person stimuli and on present context, as well as stored information on a stimulus person, operates in selecting and processing some aspects of the stimuli. According to Lambert, Anisfeld, and Yenikomshian (1965), information on the characteristics of the stimulus person operates on perceiving the person. Present context information refers to the social, physical, or behavioral context within which the person is perceived. Information on aspects of the social, physical, or behavioral context is selected and is placed in juxtaposition with
selected aspects of the stimulus. Information about other people in the same or similar context can influence interpersonal perception so that a stimulus person is judged in relation to other people in the situation (Cline, 1955; Holmes & Berkowitz, 1961; Munn, 1940; Sherman, 1927). Stored stimulus information refers to information about the stimulus person which is within the perceiver's memory and which is available as a basis of a conceptual judgment. Stored information about what a person has done on other occasions, about what other people have said about a person, and about what authority has said about the same or similar characteristics, may influence the selection and process of stimulus inputs (Sarbin, Taft, & Bailey, 1960; Warr & Knapper, 1968).

Whereas many studies have been done about the association of interpersonal perception with information, little research has been done concerning the association of information about perceptual theories and accuracy in interpersonal perception, or as to how to improve accuracy among trainee counselors and psychotherapists. The following review will deal with literature related to the training of counselors for improving interpersonal perceptual skills.

**Training Methods For Improving Accuracy Of Interpersonal Perception.** Whereas the importance of accuracy in
interpersonal perception has been recognized as to its relation to effectiveness of counseling and psychotherapy, little research has been accomplished insofar as the development of generally accepted training methods. It is also apparent that what has been done about development of training methods for interpersonal perceptual skills has been in the education of counselors, psychotherapists and other professionals in human service areas.

Concepts on effective training methods in counselor education have been varied over the past few decades. A series of changes has also occurred in the conceptualization of counseling and psychotherapy. Regarding this point, Blocker (1972) stated:

Formerly cherished notions of the counselor as a passive, shadowy acceptor and reflector of feelings and opinions have gradually given way to an image of the counselor as an active and dynamic agent of change in the lives of those with whom he engages in therapeutic encounter. (p. 210)

Truax, Carkhuff, and Douds (1964) have defined two basic approaches to the education of counselors. These two traditionally predominant approaches are the didactic-intellectual approach and the therapeutic-experiential approach. The didactic approach places emphasis on direct teaching of preestablished knowledge pertaining to the counseling process, clients, and therapists. The therapeutic-experiential approach places emphasis on trainees' experiencing therapeutic or facilitative
conditions.

Recent concepts regarding what is a more effective training method have asserted that counselor education can be benefited by employing a wide range of theories and procedures rather than the traditional therapeutic-didactic dichotomy. Caple (1972) presented a molar model of training in which he stated that, "the formal training program is made up of the following elements: didactic instruction, self-exploration, supervision, and practice" (p. 32). Didactic instruction refers to knowledge content that is formally transmitted to a student as he moves from entrance to exit in the program. This knowledge includes facts, principles, and theories. Self-exploration directly affects students' use of intellectual learnings. Whereas didactic instruction provides students with opportunities to use deductive reasoning, the conditions in self-explorative experience provide students with opportunities to use inductive reasoning. Although the nature of the supervisor-supervisee relationship is a controversial one, the process of supervision enables a supervisee to develop competent professional responses by maintaining open and continuous feedback oriented toward changing behavior. In Caple's model, learning by practice seems to be limited only to supervised work. Practice includes observation, imitation, and internalization.
Through the observation phase, the learner observes that the performer succeeds or fails. In the second phase of practice, and imitation, the learner is given an opportunity to test his own behavior and imitate successful models. Internalization, the third phase, begins when the learner adopts a certain behavior because the behavior is congruent with his value system.

Besides Caple's molar model for training, there have been many other models for counselor education. The developmental model, the microcounseling model, the interpersonal process recall model, and others have been presented and discussed as alternative concepts for effective education of counselors. Kohlberg (1975) presented a developmental approach for counseling and counselor education. He emphasized the importance of human development and said:

Without a relatively systematic developmental framework, counseling and counselor education may become a potpourri of approaches, a set of eclectic activities mostly oriented toward secondary prevention. (p. 250)

In the developmental approach, the aim is to train trainees to prepare a variety of didactic and experiential learning activities that will facilitate the clients' cognitive and emotional development. These developmental programs should include ego development, cognitive development and moral and psychological education.
Therefore, this approach is directed toward changing counselor education from the traditional approach to that of psychological and moral education.

Microcounseling approaches in counselor education emphasize teaching single specific counselor behaviors rather than attempting to teach all the skills of counseling and psychotherapy at one time (Ivey, 1974; Miller, Morrill, Ivey, Normington & Uhleman, 1973; Saltmarsh & Hubele, 1974). Ivey (1974) described microcounseling as, "an effort to unite the important facilitative conditions of the warm, empathetic counseling relationship with the current demands for directly observable behaviors and accountability" (p. 172). Many researchers (Elsenhath, Coker, & Martinson, 1972; Miller, Morrill, Ivey, Normington, & Uhleman, 1973; Saltmarsh & Hubele, 1974) have shown that the microcounseling approach is effective for training counselors and other human service workers. Teaching specific skills of interviewing through videotape presentation is an innovative approach to counselor education. This method of precise teaching and videotape techniques has been combined with other approaches and has brought forth new methods of training which are suitable for many different situations (Ivey, 1974).

The interpersonal process recall technique, which
involves the use of videotaping equipment to stimulate counselor and client to recall of the dynamics of the counseling process, has also been developed to increase counselor effectiveness (Bradley, 1974; Kagen, Krathwohl, & Miller, 1963; Spivack, 1972). When counselor trainees can observe themselves on videotape with the aid of a recall worker, they seem to be able to improve their interviewing behaviors. The interpersonal process recall approach is sometimes associated with a simulation technique.

The simulation technique assumes that trainees' growth in training can be accelerated if they are exposed to different kinds and degrees of emotional situations and if they are given an opportunity to react to these situations. The application of simulation techniques in counselor education has been both feasible and effective (Delaney, 1969).

Ryan (1969) and Canada and Lynch (1975) presented systems techniques as an alternative way of improving efficiency and effectiveness of counselor education. Canada and Lynch (1975) viewed systems technology as providing counselor educators with an answer to the question of accountability by treating the selection of training techniques and the resulting behavioral outcomes as parts of a unified system. According to this technique, four
steps are involved. First, the objectives of training must be determined. Second, the tasks that will best meet the objectives must be identified. Third, the tasks must be arranged in the most efficient and effective order. Finally, data that will support or question the successes of training must be collected. Since system technology treats the selection of training procedures and outcomes as parts of a total system, the overall goal, the subtasks, and the behavioral outcomes are considered to be closely related to each other. This approach can be applied to a particular counseling technique, to an entire course, to a degree program in counseling or any other teaching task that involves two or more component parts (Canada & Lynch, 1975).

Other techniques and variations in techniques have emerged (Delaney, 1972; Schwebel, 1972). These diverse approaches to counselor education have been supplemented by new strategies stimulated by clinical experience and research activity, and common characteristics exist among the variety of approaches. A major thrust in the last decade has been toward the development of techniques and approaches which are concrete, measurable, readily applicable, and can be acquired in a relatively short period of time (Seligman & Baldwin, 1973).

While the different approaches employed to train...
counselors have reported varying degrees of effectiveness, review of these approaches reveals that few have focused attention on trainees' ability to perceive clients' meanings and emotions. Truax and Carkhuff (1967) demonstrated that empathic counselor response could be developed, but did not direct attention to development of interpersonal perceptual skills. Although they noted that counselors with a high level of empathic response had the ability to understand the real meaning of the client, they did not explain how this ability was developed. Campbell, Kagan and Krathwohl (1971), however, have discussed affective sensitivity as a psychological trait which is subject to change through training procedures.

Smith (1973) presented an extensive proposal on sensitivity training. His major concern was the development of training methods that would improve trainees' ability to understand other people. Sensitivity was viewed as being determined by many relatively independent components and was classified into four categories: observational sensitivity, theoretical sensitivity, nomothetic sensitivity, and idiographic sensitivity. Observational sensitivity means "the ability to look at and listen to another person and remember what he looked like and said" (p. 24). Perceivers differ widely in their ability to discriminate what they see and hear
from what they feel and infer about a person. Training to develop the ability to make such discriminations can be successfully accomplished through teaching observation skills that lead to more accurate perceptions about a person.

The second component of sensitivity, i.e. theoretical sensitivity, refers to, "the ability to select and use theories to make more accurate predictions about others" (p. 24). A theory is a set of concepts and a set of relationships between these concepts. Innumerable explicit, dynamic, and interpersonal theories appear to be available as aids to improve sensitivity. In fact, theoretical training has difficulty in sensitivity training because of the association of scientific theory with a mythical way of thinking. Smith (1973) stated:

The most popular scientific theories are those that encourage their users to continue their mythic orientation, their preoccupation with expressive qualities, their illusionary correlations, and their avoidance of empirical checks. (p. 112)

Developing empathic accuracy can be accomplished through intellectual mastery of a theory. It is important that the trainees focus on empirical ways to apply theories and that they get feedback on their assumptions.

Smith (1973) also defined nomothetic sensitivity as the ability to learn about, "the typical member of a
group and to use this knowledge in making more accurate predictions about individuals in the group" (p. 25). Nomothetic sensitivity provides trainees with a dilemma. On the one hand, what the typical member of a group is like is a useful conception for the description and explanation of a behavior of a group member. On the other hand, this stereotype often results in a significant decrease in accurate perception of an individual. The results are incomplete, erroneous, and distorted stereotypes. Accurate and empirically verified stereotypes are required for the development of more accurate sensitivity.

According to Smith (1973), the training of accurate nomothetic sensitivity can be accomplished through stereotypic training, deviation training, and stress training. In stereotypic training, the learning task is to increase knowledge of a particular group; learning principles would be applied so that the trainee could quickly and completely master it. Deviation training is concerned with the ability to predict when a person will and when he will not behave in a typical fashion. Stress training aims to help trainees cope with changes of stereotypes which they already have. The changing of one's stereotypes was considered to be extremely stressful. It is widely assumed that extreme stress is not avoidable if
perceptions of a group are to be changed. Stress increases resistance which blocks the development of accurate perception. Therefore, stress training gradually increases the stressful situation as trainees develop the ability to manage it.

