1962

The Relationship of Empathy and Seminary Teachers' Effectiveness

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THE RELATIONSHIP OF EMPATHY AND SEMINARY
TEACHERS’ EFFECTIVENESS

A Thesis
Presented to the
Department of Educational Research and Services
Brigham Young University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Chet W. Harris
July 1962
ACKNOWLEDGMENTS

The writer wishes to express his appreciation to Dr. Clyde A. Parker, Committee Chairman, for time spent in consultation, and for his valuable suggestions and encouragement. Special thanks also go to Dr. Kay N. Smith and Dr. Mark K. Allen for their helpful participation as committee members. Three other men lent their guidance to this project and receive the writer's gratitude: Dr. Drayton B. Nuttall, Mr. Ernest Eberhard, Jr., and Dr. Leslie M. Cooper.

Acknowledgement is also made of the cooperation of the Church of Jesus Christ of Latter-day Saints Department of Education and its participating teachers.

For computational work, typing, and most of all, continual support and encouragement, the writer wishes to thank his wife, Claudia.
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CHAPTER I

INTRODUCTION

Studies concerning the measurement and prediction of teaching effectiveness have sprinkled the contents of educational journals for years, and continue to do so, but the question persists, "What makes a good teacher?" Any of these studies taken singly would aid little in understanding this highly complex process, and yet their cumulative results and conclusions are forming the basis upon which many of the decisions in education are being founded. It is the purpose of this study to investigate another one of these possible relationships to effective teaching.

Norman E. Gronlund (1955, pp. 277-278) points out that although many attempts have been made to isolate the correlates of teaching efficiency, little attention has been given to the accuracy of teacher's perception as a relevant variable. He then suggests what will serve as the theoretical basis for the study reported here. Gronlund postulates that because a teacher's behavior in the classroom is largely guided by how he perceives the needs and behavior of his students, it could be expected that a positive relation between the accuracy of his perceptions and his teaching effectiveness would exist. He cautions, however, that "this relationship would not necessarily be close since social perceptiveness is only a prerequisite to appropriate behavior on the part of the teacher."
What Gronlund refers to above as social perception is elsewhere termed "empathy." Rosalind Dymond (1949, p. 127) has given what has probably become the most popular definition of the term. Empathy is defined as "... the imaginative transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does."

That this "imaginative transposing," or ability to empathize is directly related to a teacher's effectiveness is supported by Gage and Suci (1951). They feel that the accuracy of a teacher's interpersonal perception will be a function of the way in which teachers value pupils and relationships with them.

Miss Smith will tend to become aware of how her pupils feel about various issues to the degree that she is interested in those pupils and in getting along smoothly with them. Similarly, she will probably act upon her awareness of their attitudes in positive ways for the same reasons that motivated her to perceive them accurately. Thus certain patterns of motivation, perception and behavior tend to go together. At one extreme of a continuum, we may have teachers who do not value pupils positively, do not perceive their attitudes accurately, and behave in ways conducive to negative reactions. At the other extreme are teachers who "need" their pupils more, perceive them with greater sensitivity and understanding, and conduct themselves in ways that elicit positive affect from pupils. (Gage & Suci, 1951, p. 145)

Especially would it seem probable that this empathic process would be related to effectiveness in teaching religion, where the emphasis is not so much upon information, but, rather, upon attitude and behavior change within the student's ethical-moral-spiritual world. Here the interpersonal teacher-pupil relationship becomes more crucial. The degree to which a student will identify with the teacher’s attitudes depends upon the student’s perception of the teacher’s feelings toward him. This interaction, as previously theorized, is a response to the teacher's
perception of the student.

**Purpose of Study**

This study was conducted for the primary purpose of discovering whether a test of empathic ability (accuracy of interpersonal perception) would show any significant differences between those seminary teachers who were rated highly effective in religious and character education and those whose effectiveness was questioned. The problem with specific hypotheses and design is presented in Chapter Three.
CHAPTER II

REVIEW OF LITERATURE

The Concept of Empathy

Having always held a prominent place in dramatic theory, the concept of empathy has in the last fifteen years become a popular area of study in psychology. Creative researchers who have succeeded in defining the empathic concept operationally for measurement have no doubt been largely responsible for this recent surge of experimental interest in the area. Among other contributing factors would be a growing knowledge concerning socialization of the personality, the growth of the client-centered approach in counseling, and the student-centered approach in teaching.

Bronfenbrenner and associates (Bronfenbrenner, Harding, & Galloway, 1958) feel that today's emphasis on the empathic concept reflects the convergence of two lines of thought—the concern with social-psychological theories of socialization on the one hand, and, on the other, the general problem of one person's ability to "understand" another. In the socialization group are mentioned Mead, Angell, Freud, and Sullivan. All these theorists give central emphasis to the recognition by the individual of other people's feelings toward him and the eventual incorporation of these attitudes into his own self-image. The second converging stream of thought, according to Bronfenbrenner, is represented by Klages, Lipps, Köhler, and Scheler who all dealt with the phenomenon of social
perception. To describe certain aspects of the processes through which one person becomes aware of the thoughts, feelings, and motives of another, these writers frequently used the term *Einfühlung*, which was translated as empathy.

Similar to Dymond's definition (1949) cited earlier, Christine Olden (1953, p. 111) describes empathy "as a feeling that emerges spontaneously in social contact, that enables the subject instantaneously to sense the objects apparent emotions . . . to trespass the object's screen of defenses behind which the real feelings may hide."

A person doing reading in this area of research will likely become confused by the many different words and terms used to connote this concept. "Empathy" has probably been most popular, but "social perception," "fellow-feeling," "social awareness," "interpersonal perception," "role taking," "social insight," "introjection," and "sociempathy" are also commonly found in the literature. Each writer, perhaps, projects his own nuance with the term he selects, but preserving essentially the meaning stated above, so that although the reader may become confused, he never gets lost. George H. Mead in his book *Mind, Self and Society* (1934, p. 366) uses still another term but retains the original concept.

The attitude that we characterize as that of sympathy springs from this same capacity to take the role of the other person with whom one is socially implicated. Sympathy always implies that one stimulates himself to his assistance and consideration of others by taking to some degree the attitude of the other person whom one is assisting. The common term for this is "putting yourself in his place."

