

A STUDY OF THE DISTINGUISHING PERSONALITY
CHARACTERISTICS OF COLLEGE FACULTY
WHO ARE SUPERIOR IN REGARD TO
THE TEACHING FUNCTION

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PREFACE

Professional activities, such as those activities associated with teaching, the ministry, law and medicine, tend to be self-chosen. The professional man is more or less "in love" with his work and usually desires to be as proficient at it as possible. One of the ways in which this desire for professional improvement is most evident is in research projects aimed at discovering more precise knowledge about professional activities and personnel qualifications.

This dissertation is the culmination of a "labor of love," so to speak, and, although many stressful hours have been involved in its production, it has been a pleasure as well as intellectually stimulating and educationally profitable. I chose to study college teachers for two reasons. First of all, being a college teacher myself, I am naturally interested in the personal characteristics of people who seem to be successfully pursuing their teaching career. Secondly, my interest led me to the discovery that there is very little authoritative knowledge about the personal characteristics of college teachers. Thus, I entered upon

this project in hopes that I might truly make a contribution to the literature concerning the profession of college teaching.

I wish to acknowledge the inestimable aid of my colleagues who so selflessly volunteered themselves as subjects for the study. Though one frequently hears of the reluctance of college professors to be "studied," I found that the professors at Phillips University did not conform to that notion. I also want to acknowledge the special assistance rendered by one of my close associates, Professor Edward Jordan, Chairman of the Department of Psychology at Phillips, who helped me in numerous ways, but especially with his statistical knowledge and frequent words of encouragement.

My sincere thanks are extended to the members of my committee, Dr. J. E. Susky, Dr. K. E. Wiggins, Dr. B. A. Kinsey, and, though he left the faculty before the conclusion of the study, Dr. E. E. Vineyard. The committee chairman and my major professor, Dr. W. Price Ewens, has been more helpful and considerate than can be described adequately. Many times he has done more than was incumbent upon him to do and I wish to extend to him my most sincere appreciation for his kindness.

Finally, I wish to acknowledge the ever-present,

and always well-intentioned, urging from my wife whose confidence in me never seemed to wane. Also, to my parents, Mr. and Mrs. Howard Sorey, without whose encouragement and assistance my entire doctoral program would not have been possible.

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CHAPTER I

INTRODUCTION

The quality of teaching is a problem of increasing concern in higher education today. Several authors of considerable note in higher education indicate in various articles and books that a superior quality of teaching is scarce in institutions all across the nation (Brumbaugh, 1956, Tead, 1949, Richards, 1950), and Marks and Dillon, 1963). Although administrators are, as in the past, concerned with curriculum, research and publication, and community service, the teaching function seems to be the focus of attention in recent times.

Since teaching rather than research or publication has long been the emphasized function of the public school faculty member, there is a sizeable body of literature reporting research on that level of teaching and teachers. However, it is not the purpose of this paper to deal with teaching at the public school level and thus it would serve little purpose to delve into that literature except, perhaps, as it is pertinent to some aspect of college teaching.

The picture, in terms of literature at the college level, is quite different from the public school level. Even though concern about the quality of teaching in college is increasing, the literature on college teaching and college teachers, at least that literature which reports research efforts, is regrettably small in comparison with that at the public school level. N. L. Gage's (1963) monumental survey of the literature on research on teaching covers over 1200 pages and the section dealing with research at the college level covers only 55 of those 1200 pages.

The smallness of the body of college literature may not seem so great when one reviews the bibliographies of Walter Crosby Eels (1957a, 1959, 1962), but the majority of these publications are of a speculative or expository type and thus the research of a controlled or experimental nature remains extremely small. Robert H. Knapp, in an article in The American College (Sanford, 1962, pp. 290-311), says:

It is plain that despite the sophistication and skills that have been developed in the social sciences for the evaluation of qualities and characteristics associated with different callings, that of the college professor, his image for different groups, the characteristics sought and esteemed, the qualities associated with superior performance --- all of these have been woefully neglected in educational research.