Idiographic sensitivity was viewed as "the ability to use increasing exposure to and information about a person in making increasingly accurate predictions about him" (Smith, 1973, p. 27). This definition is based on the assumption that people who are equal in their observational, theoretical and nomothetic sensitivity may differ a great deal in making predictions about a person. The development of consideration and responsibility was advocated as an important aspect of idiographic sensitivity training. According to Smith (1973), a person's degree of consideration and responsibility toward a person determines how he is perceived by that person, how sensitive he will become to that person, and how effective his relationship with that person will be. Feedback of consideration and responsibility, the programmed case method, and the typical case method were proposed as methods to improve trainee's idiographic sensitivity. Smith (1973) itemized principles of sensitivity as the following: 1. Concentrate on sensitivity as a goal. 2. Analyze the goal into components. 3. Specify goals for
each component. 4. Sequence the goals. 5. Fit the method to the goal. 6. Measure goal achievement. His extensive proposals on sensitivity, however, do not have sufficient empirical back-up. It appears that Smith's approach to training of sensitivity needs extensive empirical research.

On the other hand, the interpersonal process recall technique seems to be an effective technique. The interpersonal process recall technique was effective in aiding clients to develop the ability to identify, label, and discuss at length and in depth the emotions and meanings of others (Kagan, Krathwohl, & Miller, 1963; Spivack, 1972). Ivey (1974) also paid attention to selective listening, which can be interpreted as an ability to perceive others accurately. He insisted that the microcounseling paradigm should include the skills of selective listening and that counselor trainees must be taught to attend to emotional comments of the client and to key facial or body expressions. The microcounseling approach seems to be one of the more effective approaches to teaching the ability to perceive clients accurately. Canada and Lynch (1975) proposed that systems techniques can be effectively applied to teaching counselor listening skills. Payne, Weiss, and Kapp (1972) examined effects of audio-modeling versus no modeling and of experiential supervision...
versus didactic supervision on empathy training. The results showed that the effectiveness of modeling and didactic approaches is superior to that of no modeling and experiential approaches in the learning of empathy. The research also indicated that the relationship between audio-modeling and didactic supervision are additive and of approximately equal magnitude for the training. The experiential method was not effective in teaching of empathy. They accounted for the differential effect of two supervision methods:

During experiential supervision, the supervisor modeled empathy for counselor feelings. However, it was not obvious that the supervisor intended to serve as a model and appreciable transfer may be needed to move from supervisor modeling of empathy for counselor statements to counselor responding with empathy to client statements. By contrast, didactic supervisors gave examples of empathic response to client statements. Instruction made it clear that the supervisor intended to give such examples and that the counselor was expected to follow them. (p. 428)

Payne, Winter, and Bell (1972) also investigated effects of supervisor style on the learning of empathy. They examined effects of technique-oriented counseling supervision, and placebo-oriented supervision and the presupervision conditions of audio modeling versus no modeling in a supervision analogue. The results of this study showed that modeling and technique-oriented supervision were effective methods to improve empathic ability.
Two training methods for teaching counselor trainees to discriminate verbal, facial, and voice cues which are associated with specific emotions were compared by DiMattia and Zimmer (1972). Results showed that programmed text treatment is more effective in teaching discrimination of depression than the video presentation. They explained the differential effects of programmed text approach and videotape approach as follows:

The video presentation was a passive training device that did not require subjects to interact during the training process. The subjects simply sat and viewed the tape, which allowed them to ignore the cues emphasized or to focus on other stimuli in the tape or in the room. Furthermore, the video presentation did not provide any reinforcements and depended on the medium itself as a reinforcement. Therefore, unless a subject was motivated to learn the material, he was able to disregard the training.

On the other hand, the programmed text forced subjects to interact with the text, which guaranteed that subjects had to reach each frame and actively respond. The programmed text provided immediate feedback to the subjects' responses. It also provided summary frames, which helped subjects synthesize the material presented. (p. 22)

Bullmer (1970, 1972) investigated effects of a direct teaching method on improved accuracy of interpersonal perception. A programmed self-instructional text was the only means for teaching the terms and concepts of interpersonal perceptual skill. The results showed that subjects in a programmed text study group demonstrated significantly greater scores on an affective sensitivity
scale than a nonprogrammed study group. Although the programmed study group demonstrated much greater knowledge of the terms and concepts about the interpersonal perceptual skills than the nonprogrammed study group, he did not conclude that the increased amount of knowledge was a possible determinant of the differential effects of the two teaching approaches. Instead, he thought that factors other than mere acquisition of certain knowledge could be involved and that the manner in which material to be learned is arranged and presented may be influential (Bullmer, 1972).

Transfer of Knowledge in Training Interpersonal Perceptual Skills. The doubt that an increased amount of knowledge itself may not influence increased accuracy in interpersonal perception would likely be based on negative outcomes in investigations of the association of perceptual accuracy with outcomes of educational efforts. Carlhuff, Piaget, and Pierce (1968) reported that grade point average is not related to accuracy of perception. Graduate Record Examination and Miller Analogy Test scores were identified as not being associated with accuracy of perception (Bergin & Solomon, 1963; Whiteley, Sprinthall, Mosher, & Donaghy, 1967). Francher (1967) found that training in psychology was not effective in improving perceptual accuracy. Trainees were as accurate in their
sensitivity as the experienced clinical psychologists in the studies by Kelley and Fiske (1951), and Soskin (1954). Trumbo (1955) failed to identify differences of sensitivity scores between students who had just completed introductory courses and students who had completed five courses in psychology. Professional mental health workers including psychologists, psychiatrists, social workers, and art therapists did not have greater ability to predict paintings painted by schizophrenics and by normals than students under training (Levy & Ulman, 1967).

The failures in identifying an association of sensitivity or perceptual accuracy with professional training seems to help account for professionals and nonprofessionals suspecting the role of knowledge as a determinant of perceptual accuracy. However, studies in the last decade have shown that interpersonal perceptual accuracy can be improved through direct training as shown in the previous reviews. If a set of professional training programs or courses is viewed as a set of academic material, success or failure in improving interpersonal perceptual skills through teaching this set of material would likely be interpreted as success or failure in transfer of the academic material to perceptual skills. Review of literature shows that mastery of academic materials is
not a sufficient condition for mastery of practical skills. None of the theorists seems to identify knowing with skillful doing. Mastery of a concept and theory does not mean the same as mastery of a skill. Counselor trainees acquire some concepts and theories that facilitate transfer performance regardless of the characteristics of academic materials. Such facilitation does vary in amount, and so we should be concerned with why some training conditions produce high positive transfer and others result in low or no positive transfer (Broudy, 1961; Jakubowski-Spector, Dustin, & George, 1971).

Gagne (1970) stated, "establishing the conditions for transferability of what is learned can be seen to be an educational function of considerable importance" (p. 338). He divided transfer into lateral transfer and vertical transfer and suggested conditions for each type of transfer. Lateral transfer refers to a kind of generalizing that spreads over a broad set of situations at roughly the same level of complexity. On the other hand, vertical transfer refers to the effects that learned capabilities at one level have on the learning of additional ones at higher levels. In the case of lateral transfer, the question of how much transfer occurs appears to be a matter of how broadly the individual can generalize what he has learned to a new situation. The
most important conditions for lateral transfer would likely be internal to an individual. Some students are able to relate what they have learned to a wider variety of new situations than are others. Individual differences in ability of transfer are not known at present, although we presume that both learned and innate factors are at work. Assuming that nothing can be done through training to alter innate differences, a good deal can be done to improve learned capabilities if these are practiced in situations that are widely different from each other and if these are practiced in connection with a wide variety of natural phenomena. In the case of vertical transfer, the question of how much transfer occurs was viewed as a matter of the time taken to learn a higher order rule by an individual who has learned subordinate capabilities, as compared with the time to learn by one who has not. The primary condition for vertical transfer is mastery of the subordinate capabilities. Before calling on vertical transfer to aid learning of advanced capabilities, we need to insure that relevant subordinate capabilities have been thoroughly learned. The variety of previous knowledge, which an individual has acquired, plays an important role in vertical transfer. It was hypothesized that vertical transfer occurs more easily in an individual who knows a lot of relevant
subordinate knowledge than in an individual who knows little (Gagne, 1970).

Klausmeier and Ripple (1971) reviewed literature related to transfer of learning and inferred from the studies reviewed that transfer of an acquired outcome to a new situation can occur only if the outcome has been retained and that motivation and learning is the key for transfer. For facilitating transfer, a trainer must (1) foster intent to learn well and remember, (2) make the initial learning meaningful, (3) provide for satisfying consequences of correct responses, (4) emphasize general concepts and abilities, (5) provide for application, and (6) provide for sequential, cumulative learning (p. 617).

Jakubowski-Spector, Dustin, and George (1971) defined a counselor educator as a facilitator of transfer of learning. They objected to the way current counselor educators deal with the transfer of learning in counselor education programs:

Because it: (a) assumes that transfer will automatically occur; (b) inadvertently promotes the teaching of fragmented, remotely related chunks of academic-intellectual material; (c) does not contain any procedures for systematically training counseling students with provisions for individual differences among students. (pp. 242-243)

An important activity of counselor educators must be a systematic planning for transfer effects from class to counseling situations. In planning effective training
programs which facilitate transfer of learning, counselor educators must decide on targets for transfer training in terms of thinking, feeling, acting behaviors and kinds of learning situations to approximate the real situations with which counseling students will deal after graduation.

Jakubowski-Spector, Dustin, and George (1971) proposed a series of graduated steps in which counselor educators could facilitate transfer effects in training empathic understanding. First, the concept of empathic understanding is presented which may act as an advanced organizer or ideational framework. On the advanced organizer, students can build more specific ideas and experiences. Second, counseling students view a video-taped counseling interview to which they are instructed to respond empathically, as if they were the counselor. The counselor educator provides feedback on the accurate empathic responses and a model of more accurate empathic response. Third, counseling students role-play a counseling interview each other, alternately playing the counselor and client roles. Fourth, counseling students conduct interviews with a coached client and are provided with feedback on the counselors' empathic response to him. Fifth, counseling students conduct interviews with real clients and the educator provides feedback after each
Sixth, after graduation the educator plans frequent one-day conferences for counseling students for in-service training and feedback.

Although counselor educators have tried to facilitate transfer of learning, they appear to have paid insufficient attention to the diverse characteristics of information related to interpersonal perceptual skills. Jamison, Lhamon, and Suppes (1969) stated, after reviewing the literature, that few studies are concerned with the theoretical relationship between concepts in learning theory and a structure of information or knowledge. Whereas knowledge itself has been often identified with education, little attention has been paid to characteristics of knowledge both by theorists and practitioners. Broudy (1961) raised the question whether there is only one or more than one type of knowledge in the context of school education. He asserted that there are three kinds of knowledge to be mastered. First, there is existential knowledge which refers to statements of fact. The existential knowledge provides us with examples of knowing that something or other is or was the case. Second, classificatory knowledge refers to statements classifying things into kinds, or indicating the properties of certain types of things. Definitions and terminology are examples of classificatory knowledge. This
type of knowledge helps us categorize our experiences. Third, there is theoretical or explanatory knowledge which refers to some kind of reasoning. This kind of knowledge provides us with rationale that one way of looking at experiences is more sensible, more logical, or more trustworthy than another. It is the most comprehensive of the three kinds of knowledge.