The concept of empathy has been labeled a critical factor in several areas: (1) in personality generally, and more specifically in (2) teaching, (3) group work, (4) counseling, and (5) administration.
Cottrell (1942, p. 374) holds that empathy is the basic process in all social interaction, "The impact of one human organism, A, on the activities of another, B, not only stimulates and conditions a response pattern of A to B, but also conditions in A the response pattern of B to A as A has perceived that action and vice-versa." That the concept of empathic ability has implications for abnormal psychology is suggested by Roy G. Hoskins who is quoted by Dymond (1949, p. 127) as saying:

It throws open the possibility that the primary defect in schizophrenia, a defect from which the remainder of the symptomatology stems—is inadequate empathy.

Perhaps it is fundamentally characteristic as anything about the psychosis is the failure of the subject either to achieve or retain adequate breadth or depth of empathy.

Dymond, herself, (Bronfenbrenner et al., 1953) proposed that the analysis of empathic ability will lead to a better understanding of such diverse questions as how the self emerges and the child becomes socialized, how individual behavior can be predicted more efficiently, and the reason groups become or fail to become integrated. Dymond (1950, p. 344) also states, "This 'faculty' of being able to see things from the other person's point of view, while it does not insure more respect or admiration for the other, does seem to assure more effective communication and understanding."

Bender and Hostorf (1950, p. 556) support the hypothesis that "the ability to judge people" represents an important social talent:

In everyday situations, we depend necessarily on our capacity to perceive and predict the behavior, thoughts, and feelings of the other person. . . . Our socialization is reared on this foundation of perception of persons in terms of prediction. The credit manager forecasts the ability and willingness of the customer to pay his bills. The diplomat forecasts the readiness of his vis-à-vis to accept or reject proposi-
tions. The therapist makes not only a diagnosis but the prognosis of his client. All the subtle interchanges of love and friendship rest, however insecurely, on this tenuous skill in perception and prediction.

The implications of the concept of empathy for teaching have already been discussed in Chapter One. It might be added here that at least two researchers in teacher education (Gordon, 1959; Week, 1957) have sensed these implications so strongly as to attempt to teach "empathy" to teachers in an experimental situation.

If the ability to empathize is deemed important in the teaching relationship, it would seem even more so in the counseling relationship. Bruner (1954, p. 646) explains what he sees as a change of attitude:

If during the period of the '20's and '30's the main emphasis was upon accuracy in judging "personality," the trend today is upon the perception of others. The formation of impressions has become the central concern. What in the previous period were "errors" of judging are now the very phenomena under study.

Carl Rogers (1949, p. 82), speaking on "the attitude and orientation of the counselor" states, "We have come to put increasing stress on the 'client-centeredness' of the relationship because it is more effective the more completely the counselor concentrates upon trying to understand the client as the client sees himself."

Rogers (1951, p. 29) explains further in his book Client-Centered Therapy that the counselor's function is to assume an internal frame of reference of the client:

... to perceive the world as the client sees it, to perceive the client himself as he is seen by himself, to lay aside all perceptions from the external frame of reference, while doing so, and to communicate something of this empathic understanding to the client.
Lest there be misunderstanding, Rogers cautions that this is not in terms of emotional identification on the part of the counselor but rather empathic identification. Dymond (1950, p. 343) adds in this regard, "There is no implication that one would unconsciously like to be the other person in order to empathize with him, nor does empathy necessarily imply any emotional tie with the other."

Although somewhat recent in its development, the concept of empathy has made its imprint in the literature. Writers from many different areas of psychology have pointed out its importance. No less impressive are the number and variety of investigations carried out in the study of empathy.

**Literature on Measurement of Empathic Ability**

In his presidential address before the American Sociological Society in 1950, L. S. Cottrell (Bronfenbrenner et al., 1958, p. 29) reproached his fellow social psychologists for "ignoring almost completely ... one of the most critical problems confronting the behavior scientist—'empathic ability.'" Cottrell suggested that empathic responsiveness was probably essential for the solution of many problems in human relations and for successful performance of various roles called for in our society.

Research in this area has since then proceeded at a rapid rate utilizing varied methods of measurement and producing varying results. The development of an operational definition of empathy has also stimulated investigation. Simply stated, empathy is the capacity to put oneself in another's role as shown by his ability to predict the way the
other person will respond in a given situation. This is obviously based upon a similar rationale as that described by Combs (1957, p. 137): "If each individual behaves in terms of his self-concept, then it should be possible for the outsider, by observing the behavior of the individual, to infer the nature of the self-concept." Parker (1955) points out that such a definition incorporates operationally the elements of the conceptual definition. Usually, the response situation is a personality scale, but a number of other methods have been investigated also.

To begin a look into various methods of study, a simple example could be described. Dymond (1949) gave a test containing six traits with a five point rating scale to a social psychology class consisting of 29 females and 24 males. Prior to the test the class members had been divided into five groups and had met once a week for three weeks. Each member of each group completed the scale for himself (self-concept scale) and for each of the other group members as he felt they would complete it (empathy scale). A deviation score was then computed between each student's empathy scale and the actual self-concept scale of the student for which it was made. High deviation scores thus meant low empathic ability. Dymond (1952) refined the scale slightly for a later study and at that time reported a reliability (odd-even) of .82. Validity was also reported in this study based upon two criteria: judges agreement in 16 of 20 cases, and correlation with an empathic index derived for the Thematic Apperception Test. No correlation coefficient was given, however. Halpern (1957), Hastorf and Bender (1950), and Taft (1955) used similar methods also employing various personality scales.

Davitz (1960) used a similar technique except that an interest
questionnaire was utilized rather than a personality scale. Each member of three selected fraternities answered a questionnaire listing 35 activities with interest indicated along a five point scale, for himself and six other fraternity members. In recent studies conducted by Cline and Richards (1961), six filmed interviews served as the stimulus of interpersonal perception. Heterogeneous groups of subjects viewed these films, and made a variety of judgements about the behavior, attitudes, and feelings of the persons seen in the films.

Gage and Suci (1951) utilized a "mass empathy" concept in designing their study in which 20 high school teachers were asked to predict the percentage of 200 students who would answer "yes" to each of 67 items eliciting opinions on various aspects of the school. The teacher's predictions were then scored in terms of "mean error" from actual percentages.

Still another variation is that used by Meek (1957). He had as his subjects 56 students in an introductory guidance course who each ranked seven traits for themselves and for an interview companion. A rank order correlation was then computed to determine the social perception ability.