While a number of studies have been oriented toward the investigation of various methods of teaching or the

value of certain mechanical innovations such as teaching machines, closed-circuit television, etc., a more important area for study, in the opinion of the author, is the teacher himself. It would be ridiculous to imply that these other variables in the teaching situation are not worthy of investigation and that implication is certainly not intended, but the present writer is not alone in emphasizing the importance of the teacher as an object for research in the teaching situation. Woodburne (1958), p. 99) notes that, "We do not know, even in the crudest way, what the critical differences are between our best and our worst teachers." In a review of research on teaching methods at the college level, McKeachie (1963, p. 1162) notes that, ". . . it seems very likely that the effectiveness of a method depends upon the competence and enthusiasm of the teacher."

To be more specific, the personal qualities of the teacher appear to be a significant variable for research. Getzels and Jackson (1963, p. 506) indicate that the personality of the teacher is, perhaps, the most significant variable in the classroom. They say, "The educational impact of an Ichabod Crane or a Mark Hopkins, or a Mr. Chips or a Socrates, is surely not due solely to what he knows or even to what he does, but in a very real sense to what

he is." In a survey of all Ph.D. graduates from Peabody College since 1919, Hedges (1962) had them respond to the question, "What were the major attributes of the professor who exerted the most positive influence on you in college?" An analysis of the replies suggested that the respondents were more influenced by personal-social factors than by any specific teaching techniques.

It appears, then, that a significant area of research might center around the personality characteristics of the teacher. Because of the concern with improving the quality of college teaching, any relevant research, to be useful, must necessarily be related to this dimension of quality. In other words, it is necessary to determine, as nearly as possible, precisely what personality characteristics are associated with high-quality teaching and what characteristics are associated with poor-quality teaching, in order for the results to have utilitarian value. The present study is an attempt to do precisely this.

CHAPTER II

REVIEW OF LITERATURE

Most of the attempts to find the distinguishing personality characteristics of the superior college teacher have resulted either in ambiguous findings or confirmation of common-sense notions. As Guba and Getzels (1955) put it, "The superior teacher is found to have those characteristics which are valued in our culture." In other words, the superior teacher is a superior person in our culture. But it is also a common observation that many people whom others consider superior persons are not teachers as well as many teachers who are not considered superior persons. Thus there is a question as to why, among superior persons, some become teachers and some do not. There is at least a partial answer to the obverse of the previous question, persons who are not superior become teachers because of the great demand for college teachers and the small supply. Undoubtedly, those investigations which produce ambiguous results are, to some extent, victims of an artifactual phenomenon, that is, there are good and bad teachers because there are good and bad persons (in terms of culturally

valued personality characteristics), and inability to distinguish between the good and bad teachers is the result of not differentiating teachers from the general population. Although there are a number of studies which do compare their samples of teachers with a random sample of the general population, or with the standardization sample of a particular measuring instrument, the present writer is aware of no such studies on a college population. There are, however, some purely descriptive studies on college teachers' personality characteristics which may be of value in establishing normative data, but these studies do not relate personality to teaching effectiveness. Appleby and Haner's (1956) study employed the MMPI, while Roe (1952) studied college faculty with the Rorschach. Cattell and Drevdahl (1955) studied eminent scientists with the Cattell 16-P-F Test. In summary, these studies show college teachers to be above the norms, that is, possess more of the trait, on such traits as anxiousness, criticalness of others, femininity of interests, restraint-seriousness, friendliness, dependency, and compulsiveness. The college teachers are noticeably less withdrawn than the standardization samples and show less hostility and belligerence.

Fortunately for investigators who are interested

in college teachers and college teaching, there are a number of published bibliographies and review of the literature on the subject. The most extensive of these are the annotated bibliographies compiled by Walter Crosby Eels (1957a, 1959, 1962). While there are over 5000 entries in these bibliographies, slightly less than 250 of them are pertinent to the present study.

A perusal of these articles as well as articles published since 1962, reveals five types of publications concerning characteristics of effective college teachers: (1) biographical accounts of eminent college teachers; (2) compilation of the ideal characteristics of effective college teachers which are the opinions of the given author; (3) systematic surveys of various populations obtaining opinions about desirable or actual characteristics of college teachers; (4) correlational studies which attempt to relate measured characteristics to some criterion of teaching effectiveness; (5) theoretical analyses of the teaching function from which hypotheses are, or can be, drawn concerning characteristics of effective college teachers.

Articles under the first category may provide some clues for empirical investigations, but many of these "eminent" teachers were eminent because of their research

and publications rather than because of their classroom performance. Articles in the second category may be of historical interest, but are virtually worthless in a scientific sense.