While Cronbach (1962) proposed another classification of knowledge, he stated, "there are several kinds of knowledge, each with its own significance for future behavior" (p. 58). There is preverbal knowledge that comes from first-hand experience. Verbal knowledge comes from experiences put into words by a learner in verbal form. Preverbal knowledge grows out of direct experiences with objects. Verbal knowledge is a code that helps us communicate after concepts are connected to reality through preverbal learning. Verbal knowledge, therefore, does not affect behavior unless the verbal symbols relate to preverbal knowledge.

According to Cronbach (1962), verbal knowledge is classified under four headings: descriptions, prescriptions, principles, and systematized knowledge. Descriptive knowledge refers to what a single event or object is like, attempting to communicate impressions an individual might form for himself if he were to observe it.
Descriptive information can affect responses to the situation described. The most important function of descriptive information is transfer: one bit of descriptive knowledge gives insight into other situations. Case studies usually contain descriptive information which can be more easily transferred to similar cases than theoretical information. Prescriptive knowledge means exactly what to do to achieve a specific goal. Prescriptions are useful for repetitive, stereotyped situations when there are particularly correct responses to those situations. The third type of knowledge is a principle or broad generalization. A principle is a statement connecting two or more concepts. The simplest principles are a little more complex than descriptions or prescriptions. A principle gives information about many different situations and can be applied differently as one's purpose changes. Systemized knowledge is the outcome of extended scholarly investigation and can be defined as a system in which each concept relates to many others and principles from a network. A discipline is a logically ordered body of systematized knowledge. Systematic understanding is valuable because it adds meaning to each subordinate principle.

Cronbach (1962) stated that descriptions and prescriptions have limited transfer value, but principles
and systematized knowledge have potential for wide transfer. However, it does not necessarily mean that principles or systematized knowledge can be transferred easily. It seems that a dilemma exists between the wide transfer and the narrow transfer. Cronbach and Gleser (1965) implied that descriptions and prescriptions usually have a narrower band of information than principles and disciplines. While the danger of a narrow band of information is its operation into a misleading conclusion, the danger of a wide band of information is its application to inappropriate situations. When an educational goal is to train preverbal skills, the goal can hardly be achieved without descriptive knowledge, which has a very narrow band of information, because descriptive knowledge functions to bridge verbal knowledge with preverbal knowledge (Broudy, 1961; Cronbach, 1962; Cronbach & Gleser, 1965).

General semanticists suggest that abstract language such as abstract theoretical knowledge must have behavioral correlates to be meaningful (Hayakawa, 1943; Johnson, 1946). In training interpersonal perceptual skill, descriptions of verbal communication in counseling interaction may be considered behavioral correlates of abstract principles and disciplines. The behavioral correlates of interpersonal perception appear to be found...
in descriptive case studies in counseling and psychotherapy. A great deal of work has been completed in counseling and psychotherapy that relates to interpersonal perception, but little attempt has been made to discover the behavioral correlates of accurate interpersonal perception. Lack of descriptive knowledge of these behavioral correlates would likely contribute to an unsatisfactory transfer effect on interpersonal perceptual skill.

Studies on transfer of principles would be valuable to understand the role of descriptions and principles in training interpersonal perceptual skills. Kendler (1964) found that verbal mediating processes are important in transfer of what has been learned to the solution of a novel problem. In a complex learning situation, the crucial factor is the internal verbalization that takes place in learning processes. Stones and Heslop (1968) found that children most likely to use transfer in the solving of problems were the ones who were able to verbalize them. This study hints that a person who is able to solve a block problem at an intuitive level may not be able to transfer the learning to other situations. Travers (1972) stated, "the presence or absence of verbal mediating responses is of great importance. The role of verbal processes becomes even more central in
the learning of rules and principles" (p. 174). Ellis (1972) also stated that verbalization, feedback, and active participation are necessary during the early stages of skill learning.

What seems most apparent from this review of current studies, researches, and practices on training interpersonal perceptual skills and the role of descriptive knowledge in such training is that the role of descriptive information in relation to improved accuracy in interpersonal perception through direct teaching has not been identified.

**Purpose of the Study**

The aim of this study is to identify the function of descriptive information in interpersonal skills. Based on the previous studies that have shown successful training of accurate interpersonal perception, the present study purports to substantiate an effect of descriptive knowledge on accuracy in interpersonal perception.

The study is concerned with types of knowledge and their role in learning and transfer. Emphasis in academic training appears to be laid on principles, theories, and systematized knowledge. Insufficient attention seems to be given to descriptions or descriptive knowledge, although it has tremendous value for teaching other counseling and psychotherapeutic skills.
Principles and theories are valuable to the process of solving practical problems, but information is needed to bridge the abstract principles and theories to practical situations. Descriptive information has the value of helping the transfer of principles and systematized knowledge to their practical application in the counseling situation.

Descriptions have an important function in transfer of verbal knowledge to preverbal knowledge. This means that descriptive knowledge about interpersonal perception would function as an important variable in the transfer of learned verbal knowledge to practical skills in the counseling situation. Abstract principles or theories would hardly transfer to practical skills if a learner did not have knowledge of concrete descriptions of those concepts and of relationships between concepts. Hence, it appears that theoretical knowledge with descriptive information will be more easily transferred to practical situations than knowledge of theories without descriptive and detailed information.

The purpose of the study is to investigate the effect of teaching theories with descriptive information on improvement of interpersonal perception.

**Research Problem**

When we accept the theorists' proposition that the
function of descriptive knowledge is to transfer verbal knowledge to preverbal knowledge, we can make an inference based on this proposition. The inference is: teaching principles and systematized knowledge without relevant descriptive knowledge is not as effective as teaching with descriptive knowledge, if the teaching aims to improve practical skills. When a self-instructional programmed text is used for improving individuals' ability to perceive the meanings and feelings of other individuals, the program will be more effective when it is augmented with relevant descriptive knowledge than when it provides theoretical knowledge alone. From this logical inference, the following general hypothesis has been developed.

It is hypothesized that providing trainees with both theoretical and descriptive information on interpersonal perception will be more effective in improving the accuracy of their interpersonal perceptual skills than providing them with theoretical information without descriptive information.
CHAPTER II

Method

Instructional Material

A student's acquisition of information can possibly be achieved through many different kinds of instructional strategies. It seems obvious that the student can learn explicit and manifest information through a didactic approach. One of the most satisfactory methods within the didactic approach would be programmed instruction. Although programmed instruction could be in auditory or visual form, or audio-visual form, a programmed textbook appears to be one of the most satisfactory methods in the education of counselors and other professionals in human service areas (Bullmer, 1970; DiMat- tia & Zimmer, 1972).

A major consideration in this study is the types of information presented -- either theoretical or descriptive. In the present study, theoretical information refers to definitions, explanations, prescriptions, principles and systematized knowledge. On the other hand, descriptive information refers to statements of behavioral or factual referents, and existential knowledge. A combination of the two types of information seems to be included in most of the textbooks used for counselor education. For the purpose of this study, a textbook

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
is needed which contains both types of knowledge about interpersonal perception, and in which segments of one type of information are mutually exclusive from segments of another type of information. It is also important that, as a result of mastering the information presented in the text, trainees can attain their objectives, which is in the broad sense the improvement of interpersonal perceptual skills.

Fortunately, there is a programmed textbook which has been repeatedly used in the training of counselors for the purpose of improving accuracy of interpersonal perception. Bullmer (1975a) has developed a linear programmed textbook. It has been found that trainees who achieve meaningful learning of the information given in the text improve their scores on a test of interpersonal perception to a significant degree. Bullmer's *The Art of Empathy: A Manual for Improving Accuracy of Interpersonal Perception* is the text which has been repeatedly validated and studied by Bullmer himself (1970, 1972, 1975a, 1975b). Subject matter of the instructional program is as follows:

Unit I. Interpersonal Perception. The basic concepts of perception and interpersonal perception are presented. It describes how a person's implicit theory may influence his or her interpersonal perception and how
trainees can benefit from self-analysis by being aware of the use of implicit personality theory.

Unit II. Sources of Error in Interpersonal Perception. Sources of error, e.g., past experiences, thinking processes, and use of implicit personality theory, are identified. Also, the learner is encouraged to apply a self-analysis procedure to attain an awareness of his own sources of error.

Unit III. Identifying Emotions. This unit is divided into three sections. The first section concerns the meanings of human needs, desires, motives, and emotions. It also explains the relationship among these concepts. The second section clarifies and delineates the specific emotions and possible stimulus situations leading to those emotions. In section three, the learner is given examples of possible verbal statements which can represent specific emotions.

Unit IV. Identifying Hidden Meaning. This unit is concerned with anxiety and defense mechanisms. In the first section, anxiety and use of defense mechanisms are explained in detail. In the remaining sections, specific defense mechanisms are defined and examples of verbal statements of those defense mechanisms are presented.

Unit V. The Perceptual Approach to Understanding
Others. This unit is divided into two sections. In the first section, the perceptual approach to understanding is explained. In the second section, examples of verbal statements are given.

Unit VI. Summary. In the first section, a review of previous units and the meaning and significance of the integrated understanding of the material is presented. The second section gives additional examples of verbal statements related to hidden meanings.

The subject matter of the programmed text was reviewed and each section of all six units was analyzed. Bullmer and the investigator of this study conducted a content analysis of the text. The criterion for content analysis was the types of knowledge, i.e. theoretical and descriptive knowledge. The results of the content analysis are presented on Table 1 (p. 53).

Table 1 shows that the content of the text was analyzed and categorized into two types of knowledge. The units of content analysis were the sections in the text. The results of this content analysis reveal that The Art of Empathy can be divided into two parts which contain theoretical information about interpersonal perception, with and without descriptive information.