A great departure from these similar methods discussed above is that conceived by Robert Dixon (1961). He terms predictive ability, used in the previously stated operational definition of empathy, an "intellectual task" and casts doubt on its relationship to "real" empathy. He states:

The important quality of empathy, as we recognize it in teaching is a highly interpersonal phenomenon with the subject and object bound up in mutual response. The teacher and the pupil develop a positive relationship. (Dixon, 1961, p. 325)
Dixon then suggests that empathy could better be measured by tapping the personal feelings of a student toward his teacher. These feelings, Dixon thinks, are a product of the teacher's ability to empathize with the student. Using this concept of empathy, predictive ability was laid aside and an Assessment Inventory (actually an evaluation of the "warmth" or "coldness" of the teacher-student relationship), completed by the student, was used instead. In his study 97 secondary school student teachers at the University of Michigan were evaluated by their students on the Assessment Inventory, using a five point scale. Then, the score was tabulated, and theoretically, the higher the rating the greater the empathic ability.

Various other techniques (Taft, 1955) have been devised to measure empathy. Prior to the development of predictive tests, perception of emotional expressions in photographs, drawings, models, and movies were experimented with as measures of empathy. The required response ranged from a multiple-choice to a completely free response. The criteria were usually the subject's intention or the judgements of psychologists. Still another method is the use of personality descriptions. The usual procedure here, is to give the judge some data about the subject. He is then required to write a description of the subject's personality. Taft points out that this method suffers from the vagueness of the judge's task and that the criterion lacks precision because it is based upon expert opinions.

All of the methods described up to this point, except Dixon's (1961), test the judge's ability to empathize with the feelings, interests, or attitudes of the subject or group of subjects. There is another
technique which seeks to measure the ability to empathize with a person's social status, not as the subject feels about this status, but, rather as his social status is determined by peer judgement. This has been termed "Sociompathy."

Renato Tagiuri (1960) has pointed out:

> Essentially, like-dislike between members is one of the aspects of interpersonal behavior that are highly relevant to a very broad range of situations. . . . Developmental and dynamic psychology have placed the issue of being and feeling accepted at the center of their theories of personality development. (Tagiuri, 1960, p. 569)

It is probably this realization that has spurred the interest in measuring ability to perceive sociometric status especially in the school situation.

Newstetter and Feldstein along with Moreno (Tagiuri, 1960, pp. 571-572) pioneered this area in the early thirties. Moreno published some observations made on fifth graders in 1931: "The estimates of the teachers as to who were their most desired and least desired pupils from the viewpoint of the children were surprisingly inaccurate." Norman E. Gronlund (1950) is one of the most active current researchers in sociompathy. He administered a sociometric test to the pupils in 40 sixth-grade classes in which each pupil chose the five classmates with whom he would most prefer to work and the five classmates near whom he would most prefer to sit. Each teacher, in the same forty classes, then made judgements concerning the sociometric status of her pupils on the criteria of work companion, play companion, and seating companion. Results showed a considerable range in the accuracy of the teacher's judgements. Correlation coefficients representing the average accuracy of each teacher's
judgements ranged from .268 to .333 with a mean of .595.

Ausubel (1952) was interested in his study, not in the accuracy of the teacher's perception but of the development of sociempathic ability among children. He asked children to rate all of their classmates on a five point scale in terms of acceptability as friends, and to predict how each of their classmates would rate them and be rated by the group on the same basis. Ausubel reported high positive correlation on all grade levels with a tendency for ability to increase with age.

**Literature on Studies Relating Empathic Ability to Teaching**

Studies are rare which attempt to determine the relationship of empathic ability to teaching. A survey of literature uncovered only three studies in this area.

Gage and Suci (1951) hypothesized that accuracy of social perception is positively related to interpersonal relations. They used a mass empathy technique, asking 20 high school teachers to predict the percentage of 200 students who would answer "yes" to each of 67 items eliciting opinions on various aspects of school. The teacher's predictions were then scored in terms of "mean error" from actual percentages. Teachers were also rated by students on a 52 item inventory. The hypothesis was supported. The mean error scores correlated negatively -.37 with the pupil rating.

Gronlund's (1955) sociempathy study, described earlier, was also an attempt to determine the relationship between accuracy of social perception as the degree to which an individual's judgements of the social acceptability of others agree with their actual social acceptability, as
measured by a sociometric test. In this experiment the sociometric test did not deal with the student teacher's pupils, but, rather, with his own classmates in an educational psychology course following student teaching. Teaching effectiveness was determined by the use of supervisor's judgements. The top rated 15% and bottom rated 15% were then used as the contrasting groups. Gronlund's results did not reach the .05 level of confidence. He cited several possible reasons for the insignificant results: (1) social perception is not a general ability (not the same for peers as for students), (2) supervisors may have put the emphasis on the ability to impart subject matter, (3) tools and methods may have been too simple and crude to measure such a complex ability, and finally, (4) that there is no real relationship.

Dixon (1961), who, it will be remembered, did not use any form of a predictive empathy test, achieved somewhat more significant results. Using his Assessment Inventory which measured the student's perception of his teacher's interpersonal attitudes, Dixon found a significant difference at the .01 level of confidence between the top 20% and the lower 20% on the student's rating of teaching ability. In other words, as far as the students were concerned, the student teachers who had "good" empathy were also better teachers. Supervising teachers also saw "good" empathy teachers as being significantly (.01 level) better teachers.

Dixon concluded that better teachers were also better empathizers.

The three studies cited above used different methods and achieved differing results.
Summary

Three principle methods for measuring empathic ability have been reviewed. The most popular is that of "prediction of individual performance." However, "sociempathy" and "mass empathy" have also been used considerably in research. Studies relating empathy to effective teaching have been few and they have varied greatly in methodology. However, some significant relationships have been found between effective teaching and empathic ability.
CHAPTER III

RESEARCH DESIGN

Problem

The Review of Literature has shown that it is a general opinion among psychologists and educators that the ability to empathize is important not only as a factor in personality development but also in teaching effectiveness. The few attempts to find the relationship between teaching and empathy, however, are diverse in their conclusions. No studies have been found which relate empathy to the more specific field of seminary teaching effectiveness.

In view of the lack of empirically derived knowledge in this area, the author felt that an exploratory study would be valuable.

This study was conducted for the primary purpose of discovering whether either or both of two tests of empathic ability would show any significant differences between those seminary teachers who were rated highly effective and those whose effectiveness was questioned.