One of the earliest studies which sought to obtain ratings on the characteristics of ideal teachers was reported by Clinton (1930). The population sampled was college students and among the eighteen qualities attributed to the ideal college teacher by these students were, "pleasing personality," "humor," and "interest in students." Bousfield (1940), attempted a similar study ten years later and found that the desirable attributes were essentially similar but ranked somewhat differently, in that intellectual and scholarly characteristics were ranked higher than in the Clinton study. A quite different population was sampled by Trabue (1950) when he studied the characteristics of college teachers which are valued by college presidents. In a manner similar to the population in the Clinton study, the presidents valued personal-social skills above intellectual ability and scholarly competency, ranking "encouragement of individual thought," "emotional stability," "friendliness," and "tolerance," highest. While the sample was most adequate (N = 419), it was confined to undergraduate, liberal arts college, presidents.

Stauffer (1957), using an instrument containing 52 descriptive statements of college teacher qualifications, asked 281 liberal arts college deans and 527 liberal arts college teachers to respond to each of the statements as to whether they were of great value, real value, little value, or undesirable. The most important qualifications according to both the deans and the teachers were those relating to performance and effectiveness as a teacher and personal-social characteristics. Beardslee and O'Dowd (1959) obtained ratings from 1178 students in four colleges and found that the students considered the most prominent feature of the college professor to be his great intellectual power. They also attributed a "happy home life" to the professor, but rated him low in "absence of emotional problems," "stability," "sociability," "social popularity," and "attentiveness to people." In another portion of the same series of studies, the investigators obtained self-ratings of professors and found that they rated themselves high on such qualities as "stability," "absence of emotional problems," "caution," and "calmness." The Hedges (1962) study, mentioned earlier, surveyed alumni of Peabody College who had received their Ph.D. from that institution as far back as 1919. Their replies indicated that the teacher, as a person, had been more influential than his teaching

technique. However, there was no attempt to ascertain what specific characteristics of the teacher were deemed important.

One of the more important studies in category four was reported by Isaacson, McKeachie and Milholland (1963) in which they studied graduate teaching fellows in the introductory psychology course at the University of Michigan. The subjects were given an over-all rating by their students, as the criterion of effectiveness, and personality characteristics were measured by a peer-group nomination technique, a self-descriptive adjective check-list, and the IPAT 16-PF questionnaire. Two groups of these teaching fellows were studied over a four-semester period. The only consistently high relationship for both groups was the peer-group nomination factor five --- general cultural attainment. Two other factors on the peer-group nomination which approached significance were Agreeableness and Emotional Stability, and the Enthusiasm factor on the 16-PF questionnaire appeared worthy of mention. Since the study was confined to teachers of a single course, it is impossible to generalize the results to other areas and other courses. Bendig's (1955) study, which was also limited to instructors in introductory psychology courses, investigated ability and personality characteristics of those

teachers rated competent and emphatic by their students. The Guilford-Zimmerman Temperament Survey was administered to 16 instructors in introductory psychology and their students rated them on the Purdue Rating Scale for Instruction. None of the Guilford trait scores were significantly related to either the competence or the empathy scales on the Purdue Rating Scale for Instruction.

Lewis (1964) administered the Guilford-Zimmerman Temperament Survey and a 100-item biographical inventory to a sample of students and then asked them to choose, from a list of teachers in their major department, the teachers who contributed most to their educational experience. Then the instructors were given the Guilford-Zimmerman Temperament Survey and the biographical inventory and an attempt was made to: (1) distinguish between the most chosen and least chosen teachers on the Guilford-Zimmerman, and (2) assess the influence of personality factors on student-teacher interaction. No significant differences were found on the Guilford-Zimmerman between the preferred and non-preferred teachers and no consistent patterns of student-teacher personality factors were found which correlated with teacher preference.