Two kinds of instructional materials were then developed. The Art of Empathy is a text which includes
Table 1
Results of Content Analysis of *The Art of Empathy*

<table>
<thead>
<tr>
<th>Contents</th>
<th>Types of Knowledge</th>
<th>Theoretical Knowledge</th>
<th>Descriptive Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit I.</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Unit II.</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Unit III. Section 1.</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Section 2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit IV. Section 1.</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Section 2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit V. Section 1.</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Section 2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit VI. Section 1.</td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Section 2.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The symbol (*) in Table 1 refers to the types of knowledge contained in each section of the six units.
theoretical information with descriptive information, and was used as one form of learning material. To make an instructional presentation, which included theoretical information without descriptive information, the researcher of the present study excluded all sections of descriptive information in *The Art of Empathy*. Instead of the descriptive information, newly written sections were included. These new sections were merely prosed statements of the programmed theoretical information already in the relevant units. This addition of review sections was based on a consideration of time needed for mastery of the text. Time needed for learning the two different types of instructional material was equalized for the purpose of this study. The content of the instructional material which includes theoretical information without descriptive information is as follows:

Unit I. Interpersonal Perception
Proficiency Test for Unit I

Unit II. Sources of Errors in Interpersonal Perception
Proficiency Test for Unit II

Unit III. Identifying Emotions
Section 1. Needs, Desires, Motives and Emotions
Section 2. Description of Specific Emotions
Section 3. Review
Proficiency Test for Unit III
Unit IV. Identifying Hidden Meaning
  Section 1. The Use of Defense Mechanisms
  Section 2. Review
  Proficiency Test for Unit IV

Unit V. The Perceptual Approach to Understanding Others
  Section 1. Listening with Understanding
  Section 2. Review
  Proficiency Test for Unit V

Unit VI. Summary
  Section 1. Summary
  Section 2. Review

The only distinction between the two different sets of self-instructional materials was concerned with those sections containing descriptive information.

Subjects

The Art of Empathy has been written for beginning trainees in fields of human services in which interpersonal perceptual skills are crucial. The two types of self-instructional material for this study are appropriate learning materials for beginning students in counseling, clinical psychology, social work and other human service fields.

The subjects chosen for this study were counseling students enrolled in the C-P 617 Introduction to Theories of Counseling at Western Michigan University for the fall
of 1975. Generally these students could be described as beginning graduate students enrolled in a program of study leading to a Master's degree in counseling. There were three different sections of this course and the subjects of this study consisted of students enrolled in two sections of the course. In one section there were twenty-nine students enrolled. In the other section twenty-seven students were enrolled.

The number of subjects who completed all phases of this study and also satisfied necessary conditions for this study was fourteen in the first section of the course for which theoretical information was provided with descriptive information, and eleven in the second section of the course for which theoretical information was given without descriptive information. Subjects who did not master at least ninety percent of the learning materials were excluded from final analysis of the data. Because retention of information is critical in transfer of verbal information to practical skills, the ninety percent cut-off line was applied to this study (Gagne, 1970; Klausmeier & Ripple, 1971; Travers, 1972). Also, The Art of Empathy was required in other classes and was on sale at a university book store. Therefore, some of the subjects in the group receiving theoretical information without descriptive information were possibly contaminated.
by exposure to the unabridged copy of the text. Those subjects, being treated without descriptive information, who had the possibility of being contaminated by descriptive information were identified by the instructor and excluded from the final analysis of the data.

**Measuring Instruments**

For the purpose of this study, tools which can measure mastery of theoretical and descriptive information about interpersonal perception and accuracy of interpersonal perception were needed. To measure the mastery level of information, The Test of Knowledge of Interpersonal Perceptual Skills was developed. The Affective Sensitivity Scale was used to measure the accuracy in interpersonal perception.

The Test of Knowledge of Interpersonal Perceptual Skills (TOKIPS) consisted of sixty items which were based on the items in *The Art of Empathy*. The first thirty items consisted of a subtest of theoretical knowledge in the text and the last thirty items formed a subtest of descriptive knowledge in the text. Therefore, the first thirty items were to measure learning of definitions, explanations, and principles, while the last thirty items were to assess learning of verbalized descriptions of emotions and hidden meanings. Each item was thoroughly validated through studies done by Bullmer (1970).
An odd-even split half reliability was obtained by the investigator in the present study. The rank-order correlation based on data about twenty-four subjects for the pilot study done by the investigator for the present study was $r = .88$. In this study, the level of mastery of information about interpersonal perceptual skills was operationally defined in terms of subjects' scores on The Test of Knowledge of Interpersonal Perceptual Skills. (See Appendix B, pp. 103-113).

The Affective Sensitivity Scale (ASS) is a recent and promising approach to measurement of accuracy in interpersonal perception. This scale has been devised to assess the ability to detect and describe the immediate affective state of other individuals. This scale consisted of sixty-six forced choice items. Subjects view a series of videotaped excerpts from actual counseling interviews and are then asked to respond by selecting one of the three possible responses.

The range of reliability correlation was from $r = .53$ to $r = .81$ (Avery, 1973). This scale has been found to be responsive to experiences designed to increase interpersonal perceptual skills (Bullmer, 1970, 1972). In this study, the scale was used to assess the subjects' perception of emotions and hidden meanings of other individuals. Accuracy in interpersonal perception was operationally
defined as subjects' scores on the scale. (See Appendix C, pp. 114-137).

Research Design

The groups for this study were intact classes. According to Campbell and Stanley (1963) and Lindquist (1953), randomization is achieved when intact classes are assigned to treatment. Therefore, the conditions for random assignment of subjects were met in this study. Students did not have a choice whether they would take the course or not. Instructors for the classes, methods of instruction, and subject matter for the course were not known to students prior to their registration. Generally, students took the class based on what was open and convenient to them.

The research design employed in this study was a posttest only two-group design. Both of the groups received treatment. One group received a treatment consisting of instructional materials which contained theoretical information without descriptive information, while the other group was treated with instructional materials which included theoretical information with descriptive information. The Test of Knowledge of Interpersonal Perceptual Skills (TOKOIPS) and The Affective Sensitivity Scale (ASS) were used as measuring instruments for the posttest. The research design for this study can, therefore, be summarized as shown in Table 2 (p. 60).
Table 2
The Posttest-Only Two-Group Design

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>None</td>
<td>X</td>
<td>T &amp; T</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>1 2</td>
</tr>
<tr>
<td>Group 2</td>
<td>None</td>
<td>X</td>
<td>T &amp; T</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1 2</td>
</tr>
</tbody>
</table>

Note.  
T : The Test of Knowledge of Interpersonal Perceptual skills
T : The Affective Sensitivity Scale
X : Treatment of theoretical information without descriptive information
X : Treatment of theoretical information with descriptive information
A posttest only two group design would be a variation of the randomized control group posttest only design (Van Dalen & Meyer, 1966; Campbell & Stanley, 1966). This research design has controls over various sources of internal invalidity, i.e., contemporary history, maturation processes, pretesting procedures, differential selection of subjects, and interaction of selection and maturation and so on. This design also controls for such sources of external invalidity as interaction of pretesting or selection and treatment. This design is particularly useful when a pretest is inconvenient and/or takes a long time.

Statistical Analysis

In the groups for this study, $n_1$ and $n_2$ were not equal. Welch (1937), Gronow (1951), and Edwards (1972) suggested statistical methods for testing the significance of difference between two means when the numbers of subjects are unequal. In order to avoid the effects of violation of the homogeneous variances assumption, it was determined that obtained $t$ will be corrected to obtain its critical value in terms of $t'$. This procedure is suggested by Edwards (1972, pp. 99-100). While a $t'$ test will be applied to test the statistical null hypothesis, other data will be analyzed to depict characteristics of the two groups. Means and standard deviations will be calculated for the analysis of the data. The significance
level for rejection of the null hypotheses will be $p = .05$.

**Procedure**

In this study, the role of instructors was considered to be very important, because experimental procedures in the classrooms were carried out by the instructors. Prior to their participation, the instructors who were teaching C-P 617 Introduction to Theories of Counseling were asked to cooperate with the doctoral dissertation research project. They were informed that the research project would take approximately two class hours for distributing self instructional materials and for administering The Affective Sensitivity Scale and The Test of Knowledge of Interpersonal Perceptual Skills. Instructors were also informed that students would need at least six hours to master the self instructional materials.

Subjects were not informed that their assignment of reading the text and of taking a test was a research project. Instead, they were asked to master the learning material for their own benefit in improving their knowledge about interpersonal perception. They were also informed that the test would be administered to measure the mastery level of learning and that the scores to be obtained would be part of their evaluation of course performance. The instructors also motivated students to master the text by emphasizing the importance of interpersonal perception in counseling and psychotherapy.
Students were informed of the testing date two weeks before the test.

The two measuring instruments were administered on separate dates for convenience of class management and for effective administration. Scores obtained by the subjects were checked by the researcher, by a teaching assistant and also by a faculty member at the Department of Counseling and Personnel. The scores obtained were treated by statistical inference to test the following hypothesis.

Hypothesis

The general hypothesis to be investigated in this study is formulated into the following syllogism from the review of literature.

Descriptive information functions to facilitate transfer of theoretical information to preverbal skills. Also, descriptive information about interpersonal perception functions to facilitate transfer of theoretical information concerning interpersonal perception into practical skills of interpersonal perception. Therefore, if students are provided with theoretical information about interpersonal perception and descriptive information, their learning of theoretical information will be more effectively transferred to actual interpersonal perceptual skills than will be students' learning.
of theoretical information without relevant descriptive information. This general scientific hypothesis will be checked through testing a statistical null hypothesis.

The null hypothesis is: There will be no difference between the group treated with the text which contains theoretical information with descriptive information and the group treated with the text which contains theoretical information without descriptive information as measured by the posttreatment scores on the Affective Sensitivity Scale.

Limitations of the Study

This study appears to be limited, to some degree, in its generalization to other populations and other settings. The most desirable sample for this study would be randomly selected samples based on all beginning trainees in counseling, clinical psychology, social work, and other human service areas in which improved interpersonal perceptual skills would be an important objective of professional training. Although the subjects for this study were assumed to be randomly assigned, they were all trainees in counseling. Also, assignment of two different conditions to the already existing groups appeared to limit an assumption of theoretically pure random sampling.

The other limitation of this study was related to the difference of mimeographed materials and printed materials. The theoretical information without descriptive
information was mimeographed while theoretical information with descriptive information was presented in the printed book, *The Art of Empathy*. Although the effect of distinctions in types of printing is not evident in its relation to learning, the difference in types of printing might be one of the limitations of this study.

Although there would appear to be the above mentioned limitations in this study, the results of this study could be generalizable to other subjects and learning tasks which have similar characteristics to those in this study.
CHAPTER III

Results

The present study investigated two types of information as a determinant of transfer of learning of theoretical information into practical skills of interpersonal perception. Descriptive information was hypothetically viewed as a transfer facilitator which connects theoretical information to interpersonal perceptual skills. The effect of teaching theoretical information with and without descriptive information on improved accuracy in interpersonal perception was assessed in this study.