Hypotheses

The hypotheses, stated in the null form, are: (1) that there is no significant statistical difference between seminary teachers whom the department considers as very effective (high-rated) and seminary teachers whose teaching effectiveness is questioned by the department (low-rated) in their ability to empathize with the self concept of their students,
and (2) that there is no significant difference between seminary teachers who are high-rated and seminary teachers who are low-rated in their ability to sociempathize (perceive student's social status among peers).

There were two additional questions explored: (1) Do teachers empathize better with male or female students? (2) Is there a relationship between teaching effectiveness and the teacher's ability to empathize with the "generalized" or typical seminary student?

**Definition of Terms**

**Empathy**

Empathy is "... the imaginative transposing of oneself into the thinking, feeling, and acting of another and so structuring the world as he does" (Lymond, 1949, p. 127). For the purpose of this study, empathy will be operationally defined as the ability to predict the student's response to a self-concept scale.

**Sociempathy**

Sociempathy is the ability to sense the social status of another person. Operationally defined for this study it is the ability to predict the social status rank of a student as determined by his classmates on a sociometric questionnaire.

**High and Low-Rated Seminary Teachers**

High and low-rated seminary teachers are determined by the merit rating system used by the Department of Education of the Church of Jesus Christ of Latter-day Saints. In order that this variable may be correctly interpreted the following is quoted from the *Manual of Instructions for Released-Time Seminaries* (1959, pp. 30-31):
It is the feeling of the Department of Education that ability, service, and achievement in the classroom should be rewarded. Further, it is felt that there should be an incentive to increase individual effectiveness and efficiency. For these reasons there has been instituted an evaluation or merit rating program where teachers will receive salary increments according to their rating.

Teachers are rated each year by supervisors, coordinators, their Stake or District Boards of Education, and the Vice Administrator of the Department of Education. The final rating is determined by the results of these various appraisals which are arrived at through personal contacts, correspondence received, reports from supervisors and coordinators, and the use of various rating forms.

Subjects

The study compares a group of 10 male, high-rated teachers with a group of 10 low-rated male teachers (judges). At the time of the study all were full-time employees in released-time seminaries of the Church of Jesus Christ of Latter-day Saints in various communities of northern Utah. The Department of Education of the Church of Jesus Christ of Latter-day Saints selected the teachers for the study according to its merit rating system. All those of the high-rated group had received an evaluation of "A" while those who compose the low-rated group had been evaluated as "C" teachers. Furthermore, selection was made geographically. No teachers employed in the immediate area of Brigham Young University were asked to take part because it was felt that their students had already been used too much in the Department's research. Therefore, it was decided to select teachers randomly from districts just outside the University area.

As would be suspected the high-rated group tended to be older and more experienced in teaching. The mean age of the high-rated group was
43.6 years compared to 36.7 years for the low-rated group. The mean teaching experience of the high-rated group was 13.6 compared to 3.3 for the low-rated group.

Contrary to what might be supposed, Cronlund (Travers, 1955, p. 407) found in his study that the ability to empathize " bore no relation-ship to the age of the teacher, the length of her teaching experience, recency of college training, size of class, or whether the teacher had been with the class for one or two semesters." Taft (1955) found the correlation between interpersonal perception and intelligence to be near zero.

Four boys and four girls, randomly chosen, from a seminary class of high school students, grades 9 through 12, served as secondary subjects (or "targets" for determining empathic accuracy) for each teacher. The classes were chosen on the basis of the investigator's schedule.

**Instruments of Measurement**

The investigator was interested in finding an instrument which could be used in measuring the empathic ability (predictive) of seminary teachers. The stress that has been placed upon the necessity of teachers "knowing" their students led to the decision to use a self-concept scale for this purpose.

Various self-concept scales were investigated (Bills, 1951; Brown- fain, 1952; Grigg, 1960; Lipsit, 1953; Phillips, 1951; & Smith, 1960). The **Tennessee Department of Mental Health Self-Concept Scale** (Lee, 1960) was finally decided upon. It is simple in wording and mechanics and covers those areas with which a seminary teacher should have understanding.
The categories selected for the TDMH Self-Concept Scale range along two different dimensions—one which points up the individual's acceptance of himself by what he says about himself, and one which describes the individual according to various frames of reference in which he perceives himself.

The categories of the second dimension are:

(1) Physical characteristics, appearance, state of health, sexuality, etc.
(2) Moral and ethical characteristics or the value system.
(3) Psychological traits and characteristics.
(4) Primary group membership or the self as perceived in relation to one's family and close friends.
(5) Secondary group membership, the social self, or the self as perceived in relation to other people in general. (Lee, 1960, p. 15)

Since it would be necessary for a teacher to fill out a self-concept scale for several students to get a reliable sample of his empathic ability, it was necessary to shorten the 100 item scale. This was felt necessary in order that the judges would retain a tolerance for the task. Thirty items were selected arbitrarily to be used. They were chosen on the basis of clarity and simplicity, and also according to their appropriateness to the situation—those items with which teachers should have an understanding.

A copy of the abbreviated scale used in this study may be found in the Appendix.

This scale, which served as a self-concept scale for the student, was utilized as a test of empathic ability for the teacher. The teacher was given an exact copy of the scale with the student's name printed at the top. He was instructed to fill out this scale as if he were that
Validity and reliability coefficients for the full Tennessee Department of Mental Health Self-Concept Scale would not be applicable for this study since the complete scale was not used. Also, the ultimate object of measurement in this investigation is not the self-concept, but, rather, the judge's ability to empathize.

A reliability coefficient for the empathy test was computed, however. A Pearson correlation for odd-even reliability yielded a coefficient of .52. Use of the Spearman-Brown formula for correction brought the reliability up to .69.

Little information is available for the comparison of this test with others. Taft (1955) does report that he obtained a test-retest reliability coefficient of .32 for a 30 item prediction test, but this contrasted with a split-half reliability of only .20. Correlations between single items tended to be even lower than .20, a further indication of the low reliability on any one item. Then Taft (1955, p. 4) states, "We thus see the necessity for tests of this nature to include a large number of items in order to assure reliability."

The second instrument used in this study was a sociometric questionnaire. Simple in nature, it was designed to measure the social status of each class member. Two requests were made of the student: (1) "Name five persons in this class with whom you would most like to participate in a small informal discussion group." (2) "Name five persons in this class with whom you would least like to participate in a small informal discussion group."