Cattell and Drevdahl (1955) studied 291 eminent scientists from the fields of biology, physics and

psychology. These subjects were nominated by colleagues as the most productive, creative men in their respective fields. The investigators subdivided the subjects in each field into teaching-scientists, research-scientists and administrative-scientists. The Cattell 16-PF Test was administered to the entire sample and comparisons were made between the various groups. The teaching-scientists, when compared with the research-scientists, were found to be significantly higher on Factor A which Cattell describes as identical to Factors O (Objectivity), F (Friendliness-Agreeableness), and P (Personal Relations-Cooperativeness) on the Guilford-Zimmerman Temperament Survey. Compared to the researchers, the teachers were significantly lower on Factor Q₂ --- Self-sufficiency. When the teachers were compared with the administrative-scientists, they were significantly higher on Factor L (Paranoia), Factor M (Bohemian Unconcern), Factor O (Free Anxiety), Factor Q₁ (Radicalism), and Factor Q₄ (Psychosomatic Anxiety). The teachers were significantly lower than the administrators on Factor H (Adventurous Cyclothymia) which Cattell describes as "conscientiousness, regard for authority, taking life seriously, and tending to react fearfully." (Cattell, 1957, p. 193).

Borg (1957) studied tactical instructors at Lackland

Air Force Base with 50 trait tests developed by Guilford. These scores were correlated with three criteria of effectiveness, student ratings, peer ratings, and superior ratings. Since none of the three criteria were highly related, no trait scores were consistently related to all the criteria. What makes this study interesting is the fact that the investigators hypothesized the direction of the relationship for each of the 50 trait scores to each of the three effectiveness criteria. They were correct on 94 of the 150 correlations for 62 percent accuracy. This is similar to the study by Guba and Getzels (1955) in which they hypothesized the relationships between certain personality measures and criteria of effectiveness. Their hypotheses were correct in every case, although not all relationships were significant. This study was superior in design to the Borg study which probably accounts, at least in part, for the difference in accuracy of prediction.

Guba and Getzels reason that, although there is as yet:

. . . no comprehensive theory of teacher effectiveness which would permit a straight-forward development of hypotheses amenable to test . . . , it is obvious that teaching is carried on in the context of an interpersonal setting (and) it is this factor which, more than any other, accounts for the crucial importance of teacher personality in mediating the teaching-learning process. (Guba and Getzels, 1955)

On the basis of this reasoning, they selected certain instruments, "... for which a reasonable connection with effectiveness may be postulated on the basis of relevant psychological theory." Reasoning that the teacher reacts to the everyday frustrations of the classroom with either overt aggression of some kind or else he suppresses his aggressive impulses, the investigators chose the Rosenzweig Picture-Frustration Study to measure the frustration-aggression variable and Getzels' (1952) paired direct and projective questionnaires to measure the reaction-suppression variable. On the Rosenzweig they hypothesized that Extrapunitive-ness (the tendency to place blame upon the environment) was associated with ineffectiveness; Intropunitiveness (the tendency to accept responsibility for frustrations that occur) was associated with effectiveness; and Impunitiveness (the tendency to avoid placing the blame altogether) was associated with effectiveness. The investigators further hypothesized that Obstacle Dominance (the tendency to focus attention upon the obstacle occasioning the frustration) was linked to ineffectiveness; Ego Defensiveness (the tendency to focus attention on self) was linked to ineffectiveness; and Need Persistence (the tendency to focus attention on a solution to the problem) was linked to effectiveness. In regard to the other instruments,

the paired direct and projective questionnaires, the authors hypothesized that a high negative score on the projective form, which represents a suppressed, negative attitude toward the teaching situation, was associated with ineffectiveness; a high negative score on the direct form, which represents overt, conscious, negative attitudes toward the teaching situation, was linked neither to effectiveness nor ineffectiveness since both groups may have the same stereotypic beliefs about desirable teacher behavior; and a large disparity between negative scores on the projective and direct instruments, which indicates a lack of spontaneity and integrity, was associated with ineffectiveness. Six of the nine hypotheses were statistically confirmed and the remaining three approached statistical significance in the postulated direction. An important point that the authors make is that theory is useful in interpreting empirical data. The case in point being that, of the three hypotheses which did not attain statistical significance, each was in the predicted direction and can be interpreted as "associated with effectiveness" whereas, in the typical correlational study where no prior hypotheses are presented, the only conclusion to be reached would be "no relationship."