Homogeneity of variances of posttreated scores in the first two groups was tested first by obtaining F values. These obtained F values were 1.56 (N.S.) for the theoretical information, 9.33 (p<.05) for the descriptive information, and 1.06 (N.S.) for the Affective Sensitivity Scale scores. This implies that a \( t' \) test must be applied to test the significance of mean difference of the descriptive information between the two groups. Table 3 (p. 67) presents results of this \( t' \) test on theoretical information in the two groups. Table 4 (p. 68) presents the results of the \( t' \) test on descriptive information in the two groups.
Table 3
Means of Theoretical Information Measured by the TOKOIPS in the Groups

<table>
<thead>
<tr>
<th></th>
<th>Group 1 Without Descriptive Information</th>
<th>Group 2 With Descriptive Information</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X$</td>
<td>29.45</td>
<td>29.57</td>
<td>0.399*</td>
</tr>
<tr>
<td>$SD$</td>
<td>0.78</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>$n$</td>
<td>11</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

* One tail $t$ of 0.399 $p = 0.347$
Table 4
Means of Descriptive Information Measured by the TOKOIPS in the Groups

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Descriptive Information</td>
<td>X =25.00</td>
<td>X =28.07</td>
<td>3.67*</td>
</tr>
<tr>
<td></td>
<td>SD =2.83</td>
<td>SD =.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n =11</td>
<td>n =14</td>
<td></td>
</tr>
<tr>
<td>With Descriptive Information</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* One tail t of 3.67 p=.001
One tail t' of 2.28 p=.001
Table 5
The \( t \) Test of Posttreated ASS Scores for the Group With and Without Descriptive Information

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>( t ) value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
<td>With</td>
<td></td>
</tr>
<tr>
<td>Descriptive</td>
<td>Descriptive</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>( X =37.00 )</td>
<td>( X =40.36 )</td>
<td>1.46*</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>SD =5.56</td>
<td>SD =5.41</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>( n =11 )</td>
<td>( n =14 )</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

* One tail \( t \) of 1.46 \( p=.079 \)

Table 5 (p. 69) presents the results of final statistical analysis for testing the hypothesis. The hypothesis was: when measured by the ASS, there will be no difference between the group treated with theoretical information plus descriptive information and the group treated with theoretical information without descriptive information. The results indicate that the obtained \( t \) value is not sufficient to reject the null hypothesis.
CHAPTER IV

Discussion

The foregoing data indicates that improvement of accuracy of interpersonal perception appeared to occur through the treatment of theoretical information with descriptive information and that this improvement would be greater than treatment without descriptive information. The difference between the two groups however was not satisfactory to meet a statistical significance to prove that the treatment with descriptive information was more effective to improve accuracy of interpersonal perception than the treatment without descriptive information.

This would, therefore, indicate that it is not conclusive whether teaching theoretical information with descriptive information is more effective in improving the interpersonal perceptual skills than teaching without descriptive information.

It seems that many variables contributed to the inconclusive data in this study. First, descriptive information in the text seems to contribute a great deal of the transfer of theoretical information learning into interpersonal perceptual skills. This descriptive information in the text would possibly bring about greater improvement among subjects treated with descriptive information, although it was not statistically significant.
Second, based on the pilot study, it appeared that subjects of both groups have a significant amount of descriptive knowledge about interpersonal perceptual skills before they were treated with the texts. The pilot study showed that subjects in that study had already achieved approximately fifty percent of correct information concerning descriptions of concepts and principles related with interpersonal perceptual skills. This would indicate that subjects in this major study had an already significant amount of descriptive information about the interpersonal perceptual skills before they learned about the theories of interpersonal perception in the texts. This descriptive knowledge acquired prior to the treatment would play a big role in acquisition of new theoretical information and would appear to facilitate transfer of learned theoretical information to perceptual skills. This descriptive information acquired prior to treatment would possibly lessen the effect of descriptive information in the text on facilitating transfer of newly acquired theoretical knowledge into perceptual skills.

Third, review sections in the text would contribute to the improvement of knowledge and the perceptual skills among subjects treated with theoretical information without descriptive information. Repetition has been known to function positively in mastery of knowledge and of
skills. Among subjects who were treated without descriptive information, the review sections would most likely contribute to mastery of theoretical information and improvement of perceptual skills to a certain degree.

While the above three variables would most likely contribute to the failure of reaching a statistical significance level of mean difference between the two groups, the study seems to suggest that the very characteristics of theoretical information in the texts should be reconsidered.

Theoretical information in The Art of Empathy is written in an explicit, concrete and simple manner in the explanation of terms, concepts, and principles. It could be said that the level of abstraction of this theoretical is low, and is close to behavioral referents in factual realities. Consequently, the theoretical information appeared to be relatively easy to master. This low level of abstraction would function to bridge theoretical information to descriptive information without much difficulty. Subjects who were treated only with theoretical information were able, therefore, to gain more than eighty percent of the correct responses on the descriptive information in the TOKOIPS.

The level of abstraction of the theoretical information in the texts would appear to be associated with
the potentiality of transfer of theoretical information in the texts. The less abstract and complex the information is, it is speculated, the less difficult the information is to master. Also, the more abstract the information is, it was conjectured, the more difficult it is to transfer to practical skill. The concrete, simple, and less abstract information in the texts would appear to be easily transferred to descriptive information and finally to interpersonal perceptual skills.

The above speculation on the level of abstraction seems to be related to other concepts in learning transfer theories. Similarity and difficulty appeared to be related with level of abstraction. Less abstract information seems to be more closely related with behavioral referents in realities. This closeness most often implies the concept of similarity in learning theories. The less abstract theoretical information is, therefore, the more readily the information can be transferred to practical skills. The abstraction level of information is involved with a number of interlacing concepts and constructs. Although the most abstract concept is not necessarily difficult to master, most of the abstract concepts seem to be associated with learning difficulty to some degree. It has been often supported that difficulty and similarity are important in transfer of learning and that more
successful transfer can be achieved in less difficult and more similar learning tasks than in more difficult and less similar tasks (Bilodeau & Bilodeau, 1969).

While difficulty and similarity have been paid much attention in the research on transfer of learning, the concept of bandwidth of information has not attracted as much attention. Abstract information seems to have, in most cases, a wide band of information. Information with a wide band has more information but less clarity and dependability than information with a narrow band. Therefore, it appears that narrow band information has higher fidelity and dependability in its application than wide band information. When compared with concrete information, abstract information appears to have more possibility of random errors in its application to practical situations than concrete information. Thus, highly abstract information appears to be more difficult in its transfer to practical skills than less abstract information because it has more chance of random error, lower fidelity and lower dependability (Cronbach & Gleser, 1965).

It could be said that the theoretical information in the texts used for this study holds much possibility of being transferred to the perceptual skills because it is written in concrete and narrowband information, which is easy to understand. This quality of the
theoretical information in the texts for both treatment groups appeared to contribute to some degree of improvement in descriptive knowledge and the interpersonal perceptual skills.

Therefore, the concepts of abstraction level, similarity, difficulty, and bandwidth of information should be seriously considered in a counselor education program which aims to facilitate the transfer of theoretical information to practical skills. In the diversity and variety of training methods, as reviewed in Chapter I, there are common characteristics which could be summarized: concreteness, explicitness, and application of theoretical information to practical situations, whether these are simulated situations or real ones.

The above discussion of results implies that concreteness, explicitness and application of theoretical information is important for training of interpersonal perceptual skills. It also implies that descriptive information facilitates the transfer of theoretical information into practical skills even though the theoretical information may be so concrete and extensive that theoretical information is in itself readily transferable to descriptive information and to practical skills of interpersonal perception.

When an educational activity for counselors attempts
to improve interpersonal perceptual skills, teaching highly abstract theories would most likely be futile if concrete and extensive explanations and descriptive information of behavioral referents are not provided. Much suspicion has been raised as to teaching theories about interpersonal perception and its inefficiency in improving interpersonal perceptual skills. This traditional suspicion seems to result from traditional methods of theory education, and which has made consideration about descriptive information on behavioral referents and little effort to bridge theories to skills of interpersonal perception.

Further research is suggested to substantiate whether the abstraction level of theoretical information is associated with the degree of transfer of theoretical information into practical perceptual skills. Thus it can be said that the result of this study is suggestive rather than decisive.
CHAPTER V

Summary

Developing trainees' ability to accurately perceive, or understand, feelings and meanings of clients has been an important goal for educators of counselors and psychotherapists. Although this educational goal is most difficult for a counselor educator to achieve, several training procedures and methods have been developed to ameliorate trainees' ability to understand and communicate empathically with clients. Knowledge about interpersonal perception and communication has been generally assumed to be associated with practical skills of interpersonal perception and communication. In counselor education, the importance of knowledge has not been seriously rejected, but it has not been clearly understood how different types of knowledge are associated with the transfer of knowledge into practical skills.

While this study has focused on counselor trainees' ability to perceive feelings and meanings of other individuals, the study purported to investigate types of knowledge as a determinant of transfer of knowledge about interpersonal perception into interpersonal perceptual skills. Theorists have asserted that descriptive and existential knowledge function to facilitate learning transfer of verbal knowledge into preverbal skills.
Based on this assumption, the following statement was derived: In the learning of interpersonal perceptual skills, transfer of theoretical knowledge to interpersonal perceptual skills will be achieved through providing descriptive information. If trainees are provided with both theoretical and descriptive information about interpersonal perception, their learning of perception will be more readily transferred to perceptual skill than if they are provided with theoretical information without descriptive information. This general assumption was checked through testing the statistical null hypothesis: There will be no difference of improved accuracy in interpersonal perception between the group treated with theoretical information and descriptive information and the group treated with theoretical information without descriptive information.

The instructional material used for the study was Bullmer's *The Art of Empathy*. Content analysis was done to classify each section of the book into theoretical or descriptive knowledge categories. Sections which contained theoretical information were involved with explanations of theoretical concepts, relationships among concepts, and principles. The sections of descriptive information included examples of verbal expressions of feelings and meanings. All information was about interpersonal perception. Based on this classification of information, two
types of instructional material were prepared for this study. One type presented both theoretical and descriptive information; the other type excluded the descriptive information and replaced it with review sections on the theoretical information already presented in the relevant units.

Subjects for the study were counseling trainees who were taking C-P 617 Introduction to Theories of Counseling offered by the Department of Counseling and Personnel, Western Michigan University. This course is a required course which must be taken prior to enrollment of the counseling practicum, which leads to the degree of Master of Arts. The number of subjects in the final analysis of the data was fourteen for the group treated with both theoretical and descriptive information and eleven for the group treated with theoretical information without descriptive information.

The measuring instruments for the study were The Affective Sensitivity Scale and The Test of Knowledge of Interpersonal Perceptual Skills. The research design employed for the study was the posttest only two group design which can control various sources of internal and external invalidity.

The obtained data were analyzed to acquire descriptive statistical information and to test the null hypothesis.
The result of testing the null hypothesis showed that the improved scores on the Affective Sensitivity Scale for subjects treated with descriptive information was not significantly greater than the scores of subjects treated without descriptive information. The interpretation of this result is that there is no difference between the accuracy of interpersonal perception for the two groups.