In order to determine the social status of each student a +1 was
given for each time his name appeared in answer to the first statement and a -1 was scored for each time his name appeared in answer to the second request. The students were then ranked according to their score to determine social status in the class.

The counterpart to this instrument was simply a request of the teacher that he rank the students as he felt the class would according to the two questions mentioned above.

Testing Procedure

The teacher in each class introduced the investigator. After a few words of greeting were exchanged the investigator said, "This is one of 20 seminary classes that has been selected to take part in a research project. We want to know exactly how seminary students feel about themselves. You will enjoy completing this Student Information Form because it is all about you and your feelings. We would like for you to be thoughtful, careful, and sincere in completing this form I will give you. Your name is necessary only for initial identification. No one who knows you will see it after it is completed."

After each student had received his form, the investigator read the instructions for both parts to the class. They were encouraged to interpret the words and questions as they understood them, rather than asking for detailed explanations regarding them. It appeared that they went at the task with interest.

The names of eight students (four boys and four girls) were chosen randomly from the class role of each teacher and he was given a scale for each of them on which he was to put down the response for each item
as he felt the student would.

**Statistical Analysis**

Reports of previous studies measuring interpersonal perception display a variety of methods for analyzing the data statistically. Early studies in this field (Dyson, 1949; 1950) used a simple "deviation score," arrived at by merely finding the difference on each item between the judge's prediction and the subject's actual response and adding them up. The accuracy score is thus equal to the sum of all the errors made by the judge.

Bronfenbrenner, Harding, and Gallwey (1958) were among many (Campbell, 1955; Cronbach, 1955; Crow & Hammond, 1957; Gage, 1953; Hastorf & Bender, 1950; Lindgren & Robinson, 1953; Hurstein, 1957; & Sechrest, 1961) who saw that the simple statistical analysis suggested by Dyson would show a spurious relation resulting from a chance similarity between the judges' predictions and the criterion against which they were being validated. Hastorf and Bender (1950) showed that the best judges or empathizers were also more similar to the group being judged. They concluded that the "superior" judges were merely projecting.

Gage (1952) showed that another artifact of Dyson's statistical analysis was "stereotype accuracy." He first asked judges to predict the responses of subjects whom they had not seen on a questionnaire. All that the judges knew of the subjects was that they were college students. Following this Gage secured a new set of predictions following a period of direct observation. Paradoxically, his judges did somewhat more poorly the second time. The point here is that the conventional analysis
used by Dymond measures not only interpersonal sensitivity but also sen-
sitivity to the generalized other. In Cage's study interpersonal sensi-
tivity after a brief observation actually interfered with the more accu-
rate stereotype accuracy.

Victor Cline and James Richards (1960), two of the more active
researchers in this area, recently have found what they feel is a statis-
tical analysis which can measure accuracy of interpersonal perception.
It was this method of statistical analysis which the investigator chose
to use in this study in testing the first hypothesis.

An example of one of their studies (Cline & Richards, 1961) at
the University of Utah will serve to illustrate their method and give
evidence of its validity. The 209 subjects or judges were divided into
three groups and asked to rate six-standard stimulus persons on a Values-
Beliefs Inventory which consists of 12 items, each with a 5 point scale.
The groups varied in the amount of information known about the six peo-
ple. The first group was shown sound-color movies of spontaneous inter-
views with them. The second group made their judgements on the basis of
knowing only age, sex, marital status, and number of children of the stim-
ulus persons. The third group did not actually judge the six persons but,
rather, filled out the inventory as they thought a typical American male
would, and as a typical American female would.

Using the Cline-Richards system of statistical analysis of empa-
thic ability (1961), the major score to be derived is the Interpersonal
Accuracy correlation term. This term measures the accuracy with which
differences between stimulus persons on individual characteristics are
judged. It is computed by determining the correlation between each judge's
predicted values and the corresponding actual responses by "others" on individual items and then averaging across items. This correlation term is expressed in terms of Fisher's z.

In the study referred to above (Cline & Richards, 1961), it was found that the Interpersonal Accuracy z score for the judges who actually saw the films were significantly superior to the two groups who made their judgements on the basis of stereotypes. These results indicate that differentiation among persons increases as the amount of information provided about them increases. Also it shows that the judges could not make accurate judgements about individual differences on the basis of stereotypes. These results appear, therefore, to provide evidence for the validity of the statistical analysis used by Cline and Richards, and to satisfy previous criticisms made against interpretation of scores of empathic ability.

Cline and Richards have also developed what they call the Stereotype Accuracy correlation term. Actually a modification of a method developed by Cronbach (1955), this component is a measure of the degree to which each judge predicts how the group of stimulus persons as a whole responds to the judging instrument. It involves the degree to which the means of items (averaged across stimulus persons) predicted by each judge corresponds to actual item means. In this measure the correlation coefficient is also transformed to the Fisher z. It is a measure of how accurately the judge predicts the responses of the typical "other" or people in general.

It should be added that Cline and Richards used two other component scores in their studies of interpersonal perception. The first is called
an Interpersonal Accuracy variance term and involves the computation of
the variance of each judge's predictions on individual items, averaged
across items. The second was termed Stereotype Accuracy variance and is
a computation of the variance of each judge's predicted means. These mea-
sures, according to Cline and Richards (1960), permit an independent eval-
uation of variability. For the purposes of this study it was not felt a
computation of these components would be necessary and they, therefore,
were not included in the statistical analysis.

In testing the first hypothesis of the present study, the Inter-
personal Accuracy z score was obtained for each group of 10 teachers
(judges) on each item and averaged across items of the Self-Concept
Scale. This resulted in two z scores which were tested for significance
of difference.

In order to find if either high-rated teachers or low-rated
teachers empathize significantly better with one sex than they do the
other, a similar technique was used. Interpersonal Accuracy z scores
were obtained for each group of teachers from the correlation of their
judgements and actual male responses and from their judgements and actual
female responses. Again these z scores were averaged across items re-
sulting in two scores for high-rated teachers and two scores for low-rated
teachers. Two tests for significance of difference were then made.

The second exploratory question inquires as to the relationship
between teaching effectiveness and the teacher's ability to empathize with
the "generalized" or typical Seminary student. Here Cline and Richard's
Stereotype Accuracy correlation term was employed. In each group the
means of the teachers were found for each item and student means were
found for each item. Correlations between these means were computed for each group of teachers, transformed to Fisher z scores, and tested for significance of difference.