The chief conclusions that can be drawn from this review of the literature on college-teacher personality

characteristics and effective teaching are:

1. The literature on the subject of teacher personality and effectiveness, at the college level, is sparse.
2. The personal-social characteristics of college teachers appear to be an important factor in their effectiveness as judged by students.
3. The lack of a guiding theoretical system has hampered interpretation of the results of most of the studies.
4. While the criterion problem has been considered and discussed in many articles, with much criticism of student-ratings as a criterion, the majority of studies continue to employ it.
5. There has been no attempt to study the relationship of the self-image of the college teacher, nor the accuracy of the self-image, to his effectiveness.
6. Except for one or two studies, there has been no attempt to control subject-matter area of the teachers studied. Apparently there is a tacit assumption that personality characteristics associated with effectiveness are independent of subject-matter area.

7. There are too few studies as yet to allow for any consistent results. Thus no conclusions can be drawn, with any certainty, regarding the relationships between personality characteristics and teaching effectiveness of college teachers.

CHAPTER III

THE PRESENT STUDY

In the present study, an attempt will be made to differentiate between "superior" and "inferior" teachers in regard to several personality characteristics. This means that, (1) a prior selection of a group of "superior" teachers and a group of "inferior" teachers must be made upon some valid criterion other than the variables under investigation, (2) a suitable pool of college teachers from which to select the two groups must be found, and (3) adequate devices for measuring the personality characteristics of the teachers must be selected. Within this procedure is contained the merits and the limitations, as well as the necessary assumptions, of this study.

The population from which the two groups of teachers to be studied were selected consisted of the full-time teaching faculty of Phillips University, Enid, Oklahoma. Since the author is a member of the Phillips faculty, it was obviously a matter of convenience to utilize this population. However, a more pertinent advantage to this study

was the fact that Phillips University is a small, private school which emphasizes the teaching function to its faculty rather than research and publication. However, it should be noted that since participation in the study was voluntary, fourteen of the sixty-four, full-time faculty members did not take part. This may have produced a selective bias in the study, but it is virtually impossible to require participation in a study of this kind and idealistic to expect one-hundred percent cooperation on a voluntary basis.

The basis for selecting the superior and inferior teachers was student ratings. Much has been written about the merits and dangers of student rating of instructors and the literature is replete with contradictions. While it might be argued that students are not competent to judge the quality of effectiveness of their instructors, at least two studies support the notion that students do know the difference between the best and worst teachers. (Maslow and Zimmerman, 1956, Morsh, Burgess and Smith, 1956) Moreover, reliability studies on rating scales for teachers show that students are consistent in their ratings. (Remmers, 1960) H. H. Remmers says that many of the variables in research on teaching are so highly complex that only a very sensitive and complex measuring device such as the human observer

can handle them. (Remmers, 1963, p. 329) There were two other possible criteria for the two groups of teachers considered. Student gain in subject matter knowledge was rejected as a criterion because (1) there are no achievement tests available with broad enough scope to measure all academic areas, and (2) it would be difficult to assess how much of a given amount of student gain, if it could be measured, is due to teacher-influence and how much is due to "extra"-classroom influence. The utilization of a systematic behavior record by trained human observers which Ryans (1960) has employed at the public school level has several advantages over the student-rating method, but it has a very serious drawback when used at the college level. The sanctity of the classroom in college precludes the use of this device. Aside from this disadvantage, it never is advisable, when it can be avoided, to introduce a strange element into a situation under investigation, and certainly an observer in a college classroom is, at the present time, a strange element. In regard to the limitations of the student-rating method of selection of the groups, two points must be noted: (1) the results of several studies indicate that certain conditions markedly influence student-ratings (Gage, 1961) and, (2) student-ratings do not permit absolute classification into the "superior" and "inferior" categories,

only classification relative to the population which was rated.

It is always important to select valid and reliable instruments with which to make the measurements required in a study. If appropriate measuring devices are available which are published and have been in existence long enough to have a sizeable body of validity and reliability studies behind them, then these are to be preferred. In this study, the student ratings were taken with the Purdue Rating Scale for Instruction (Remmers, 1960) and personality characteristics were measured with the Guilford-Zimmerman Temperament Survey (Guilford and Zimmerman, 1949), both of which have been in publication for a number of years and whose reliability and validity have been as well established as any instruments of a similar nature. Furthermore, the GZTS is a factor-analytic inventory and offers the advantage of measuring discrete traits of personality. It was also selected because it is not oriented toward diagnostic measurement of clinical pathology and thus seemed more appropriate for use with a non-clinical population. For a description of the ten traits measured by this inventory, see Appendix A. One of the instruments utilized was developed specifically for this study. While there are published devices for the measurement of self-concept or self-image,

one was needed which related specifically to the GZTS in order to produce a measure of the "accuracy" of the self-image. A description of the instrument and its development will follow later. It is sufficient at this point to note that an estimate of reliability was obtained during the course of developing the instrument which was adequate.