Many variables seemed to be possibly associated with the failure of reaching a statistically significant level of mean differences on the improved perceptual skills between the two groups. The possible contribution of theoretical information sections, review sections, and descriptive information sections were discussed. Also, the possible effect of descriptive information acquired by the subjects before the treatment was discussed.

Among the many possible variables, it was tentatively hypothesized that concreteness, explicitness, and simplicity of information would be associated with transfer of verbal information to preverbal skills and to interpersonal perceptual skills. The investigator of this study suggests that further research should be done to substantiate whether or not abstraction level of information is related to transfer of knowledge and to perceptual skills.
References


Avery, D.M. Personality correlates of accuracy in interpersonal perception (Doctoral dissertation, Indiana University, 1973). University Microfilms No. 74-2,616


Bradley, F.O. A modified interpersonal process recall technique as a training model. Counselor Education and Supervision, 1974, 12, 163-171.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Fiedler, F.E., & Hoffman, E.L. Age, sex and religious background as determinants of interpersonal perception.
among Dutch children: A cross-cultural validation.  


Foulds, M.L. Dogmatism and ability to communicate facilitative conditions during counseling. **Counselor Education and Supervision**, 1971, 11, 110-114.


Gronow, D.G.C. Test for the significance of the difference between means in two normal populations having unequal variances. **Biometrika**, 1951, 38, 252-256.


Jamison, D., Lhamon, D., & Suppes, P. Learning and the


Martin, J.G. Racial ethnocentrism and judgment of beauty.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Spivack, J.D. Laboratory to classroom: The practical application of IPR in a master level's prepracticum counselor education program. Counselor Education and Supervision, 1972, 12, 3-16.


Truax, C.B., & Carkhuff, R.R. Toward effective counseling


Weisberger, C.A. Accuracy in judging emotional expressions


Welch, B.L. The significance of the difference between two means when the population variances are unequal. *Biometrika*, 1937, 29, 350-362.


Appendix A; A Summary of Pilot Study

This is a summary of a pilot study which was conducted during the spring session of 1975 with a class of C-P 617 Introduction to Theories of Counseling at the Department of Counseling and Personnel, Western Michigan University. The primary purpose of this study was to investigate the effect of teaching theoretical knowledge about interpersonal perception, with and without descriptive information, on interpersonal perceptual skills.

Unfortunately, this study did not produce meaningful results. Most of the subjects were poorly motivated for learning mainly because they were informed that they would be subjects for a study to used in a doctoral dissertation. Another procedural weakness was poor sound reproduction from audiovisual sets while administering the Affective Sensitivity Scale. However, this pilot study provided valuable information for this type of research about the effect of descriptive information on interpersonal perception.

Thirty-two students were enrolled in the class. Students in the class were randomly assigned into one of two treatment groups. One group of students was required to master a programmed text on interpersonal perceptual skills, without descriptive information. The other group was required to master the same programmed text with descriptive information. The difference between the two kinds of texts
were descriptive information sections and sections of review. The text of theoretical information without descriptive information included a review section which replaced descriptive information with prosed restatements of theoretical information. Students were informed that the extra class assignment required for learning the material was for the purpose of research leading to a doctoral thesis.

The Test of Knowledge of Interpersonal Perceptual Skills (TOKOIPS) and the Affective Sensitivity Scale (ASS) were administered to measure the mastery level of knowledge about interpersonal perception and accuracy in interpersonal perception, respectively. While the ASS was administered only after the treatment, the TOKOIPS was administered both before and after treatment.

Although the basic purpose of this pilot study was to test whether descriptive information functions to facilitate transfer of theoretical knowledge into practical perceptual skills, additional analysis of the data was conducted. Data provided by scores for subjects were analyzed to test the following null hypothesis and to measure the baseline of theoretical and descriptive knowledge.

The null hypothesis is: There will be no difference between the theoretical information without descriptive information group and the theoretical information with
descriptive information group as measured by posttreatment scores on the ASS.

Before the final analysis of data on testing the hypothesis is presented, statistical data on results of statistical analysis of pre- and post-tested scores measured by the TOKOIPS are presented. Table 6 (p. 98) shows statistical data on pretested scores of theoretical information. Table 7 (p. 99) shows the data on pretested scores of descriptive information. Table 8 (p. 100) shows the data on posttested scores of theoretical information on the TOKOIPS. Table 9 (p. 101) shows the data on posttested scores of descriptive information on the TOKOIPS.

One of the most interesting results in Table 9 (p. 101) is the set of pretested scores on the descriptive information subtest in the TOKOIPS. The relatively high scores among subjects measured by the pretest of the descriptive information subscale would indicate that subjects held a relatively high amount of accurate descriptive information about interpersonal perception prior to the treatment of the pilot experimentation. The investigator made a tentative hypothesis that this descriptive information will play a significant role in the learning of new theoretical information and in the transfer of theoretical information into practical skills.

The result of testing the null hypothesis is presented in Table 10 (p. 102).
<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
<td>Mean $\bar{X} = 4.50$</td>
<td>Mean $\bar{X} = 3.75$</td>
</tr>
<tr>
<td></td>
<td>SD $= 2.33$</td>
<td>SD $= 1.92$</td>
</tr>
<tr>
<td></td>
<td>$n = 12$</td>
<td>$n = 12$</td>
</tr>
<tr>
<td>Descriptive</td>
<td>Information</td>
<td>Information</td>
</tr>
</tbody>
</table>

Table 6
Means and Standard Deviations of Theoretical Information Subtest as Measured by the Pretest of TOKOIPS
Table 7
Means and Standard Deviations of Descriptive Information
Subtest as Measured by the Pretest of the TOKOIPS

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without</td>
<td>With</td>
</tr>
<tr>
<td>Descriptive Information</td>
<td>Mean $\bar{x} = 17.25$</td>
<td>Mean $\bar{x} = 14.17$</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation $SD = 4.58$</td>
<td>Standard Deviation $SD = 3.27$</td>
</tr>
<tr>
<td></td>
<td>n = 12</td>
<td>n = 12</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Table 8
Means and Standard Deviations of Theoretical Information Subtest as Measured by the Posttest of the TOKOIPS

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Descriptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>$\bar{X} = 20.33$</td>
<td>$\bar{X} = 19.00$</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>$SD = 8.23$</td>
<td>$SD = 6.68$</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>
Table 9

Means and Standard Deviations of Descriptive Information Subtest as Measured by the Posttest of the TOKOIPS

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Descriptive Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>$\bar{X}_1 = 21.33$</td>
<td>$\bar{X}_2 = 21.75$</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>$SD_1 = 3.92$</td>
<td>$SD_2 = 3.27$</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>$n_1 = 12$</td>
<td>$n_2 = 12$</td>
</tr>
</tbody>
</table>
Table 10
Result of t Test of the Affective Sensitivity Scale Scores for the Group Without Descriptive Information and for the Group With Descriptive Information

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Descriptive</td>
<td>Mean $\bar{X} = 38.42$</td>
<td>Mean $\bar{X} = 39.92$</td>
<td></td>
</tr>
<tr>
<td>Descriptive Information</td>
<td>SD = 9.54</td>
<td>SD = 9.61</td>
<td>.366*</td>
</tr>
<tr>
<td>Information</td>
<td>n = 12</td>
<td>n = 12</td>
<td></td>
</tr>
</tbody>
</table>

*Note. p > .05
Appendix B: Test of Knowledge of Interpersonal Perceptual Skills

Instruction

This test provides an opportunity for you to evaluate the knowledge that you have acquired on interpersonal perception, and to develop and ameliorate your ability to accurately perceive the motives, emotions, defense mechanisms and meanings of others. Accurate perception of others is the first step in a process which eventually can lead you as a counselor to make appropriate and effective responses. This test consists of 60 items. You may experience a good deal of difficulty with this test. Write your answers on the test sheets.

A. Supply the missing words in the following statements.

1. Many factors which influence a person's perception have their basis in the perceiver's ________.

2. Some of the important factors which influence a person's perceptions are p________ l________, _________ processes, mental _________, and _________.

3. The process by which one individual becomes aware of the properties of another individual is referred to as _________ _________.

4. Not all properties of the stimulus person can be easily observed visually since many properties are _________.

5. The meaning, motives, and emotions of human beings can be inferred accurately by interpreting the person's appearance
motor behavior, and __________ behavior.

6. The process of perceiving another human being is complicated and has many sources of __________.

7. Three major causes of inaccurate inferences concerning another person are inadequate __________, __________ and the use of __________ __________ theory.

8. Verbal statements can be interpreted from the viewpoint of the __________ __________ of the statement or from the viewpoint of the __________ __________ of the statement.

9. According to the __________ approach to understanding the meaning of the other person, behavior must be perceived from the other person's __________ of __________.

10. It seems that we have a tendency to __________ what is said by the other person.

11. If you wanted to improve your ability to accurately perceive others, you would benefit from the procedure of __________ __________.

12. Three behavioral manifestation of implicit __________ __________ are __________, __________ and __________ attribution.

13. You will improve your ability to infer accurately the meaning of others when you learn to interpret their statements from the viewpoint of their __________ intent.
14. One of the major sources of inaccurate perception of others is _________ of stimuli which serves as a buffer against realities with which the perceiver is unable to cope.

15. A technique for avoiding the natural _________ to evaluate has been referred to as _________ with _________.

16. Since one cannot perceive all available stimuli simultaneously when attempting to perceive another person, the perceptual process must be _________.

17. The "common sense" set of notions which people have about what other people are like and how they operate has been referred to as their _________ _________ _________.

18. When you assume that another's values and traits are the same as your own, you may be using _________ similarity as your basis for the inference.

19. It is probably fair to say that human beings are always in some state of _________ which produces motives and leads to behavior.

20. Anxiety is always an _________ feeling.

21. It is not easy to avoid ________ the statements of others when our own strong _________ are involved.

22. Anxiety which is controlled by responses and does
not manifest itself in overt behavior is referred to as controlled or ______________ anxiety.

23. Psychologists refer to the noninstrumental responses which an individual may employ to distort reality as _____________ ____________.

24. A person who finds usual method of attaining a goal blocked and then seeks out a new method of attaining that same goal is employing an i ____________ response to reduce anxiety caused by the situation.

25. Human needs and ____________ and ____________ are closely related.

26. When a person gives a good sounding reason for behavior which is motivated by unconscious unacceptable impulses, the mechanism being employed is referred to as ____________.

27. When a person accepts a substitute goal which seems attainable or acceptable for a desired goal which is unconscionably seen as unattainable or unacceptable, he may be ____________.

28. When someone attributes his own unconscious undesirable feelings and motives to others he is ____________.

29. A person who perceives something which is unconsciously threatening to him may distort his perception completely to the opposite. This would be an example of ____ ____.