The Cline and Richard's method was not applicable for testing the second hypothesis which had to do with sociopathy. Here a rank order correlation was computed between each teacher's judgement of social status and the actual social status of his eight students. These correlations were then transformed to Fisher z scores and an average was obtained for each group. These two scores were then tested for significance of difference.

For the purposes of this study the 5% level of confidence was selected as that required for significance.
CHAPTER IV

FINDINGS AND DISCUSSION

The two hypotheses involved in this study are:

(1) that there is no significant statistical difference between seminary teachers whom the department considers as very effective (high-rated) and seminary teachers whose teaching effectiveness is questioned by the department (low-rated) in their ability to empathize with the self concept of their students,

(2) That there is no significant difference between seminary teachers who are high-rated and seminary teachers who are low-rated in their ability to sociempathize (perceive student's social status among peers).

Two exploratory questions were also investigated:

(1) Do teachers empathize better with male or female students?

(2) Is there a relationship between teaching effectiveness and a teacher's ability to empathize with the "generalized" or typical seminary student?

Except for the second hypothesis, which has to do with sociempathy, statistical findings for all of the above were obtained by employing the previously discussed correlation method as suggested by Cline and Richards (1960). The results are reported in Tables 1 and 2 that follow.
TABLE 1

\(t\) Ratio's for Differences Between Means of High-Rated Teachers and Low-Rated Teachers on Measures of Interpersonal and Stereotype Accuracy Scores on Self-Concept Empathy Test

<table>
<thead>
<tr>
<th>Score</th>
<th>High-Rated Teacher's Mean</th>
<th>Low-Rated Teacher's Mean</th>
<th>(t) Ratio's</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy (z)</td>
<td>.14</td>
<td>.08</td>
<td>.38</td>
<td>(not significant)</td>
</tr>
<tr>
<td>Stereotype</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy (z)</td>
<td>1.7</td>
<td>1.3</td>
<td>.38</td>
<td>(not significant)</td>
</tr>
</tbody>
</table>

TABLE 2

\(t\) Ratio's for Differences Between Means of Interpersonal Accuracy Scores for Male Students and Female Students

<table>
<thead>
<tr>
<th>Score</th>
<th>Female Students</th>
<th>Male Students</th>
<th>(t) Ratio's</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy (z)</td>
<td>.14</td>
<td>.10</td>
<td>.17</td>
<td>(not significant)</td>
</tr>
<tr>
<td>High-Rated Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy (z)</td>
<td>.08</td>
<td>.07</td>
<td>.04</td>
<td>(not significant)</td>
</tr>
<tr>
<td>Low-Rated Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results recorded in Table 1 indicate that the first null hypothesis cannot be rejected. It may be noted, however, that the difference between the mean Interpersonal Accuracy \(z\) scores is in the predicted
direction, although not significant.

Table 1 also indicated the answer to the second exploratory question which inquires if there is a relationship between effective teaching and Stereotype Accuracy. According to the results of this study it would have to be concluded that there is no relationship.

The other exploratory question may be investigated in Table 2. Although both groups tended to empathize better with the girls, neither difference between the mean Interpersonal Accuracy z scores was significant.

The summary of the statistical analysis for the second hypothesis is shown in Table 3.

TABLE 3

<table>
<thead>
<tr>
<th>t Ratio for Difference Between Means of Scores for High-Rated and Low-Rated Teachers on Sociempathy Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Rated Teacher's Mean z</td>
</tr>
<tr>
<td>.57</td>
</tr>
</tbody>
</table>

In testing the second hypothesis no significant difference was found, thus making it necessary in this study to accept the null hypothesis. Although not significant, somewhat surprising was the direction of the means—tending to show a superiority in sociempathy for the low-rated teachers.
Discussion

The results obtained in this study do not support the proposition that there is a positive relationship between effective seminary teaching and the ability to empathize and sociempathize with students. Although the author has found no similar studies in the literature testing the first hypothesis, the results obtained here appear contrary to current psychological theory that empathy is an important factor in human relations, which in turn, is important in effective teaching.

However, the scope and depth of this study are not such that the findings contained in it offer any serious challenge to accepted theory. But two suggestions do seem to be implied by these results. First, that a similar study be conducted, and second, that an inspection be made of the statistical analysis used here. Suggestions for further research will be made later. But as for the statistical analysis, a brief inspection reveals that certain factors combined to make the correlations spuriously low and thus possibly invalidate to some extent the z scores used here to measure accuracy of interpersonal perception.

A comparison between Interpersonal Accuracy z's obtained in this study and those typically obtained in studies by Cline and Richards show theirs to be much higher. For instance in one study (Cline & Richards, 1961) 95 college students achieved a mean Interpersonal Accuracy z of .34. This compares to a mean score for high-rated seminary teachers in this study of .14. Even though the subjects were drawn from different populations and the experimental method varied, the large difference appears too great not to have been influenced by some other variable. That vari-
able apparently is the instrument itself and the way it was used. The data sheet from the IBM 650 Computer shows that even though a teacher would appear to have judged a student's self concept very accurately according to the raw data on a particular item, the correlation coefficient would be spuriously low because there was little deviation of response. Without this variance in the use of the scale the Pearson correlation becomes artificially small.

If the above suspicion is true, it may be that the difference between the Interpersonal Accuracy z means of the high-rated teachers and the low-rated teachers would have grown as the correlation coefficients grew with a greater latitude in the use of the scale. This may mean either that the teachers (and/or students) hesitated to use the breadth of the scale or that the scale itself failed to contain items which allowed discrimination.

Evidence for this observation is obtained from the Stereotype Accuracy z scores. If there was little use made of the scale range, it would appear that the Stereotype Accuracy z's, which are based on correlations of item means, would be higher than those typically obtained in other studies. This is pointed out by a comparison of this study's sample with the one cited above (Cline & Richards, 1961). Whereas their group of college student judges achieved a mean Stereotype Accuracy z of only 1.02, the high-rated teachers used here averaged 1.7.

The discussion turns now to the second hypothesis which has to do with the relationship of sociopathy and effective teaching. The acceptance of the null hypothesis here corresponds with a similar study done by Gronlund (1955). He also grouped teachers according to rated
effectiveness and asked them to judge sociometric status. Cronlund's test for significance of difference failed to reach the .05 level of confidence, also.