30. The process of ascribing to one's self qualities of another object is referred to as ____________.
B. The following statements can be viewed as an example of rationalization, compensation, identification, projection, reaction-formation or none of those mechanisms. Identify and supply the defense mechanisms which the person making the following statements might be employing.

31. ___________. "I'm not fooled by people. Everybody will cheat if they can get away with it."

32. ___________. "I devote every minute of my life to working with children."

33. ___________. "I've never had a dishonest thought in my life."

34. ___________. "John has the same good traits which I have."

35. ___________. "I think it's all right to cheat once in a while if it doesn't hurt anyone."

36. ___________. "The only reason that I cheat on exams is that everybody else is doing it."

37. ___________. "Everybody is out to get the best of you."

38. ___________. "It's only money. Money isn't important to me."

39. ___________. "My college has higher standards than any of those eastern colleges."
108

40. _______________ "My only interest is to be the best teacher ever."

C. The following verbal expressions may be viewed as an example of fear, anxiety, joy, anger, pride, shame, guilt, love, hate, jealousy and envy. Indicate the emotion which you think most likely may exist.

41. _______________ "I don't know why I feel so uneasy."
42. _______________ "If I flunk this test, I'm in trouble."
43. _______________ "It may be right but I should have done better."
44. _______________ "She tells me she doesn't care about him but I know otherwise."
45. _______________ "I would just like to get rid of her."
46. _______________ "If the author had done a better job with this text, I could learn this stuff."
47. _______________ "I knew it was wrong when I did it. I feel just terrible."
48. _______________ "I feel drawn to him—I can't help myself."
49. _______________ "I'm pleased with myself. I feel I did a good job."
50. _______________ "It's beneath me to behave as badly as I did."

D. For each of the following statements, select the
interpretation which seems to express best the true mean-
ing, motives, and emotions of the person making the state-
ments.

51. "All girls are the same. All they want is what they can get out of you."
   A. He hates all girls.
   B. He wants to know how I feel about girls and this is his way of asking.
   C. How could he really think that about girls?
   D. He's not sure how he feels about girls. His feel-
ings are causing him a problem.

52. "I would have made a passing grade on the exam if the teacher had asked fair questions."
   A. He feels angry.
   B. He's sorry he didn't work harder.
   C. He really feels remorseful--he knows the value of studying now.
   D. He hates his teacher.

53. "I know that what I did was wrong even though there were others doing the same thing."
   A. She feels ashamed of her behavior.
   B. She's rationalizing and trying to place the blame on the other.
   C. She is experiencing guilt feelings because of her wrongdoing.
   D. She would like sympathy from me.
54. "I can't stand hippies."
   A. He doesn't know how he feels about hippies.
   B. Hippies make him feel angry.
   C. He thinks hippies are less than human.

55. "I don't think it's wrong to want things for yourself."
   A. She doesn't care how I feel about her.
   B. She is selfish and doesn't think of others.
   C. She doesn't feel bad about thinking of herself.

56. "I get angry at times but so does everybody else."
   A. He may be having difficulty accepting his feelings of anger.
   B. He has a bad habit of getting angry.
   C. He thinks it's OK to get angry because others do it.

57. "I'm really a terrible person."
   A. She has done something bad.
   B. She is feeling remorseful about her behavior.
   C. She wants me to see her as a bad person.

58. "My parents treat me very badly but I love them very much.
   A. He doesn't mind that his parents treat him this way.
   B. He'd love his parents no matter what they did to him.
C. He is confused about his feelings and may not really love his parents.

59. "Nobody can help me."
   A. She feels this is something she is obligated to do on her own.
   B. The thought of talking about it is making her very anxious.
   C. She feels that it is too late for help.

60. "All teachers are the same. They don't give a damn students."
   A. He hates teachers—and me also.
   B. He's trying to make me angry.
   C. Teachers are a source of anxiety for him in some way.
   D. He doesn't really think that. How could he?

Key to Answers

1. personality
2. past learning, thinking, set, motives
3. interpersonal perception
4. internal
5. verbal
6. error
7. intelligence, distortion, implicit personality
8. verbal content, affective intent
9. perceptual, point, view
10. evaluate
11. self-analysis
12. personality theory, stereotyping, similarity, trait
13. affective
14. distortion
15. tendency, listening, understanding
16. selective
17. implicit, personality, theory
18. assumed
19. need
20. unpleasant
21. evaluating, emotion
22. latent
23. defense mechanism
24. instrumental
25. emotions, motives
26. rationalization
27. compensating
28. projecting
29. reaction formation
30. identification
31. projection
32. compensation
33. reaction formation
34. identification
35. rationalization
37. projection
39. identification
41. anxiety
43. shame
45. hate
47. guilt
49. pride
51. D
53. C
55. C
57. B
59. B

36. rationalization
38. reaction formation
40. compensation
42. fear
44. jealousy
46. anger
48. love
50. shame
52. A
54. B
56. A
58. C
60. C
Appendix C: Affective Sensitivity Scale

Instruction

You will be viewing short scenes of actual counseling sessions. You are to identify what feelings the clients have toward themselves and toward counselors they are working with.

Although in any one scene a client may exhibit a variety of feelings, for the purpose of this instrument you are to concentrate on identifying his last feelings in the scene.

On the following pages are multiple choice items consisting of three responses each. Most scenes have two items; but a few have one or three items. After you view each scene, you are to read the items and ask yourself the following question:

If the client were to view this same scene, and if he were completely open and honest with himself, (i.e., if he could identify his real feelings) which of these three responses would he use to describe his feelings?

After you decide which response accurately describes what the client is actually feeling either about himself or the counselor he is with, indicate your choice on the answer sheet.
Here is a sample item:

Client I
Scene 1.

Item 1.
1. This exploring of my feeling is good. It makes me feel good.
2. I feel very sad and unhappy.
3. I'm groping and confused; I can't bring it all together.

After you had viewed Scene I for Client 1, you would read these three statements (Item 1) and would then decide which one best states what the client would say about his own feelings after viewing the same scene. For example, if you decide number two best states what the client is feeling, you would then find the number 1 on your sheet and darken in the space for number two.

1. 1---- 2 --- 3 ---- 4 ---- 5 ----

We will only make use of the first three answer spaces following each item on your answer sheet.

Remember you are to concentrate on the latter part of each scene in determining the most accurate description of the client's feelings.

After you view the appropriate scenes, you will have
thirty seconds to answer each of the first twelve items. For each of the remaining items, you will be allowed twenty seconds.

Caution: The item numbers on your sheet go across the page, not down the page as you would usually expect!

Client I.
Scene 1.

Item 1.
1. I feel sorry for my husband and the relationship we have.
2. I don't really understand what I feel. Yet, I do feel guilty about creating pain in others which returns to me.
3. I feel pleased at seeing a possible relationship between my feelings of anger and pain.

Item 2.
1. He (counselor) doesn't have to like me. I just want him to agree with me and tell me I'm right.
2. I'm trying to please you. Do you like me?
3. He's really understanding me now.

Client I.
Scene 2.

Item 3.
1. I feel calm and collected. I just want to think for a while.
2. Yes, that is when I get angry. I see it all clearly now.
3. I feel anxious and stimulated.

Item 4.
1. I'll pretend I'm agreeing with him (counselor), but I don't see the connection at all.
2. I like what he's doing. I don't feel as uncomfortable now.
3. I wish he would stop pushing me in this direction.

-------------------------------------
Client II.
Scene 1.

Item 5.
1. I'm pleased, happy; I feel good all over!
2. It was brought right back, that amazes me, but it hits quite bad too. It hurts.
3. I'm not bothered by this. I can handle it.
   I'm confident.

Item 6.
1. He's (counselor) caught me; careful, I'm not sure I want that.
2. I like him. He's trying to make the situation a little lighter and made me feel better about it.
3. I don't feel he understands. He's sarcastic.

I don't like that.

Client II.

Scene 2.

Item 7.

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

Item 8.

1. I feel a little bit embarrassed, but that all
right as long as I can keep my composure.
2. I have a feeling of sadness.
3. I feel flustered and embarrassed.

Item 9.

1. He's asking for some touchy material, but that's
all right. It's about time he knew.
2. He's being very frank and open! I'm not sure I
want that.
3. I want him to leave me alone—I want out of here.

I don't like this.

Client II.

Scene 3.

Item 10.
1. I'm getting so much attention. I really enjoy this. It makes me feel good.
2. I'm scared by what I am feeling. I feel embarrassed and threatened.
3. I have the feeling that what I want was wrong, and I'm a little ashamed of myself.

Item 11.
1. This is good. We're really moving into my feelings.
2. He's too perceptive; he's looking right through me.
3. He's getting a little sticky; I'm not sure I like that.

Client III.
Scene 1.

Item 12.
1. I feel protective and defensive of what people may think about my family.
2. All this seems so pointless! I'm puzzled and bored.
3. We're having a nice conversation. Some of these things really make me think.

Item 13.
1. This guy (counselor) embarrasses me with the questions
he asks.

2. The question he asks really makes me think. I'm not sure I like that.

3. I can't follow this guy's line of thought. What's he trying to do?

-----------------------------------------------

Client IV.

Scene 1.

Item 14.

1. I'm concerned with my physical condition. I'm worried about it.

2. I want pity. I want her to think 'Oh, you poor boy'.

3. I feel good—nothing's bothering me, but I enjoy talking.

Item 15.

1. She's too young to be counseling, and she's a girl. I'm not sure I like this.

2. She likes me; I know she does.

3. I'd like her to think I'm great.

-----------------------------------------------

Client IV.

Scene 2.

Item 16.

1. I'm a little annoyed with my family's ambitions
for me.

2. That's a hell of a lot to ask! It makes me mad.

3. I feel sorry for myself, and I want others to feel the same.

Item 17.

1. She (counselor) really understands me! She's with me now.

2. I don't feel much either way towards the counselor; she's not important to me.

3. I wonder if she appreciates the pressure that's put on me.

Client IV.

Scene 3.

Item 18.

1. This whole thing just makes me sad and unhappy.

2. It kind of angers me that they don't appreciate me when I feel I did my best. I wish I could tell them off.

3. No matter how well I do, I'm always criticized. It doesn't bother me too much though because I know I did my best.

Item 19.

1. I can tell she understands what I'm saying. She's really with me.
2. I wish I could get out of here; I don't like her.
3. Understand what I am saying; I want her to know how I feel.

--------------------------------------------------

Client IV.

Scene 4.

Item 20.

1. I really want to be successful, and somehow I know that I can be.
2. That makes me feel kind of sad, unhappy. I don't want to believe that it's true—I want to be good.
3. I don't know what I feel here. It's all very confusing.

Item 21.