In interpreting the meaning of the insignificant results of this study, one explanation has been presented. Another possible contributing reason may be that coordinators who are largely responsible for making the teacher ratings may have put the emphasis on the ability to impart subject matter, or seeming attention and silence in the classroom. Indeed, it may be that those responsible for the evaluations never had an opportunity to evaluate interpersonal student-teacher relations. Still another alternative is that there is no real relationship, or that empathic ability is just one of many variables of teaching effectiveness and, therefore, insignificantly related.
CHAPTER V

SUMMARY AND CONCLUSIONS

This study was conducted for the primary purpose of discovering the relationship of two personal variables to effective seminary teaching. The personal variables used were empathic ability as measured by accuracy of interpersonal perception on a self-concept scale, and sociempathic ability, as measured by the degree to which an individual's judgements of the social acceptability of others agree with their actual social acceptability, as measured by sociometric questions.

It was hypothesized that: (1) there is no significant statistical difference between seminary teachers whom the department considers as very effective (high-rated) and seminary teachers whose teaching effectiveness is questioned by the department (low-rated) in their ability to empathize with the self concept of their students, (2) there is no significant difference between seminary teachers who are high-rated and seminary teachers who are low-rated in their ability to sociempathize (perceive student's social status among peers.)

A 30 item self-concept scale was administered to the classes of 20 seminary teachers, 10 high-rated and 10 low-rated. Each class was also asked to answer two sociometric question. From the students of each class who completed this task, the names of four boys and four girls were chosen. Each teacher was then asked to complete a blank self-concept scale for each student as he thought the student would. The teachers
were also asked to rank the eight students as they thought the class had ranked them in answer to the two sociometric questions.

Two scores were derived from the data to test the two hypotheses. The first was an Interpersonal Accuracy Pearson correlation term (Cline & Richards, 1960) expressed as a Fisher z. A mean score was obtained for each group and tested for significance of difference. Likewise a rank order correlation was computed between each teacher's judged social ranking of students and their actual social status as determined by class responses to the sociometric questions. These correlation coefficients were also expressed in terms of Fisher z. A mean score for each group was obtained and a test for significance of difference was then computed.

The 5% level of confidence was established as the necessary level of confidence for this study. Neither null hypothesis was rejected. That is, there was no significant difference between high-rated teachers and low-rated teachers in either ability to empathize with student's self concepts or to sociempathize with the students' social status within the class.

Two additional questions were explored: (1) Do teachers empathize better with male or female students? (2) Is there a relationship between teaching effectiveness and a teacher's ability to empathize with the "generalized" or typical seminary student?

In both of these instances, also, no significant differences were found.

In regard to the two hypotheses, it was concluded from the data used in this study that:

(1) There was no difference between the high-rated seminary teach-
ers and the low-rated teachers in their ability to empathize with their
student's self-concept.

(2) There was no difference between the high-rated seminary
teachers and the low-rated teachers in their ability to sociempathize
with the social status of their students as determined by their peer group
(class).

Possible reasons for the conflict of the results of this inves-
tigation and the relationship which would be suspected to exist according
to psychological theory, were proposed. The results pertaining to soci-
empathy and teaching effectiveness were discussed relative to similar re-
sults obtained by a previous investigator.

Suggestions for Further Research

As a result of the experience and insights obtained in conduc-
ting this study, the researcher would make the following suggestions for
future research in this area:

(1) Similar studies of the relationship between empathy and ef-
fective seminary teaching could be conducted using a larger sample.

(2) A filmed-interview technique, similar to that employed by
Cline and Richards (1960) could be employed using seminary students who
have been found to differ widely in personality and self concept as the
stimulus persons.

(3) An item-analysis could be computed on the judging instrument
prior to its actual use in a study of empathy in order to insure that the
items will "encourage" discrimination.
APPENDICES

AND

BIBLIOGRAPHY
APPENDIX A

Name_________________________ School_________ Period_______

Seminary Course________________

Age_________

Sex_________

STUDENT INFORMATION FORM

In the interest of finding information which will be of help in understanding seminary students, you are being asked to complete this Student Information Form. There are no right and wrong answers. Each part is important and your decisions and choices on each should be made thoughtfully and carefully. The value of this whole study depends on how accurately you do this. A response should be made to every item. The information put here will not be seen by teacher or students. Your name is necessary only for initial identification. No names will be used in the study.
PART I

SELF-CONCEPT SCALE

Instructions: These statements are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the following responses; and next record the number that represents that particular answer in the blank space at the end of the statement.

<table>
<thead>
<tr>
<th>Response:</th>
<th>Completely True</th>
<th>Mostly True</th>
<th>Partly True And Partly False</th>
<th>Mostly False</th>
<th>Completely False</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number:</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Remember you are not trying to describe yourself as others see you but only as you see yourself.

____1. I don't feel as well as I should.
____2. I do poorly in sports and games.
____3. I am satisfied with my moral behavior.
____4. I wish I could be more trustworthy.
____5. I am true to my religion in my everyday life.
____6. I am a cheerful person.
____7. I can always take care of myself in any situation.
____8. I am a friendly person.
____9. I am mad at the whole world.
____10. I do not feel at ease with other people.
____11. I consider myself a sloppy person.
Caution: Make sure you are using the number scale correctly.

Response: Complete ly True Mostly True Partly True And Partial ly False Mostly False Completely False

Number: 5 4 3 2 1

12. I am a religious person.
13. I have a lot of self-control.
15. I am as smart as I want to be.
16. I despise myself.
17. I do things without thinking about them first.
18. I am an important person to my friends and family.
19. My friends have no confidence in me.
20. I am popular with girls.
21. I am satisfied with the way I treat other people.
22. I am an attractive person.
23. I like my looks just the way they are.
24. I try to be careful about my appearance.
25. I am hard to be friendly with.
26. I am satisfied with my relationship to God.
27. I have trouble doing the things that are right.
28. I am a calm and easy going person.
29. I am popular with boys.
30. I find it hard to talk with strangers.
PART II

SOCIOGRAPHIC QUESTIONS

The purpose of the following two questions is to find out how this classroom would be divided if the students were allowed to choose their own companions for small, informal discussion groups. Make sure you write five names of students in this class (including those who are absent if desired) for each question. Give both first and last names, spelling them the best you can. Your choices will not be seen by anyone else.

1. Name five persons in this class with whom you would most like to participate in a small informal discussion group.

2. Name five persons in this class with whom you would least like to participate in a small informal discussion group.
APPENDIX B

Teacher's Name________________________

<table>
<thead>
<tr>
<th>Age</th>
<th>Years of Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bachelor's Degree____

<table>
<thead>
<tr>
<th>Major:</th>
<th>Master's Degree____</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Major:</td>
</tr>
<tr>
<td></td>
<td>Minor:</td>
</tr>
</tbody>
</table>

Approximately how many hours do you spend in individual counseling with students per month?____

EMPATHY TEST

PART I

Included with this form are eight self-concept scales. On them you will find the names of eight of your students. Please fill out each one as though you were that student. Try to answer each item as you feel he would—not as you judge him to be. Your first impression will usually be your best one. Read the instructions and make sure you are using the number scale correctly. Your name is necessary only for initial identification. No names will be used in the study. Teachers have found this an interesting and enlightening task. Your cooperation is greatly appreciated. If you desire a résumé of the results of the study, check here: □
PART II

SOCIEMPATHY TEST

Please rank the following eight students as you feel the class would rank them in response to the following question: "Name five persons in this class with whom you would most like to participate in a small informal discussion group." Place a "1" by the name of the student you feel would get the most nominations (the highest rating); then place an "8" by the name of the student who would get the lowest rating; a "2" by the name of the student whom you feel would get the second highest rating; etc.

__________________________  __

__________________________  __

__________________________  __

__________________________  __

__________________________  __

__________________________  __

__________________________  __

__________________________  __
### APPENDIX C

**TABLE 4**

Means and Interpersonal Accuracy z Scores for Low-Rated Teachers on Self-Concept Empathy Test Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Teacher's Mean</th>
<th>Student's Mean</th>
<th>Combined z</th>
<th>Boy's z</th>
<th>Girl's z</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.28</td>
<td>2.44</td>
<td>.047</td>
<td>.071</td>
<td>.090</td>
</tr>
<tr>
<td>2</td>
<td>2.30</td>
<td>2.04</td>
<td>.130</td>
<td>-.057</td>
<td>.418</td>
</tr>
<tr>
<td>3</td>
<td>3.73</td>
<td>3.69</td>
<td>.103</td>
<td>.141</td>
<td>.090</td>
</tr>
<tr>
<td>4</td>
<td>2.63</td>
<td>2.60</td>
<td>.146</td>
<td>.262</td>
<td>.009</td>
</tr>
<tr>
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<td>3.70</td>
<td>3.61</td>
<td>.273</td>
<td>.539</td>
<td>.134</td>
</tr>
<tr>
<td>6</td>
<td>3.68</td>
<td>3.96</td>
<td>-.049</td>
<td>-.125</td>
<td>.021</td>
</tr>
<tr>
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<td>3.64</td>
<td>3.81</td>
<td>.048</td>
<td>.088</td>
<td>.061</td>
</tr>
<tr>
<td>8</td>
<td>3.99</td>
<td>4.03</td>
<td>.032</td>
<td>.083</td>
<td>.000</td>
</tr>
<tr>
<td>9</td>
<td>1.58</td>
<td>1.31</td>
<td>.229</td>
<td>.514</td>
<td>.007</td>
</tr>
<tr>
<td>10</td>
<td>2.81</td>
<td>2.33</td>
<td>.015</td>
<td>.113</td>
<td>-.054</td>
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<td>11</td>
<td>1.84</td>
<td>1.74</td>
<td>.039</td>
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<td>.084</td>
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<td>12</td>
<td>3.85</td>
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TABLE 5

Means and Interpersonal Accuracy z Scores for High-Rated Teachers on Self-Concept Empathy Test Items

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TABLE 6

Rank Order Correlations and Fisher z Transformations for Low-Rated Teachers on Sociopathy Test

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TABLE 7

Rank Order Correlations and Fisher z Transformations for High-Rated Teachers on Sociopathy Test

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BIBLIOGRAPHY


THE RELATIONSHIP OF EMPATHY AND SEMINARY TEACHERS' EFFECTIVENESS

Abstract of a Thesis
Presented to the
Department of Educational Research and Services
Brigham Young University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Chet W. Harris

July 1962
ABSTRACT

This study was conducted for the primary purpose of discovering the relationship of two personal variables to effective seminary teaching.

It was hypothesized that:

1. there is no significant statistical difference between seminary teachers whom the department considers as very effective (high-rated) and seminary teachers whose teaching effectiveness is questioned by the department (low-rated) in their ability to empathize with the self concept of their students,

2. there is no significant difference between seminary teachers who are high-rated and seminary teachers who are low-rated in their ability to sociompathize (perceive student's social status among peers).

A 30 item self-concept scale was administered to the classes of 20 seminary teachers, 10 high-rated and 10 low-rated. Each class was also asked to answer two sociometric questions. From the students of each class who completed this task, the names of four boys and four girls were chosen. Each teacher was then asked to complete a blank self-concept scale for each student as he thought the student would. The teachers were also asked to rank the eight students as they thought the class had ranked them in answer to the two sociometric questions.

Two scores were derived from the data to test the two hypotheses. The first was an Interpersonal Accuracy Pearson correlation term expressed as a Fisher z. A mean score was obtained for each group and tested for significance of difference. Likewise a rank order correlation was computed between each teacher's judged social ranking of students and their actual social status as determined by class responses to the sociometric questions. These correlation coefficients were also expressed in terms of Fisher z. A mean score for each group was obtained and a test for significance of difference was then computed.
The 5% level of confidence was established as the necessary level of confidence for this study. Neither null hypothesis was rejected.

Two additional questions were explored:

(1) Do teachers empathize better with male or female students?
(2) Is there a relationship between teaching effectiveness and a teacher's ability to empathize with the "generalized" or typical seminary student?

In both of these instances, also, no significant differences were found.

In regard to the two hypotheses, it was concluded from the data used in this study that:

(1) There is no difference between the high-rated seminary teachers and the low-rated teachers in their ability to empathize with their student's self concept.

(2) There was no difference between the high-rated seminary teachers and the low-rated teachers in their ability to sociompathize with the social status of their students as determined by their peer group (class).

Possible reasons for the conflict of the results of this investigation and the relationship which would be suspected to exist according to psychological theory, were proposed. The results pertaining to sociompathy and teaching effectiveness were discussed relative to similar results obtained by a previous investigator.

[Signatures]

Chairman, Advisory Committee

Member, Advisory Committee