1. I feel neutral towards her here. I'm not paying any attention to her.
2. Please feel sorry for me and try to help me. I wish she would praise me.
3. I like talking to her. She can be trusted even to the point of telling her how I really feel about myself.

--------------------------------------------------

Client V.

Scene 1.

Item 22.
1. I feel rejected and empty inside. Am I unlovable?
2. I feel a little lonely. I want my boy friend to pay a little more attention to me.
3. I really don't feel much here; I'm just kind of talking to fill up space.

Item 23.
1. Please say it isn't fair, Mr. Counselor.
2. He really understands me. I can tell him anything.
3. I'm not sure I care what he says. It's kind of unimportant to me what he feels about me at this time.

Client V.

Scene 2.

Item 24.
1. I'm afraid of marriage--insecure; it might not work out, and I'd be lost.
2. I really can give him all the affection he needs, I feel I'm a worthwhile person to be desired. He wouldn't dare step out on me.
3. I'm really not too worried; it'd all work out in the end even if we have to go to marriage counselors.

Item 25.
1. I don't care if he (counselor) can help me or not. I'm not sure I want his help.
2. He's so sympathetic. That makes me feel good.
3. Can you help me?

Client V.

Scene 3.

Item 26.
1. I feel I have some need to be liked, but it's not real strong.
2. I'm not loveable; I don't really like myself.
3. I'm a good person; I'm loveable. Down deep I know I am.

Item 27.
1. I feel dejected, kind of insecure. I want to be likeable!
2. My main concern is that it's hard for me to take criticism. I usually think of myself as perfect.
3. I feel a little sad about all this; I do kind of want people to like me.

Item 28.
1. He thinks well of me; I know he does, I can tell.
2. I want the counselor to really like me, but I'm not sure he does.
3. I like it when he asks questions like that. They
make me really think about deeper things.

Client V.

Scene 4.

Item 29.
1. I wouldn't want to be treated like he treats Mother, but I don't mind him (stepfather) too much.
2. I feel very little emotion about anything at this point.
3. I hate him (stepfather)!

Item 30.
1. Boy, I'm happy that he (counselor) agrees with me. He sympathizes with me. I feel completely accepted.
2. I'm embarrassed to tell the counselor how strong my feelings really are.
3. I'm not sure he'll be able to help me much after all. I'll just have to work this out by myself.

Client V.

Scene 5.

Item 31.
1. I'm kind of feeling sorry for myself, but I'm not really too worried.
2. I want to move out of the house as soon as possible.
I feel I would be better off on my own.

3. My own parents don't want me; I feel cut off and hurt.

Item 32.
1. I don't feel he's (counselor) helpful at all, and if he can't help me and see my side, I'm not going to like him either.

2. He's got me in a spot, but I feel I can still get him to see me as a good girl who is persecuted.

3. I wish the counselor were my father. He's listening; he understands how I feel.

Client VI.

Scene 1.

Item 33.
1. Disapprove! She'd kill me!

2. I feel jovial; this is real interesting.

3. I'm not sure how she would feel but the whole idea of her finding out excites me.

Item 34.
1. He (counselor) understands me completely. He certainly is relaxed and comfortable.

2. I really don't care what he feels about me. I just want someone to talk to--anyone will do.
3. I was wondering how he would feel about me and what I'm saying.

Client VI.

Scene 2.

Item 35.
1. I think my brother is O.K. We have fun together.
2. I don't know what I'm saying here. I'm a little mixed up and confused.
3. I'm saying something that's important to me. I like Doug.

-----------------------------

Client VI.

Scene 3.

Item 36.
1. This is very confusing for me. I'm not sure I understand what is going on.
2. This is how I really feel, I'm kind of starting to be myself.
3. I'm just talking to be talking here; this really doesn't mean much to me.

Item 37.
1. I guess he's (counselor) all right, but I'm still not sure he understands me.
2. Let's get going. I'm impatient! I want to move to more important matters.
3. I feel comfortable with him. He understands me.

-------------------------------------------------------------

Client VI.

Scene 4.

Item 38.

1. I love my brother, but not romantically. We just have a good brother-sister relationship.
2. I don't know about feeling this way about Doug; it feels so good, but it concerns me too.
3. I feel better about my relationship with Doug now. It helps to get it out in the open. Now I feel it's all right.

-------------------------------------------------------------

Client VI.

Scene 5.

Item 39.

1. I'm not feeling much of anything here. I'm just kind of talking to be talking.
2. I'm mad at everyone at this point and don't know which way to turn; I guess I'm mad at myself too.
3. Now I'm talking about things that are real. I'm not on stage anymore. She is a louse!

Item 40.

1. He (counselor) feels she's a bad person too.
2. Don't you agree with me? I want to know what you think.
3. He thinks this all sounds petty. He doesn't understand.

Client VII.

Scene 1.

Item 41.

1. I felt angry with my mother, but this made me feel guilty. I needed to make an excuse for her.
2. I'm really not angry with mother. It's not her fault.
3. I'm in a very passive mood. I'm just relaxing and talking about things that interest me.

Item 42.

1. This counselor is all right. I feel I can confide in him.
2. I feel comfortable. I'm not sure what this counselor wants me to do.
3. I feel he wants me to talk about myself, but I don't care. I'm going to talk about what I want to talk about.

Client VII.

Scene 2.

Item 43.

1. I'm very sensitive; I'm very easily hurt.
2. I'm somewhat sensitive and easily hurt, but not deeply so.

3. I'm not sensitive or easily hurt at all. I just like to make people think I am.

Item 44.

1. That makes me mad, I can do it--I know I can, but things just keep getting in my way.

2. It's really all his fault, if he just wouldn't have been such a joker.

3. This makes me feel guilty; I need to blame someone else instead of blaming myself.

Item 45.

1. I'm neutral towards the counselor. I don't care what he feels about me.

2. I'm afraid he doesn't like me and what I'm saying about myself. I don't want him to be harsh with me.

3. He's easy to talk to. He understands what I'm like, and he still likes me. I can confide in him.

Client VIII.

Scene 1.

Item 46.

1. Say, this is all right. I like this.
2. I'm not feeling anything deeply. I know what I need!

3. It's embarrassing and difficult. I feel a little annoyed.

Item 47.
1. I feel I can rely on this guy, so I'll let him talk and I'll just answer his question.
2. I wonder what you think about this--please respond. Give me some help.
3. The counselor is a good guy. I like his question; they make it easier for me.

-------------------------------------------

Client VIII.

Scene 2.

Item 48.
1. I feel very unhappy about what I may eventually have to do.
2. I don't know what I feel; I'm confused about what I feel.
3. I'm damned uncomfortable; it's so confusing. I feel kind of 'blah' about it all.

Item 49.
1. He's (counselor) missing the point. He bugs me.
2. I can't really tell about this guy. I don't
I know how I feel about him.

3. He seems like a good guy. He asks nice questions. I like him.

Client IX.
Scene 1.

Item 50.

1. I'm not sure how I feel about this counselor. I don't feel one way of the other about him.

2. I like the counselor very much—he makes me feel good.

3. He understands me pretty well and is trying to help. I guess I kind of like him.

Client IX.
Scene 2.

Item 51.

1. Goody, goody people don't really know any better, so I can't be disgusted with them, but it does makes me angry.

2. I don't really mind people feeling superior to me. It just makes me a little angry.

3. It tears me up inside when people think they're better than I am. I want people to be the same as me.
Item 52.
1. I'm every bit as good as they are. I really feel I am. I know I am.
2. I kind of wished they liked me, but I can live without being a member of their group.
3. Those smart kids make me feel stupid.

Item 53.
1. I feel sorry for them; they just don't realize what they're doing to people like me.
2. I feel I'm not as good as they are, and it really hurts when people act that way.
3. It makes me a little angry. I'm every bit as good as they are.

Client IX.
Scene 3.

Item 54.
1. I feel a little insignificant, and this makes me a little unhappy.
2. I'm a nobody. I am always left out.
3. I'm unhappy with school. That's what is really bothering me.

Item 55.
1. He (counselor) doesn't quite understand, but I don't care. It doesn't matter.
2. I don't feel one way or the other towards this counselor, we're just having a nice talk.

3. He (counselor) is really listening to me, and I feel he understands what I'm feeling.

-----------------------------

Client X.

Scene 1.

Item 56.

1. I'm feeling scared, concerned. Is this for me?

2. I just feel uncertain about what to talk about.
   If I once get started, I'll be all right.

3. I feel very deeply depressed.

Item 57.

1. He (counselor) seems to be listening—can he understand how I feel?

2. He's really with me. I can tell he understands me.

3. He doesn't keep things moving enough. I don't like that.

-----------------------------

Client X.

Scene 2.

Item 58.

1. I'd like to think I could make it, but I'm not sure. I feel inadequate.

2. I just have an I-don't-care feeling; that's my
real attitude towards all of this.
3. I'm confused here. I really don't have any definite feelings.

Item 59.
1. I want to impress the counselor. I want him to believe I can do it.
2. He believes me; he thinks I can do it; I can tell.
3. I really don't care what the counselor thinks. It's not important to me.

Client X.

Scene 3.

Item 60.
1. What's the use of looking ahead? I'm scared to think about it.
2. I can accept my situation. Really, things aren't so bad. Things may bother me a little, but really not much.
3. I enjoy just living for today.

Item 61.
1. He's (counselor) all right. He really understands me.
2. Nobody really can understand this. I don't think he will be any different.
3. I don't care what he thinks or feels; he's not
important to me anyway.

-----------------------------------------------

Client X.
Scene 4.

Item 62.
1. I feel somewhat unhappy. I don't like to feel this way.
2. There's something about me; I just don't fit in, and that makes me feel real inadequate.
3. In some instances, I'm unsure of myself. I'm afraid I'll do the wrong thing, but I can handle this just be avoiding these situations.

-----------------------------------------------

Client XI.
Scene 1.

Item 63.
1. I'm unhappy about all this, but I'm afraid to make a change.
2. It's not that I don't like school, it's just that I want to do the things I like most.
3. I'm not the student type. School bores me, but it embarrasses me when I say it.

Item 64.
1. The counselor is a nice guy. I like him, and I think he likes me.
2. I wonder what the counselor thinks of me. He'll probably think less of me for saying this.
3. I don't care what he thinks of me. It doesn't matter to me.

Client XI.
Scene 2.
Item 65.
1. I've found some new dimensions. I like to feel that I can have some excitement, but this kind of scares me too.
2. This doesn't really mean much. I'm not feeling much of anything.
3. This makes me feel very guilty; I'm very ashamed.
Item 66.
1. I suppose he'll (counselor) tell me that's wrong, too. I'm not sure he understands me very well.
2. He's O.K.; he's listening to what I have to say. He really understands me and my feelings.
3. I don't care what he thinks or feels; it's not important. I don't have any feelings toward the counselor.