The attempt to obtain a measure of the accuracy of self-concept needs some clarification and, perhaps, some justification since it may seem to be a particularly weak point in the study. More specifically, there was an attempt to measure each individual's perception of the degree to which he possessed each of the traits on the GZTS and then to compare this perception with his scores on each of the GZTS traits. In effect, the subjects were asked to indicate how they thought they would rate on each of the ten traits and then they completed the GZTS and their resulting scores were compared with this rating. Although it could be argued that both instruments are self-report devices, the GZTS, being a more or less "indirect" technique, allows the person to report "fractional" behavior rather than estimating whole traits and furthermore it does not connect many of the stimulus statements in an obvious manner to a given trait. Also, the person taking the GZTS does not know the names of the traits being measured. Thus, on the self-

rating instrument, the person makes a wholistic estimate of the degree to which he possesses a trait and on the GZTS he reports the presence or absence of specific behaviors from which the interpreter infers the degree to which he possesses a trait and on the GZTS he reports the presence or absence of specific behaviors from which the interpreter infers the degree to which he possesses that trait. It can be argued, therefore, that there is more personal bias possible in the former than in the latter and hence, the discrepancy between the two scores reflects the "accuracy" of the individual's estimation of himself on the ten traits. Getzels (1952) has done something similar to this method in using paired direct and projective questionnaires to study covert and overt levels of attitudes toward teaching. He produces evidence that there is a difference in direct and indirect measurement of the same attitude in subjects who later reveal this difference in an interview.

The problem with which the present study deals, then, is to attempt to distinguish differences, if any, in personality characteristics, self-concept, and accuracy of self-concept between two groups of college teachers selected on the basis of student-ratings of their classroom performance. One group, hereafter referred to as the "superior" teachers, consisted of those teachers who rated in the top

26 percent of the fifty teachers who participated in the study, and the other group, hereafter referred to as the "inferior" teachers, consisted of those teachers who rated in the bottom 26 percent.

On the basis of relevant psychological theory, three general hypotheses will be tested:

(1) Since the college professor is accorded such a high status, occupationally, in our society (Sanford, 1962, p. 301), it is reasonable to assume that one who occupies that position and plays the role successfully must possess socially valued characteristics. Thus, it is hypothesized that superior teachers, as rated by their students, will score in the socially valued direction* on a greater number of the GZTS traits than will inferior teachers.

(2) The work of Lecky (1945), in particular, and also Snygg and Combs (1960), indicates the importance of a person's self-image in determining his behavior. More specifically, Lecky stresses a positive image of self as important to effective behavior or efficient living. Thus, it is hypothesized that superior teachers will show a more positive self-concept, that is, they will rate themselves

*The factors on the GZTS are so arranged that a "high" score indicates positive qualities of a trait, while "low" scores indicate negative qualities.

more positively on the self-rating scale used in this study, than will the inferior teachers.

(3) Self-theorists, such as Lecky, also emphasize a realistic, or "accurate" self-concept as being vital to personality integration or effective living. Thus, it is hypothesized that superior teachers will show more accuracy in their self-rating, as measured by the discrepancy between self-rating and GZTS scores, than will inferior teachers.

CHAPTER IV

METHOD

Procedure

All full-time teachers in the undergraduate college at Phillips University were requested to administer the Purdue Rating Scale for Instruction to one of their classes, preferably a class of 25 or more students. Then they were asked to complete the self-rating instrument and the GZTS, in that precise order. The teachers were not told the precise nature of the study in order to eliminate possible biases from such knowledge. They were simply told that this was a study attempting to correlate certain personality factors with particular functions of teaching. Complete anonymity was guaranteed and the students were requested to refrain from identifying the course or the instructor on the Purdue Rating Scale for Instruction.

Complete sets of data were collected from fifty teachers and from these sets of data two groups, the upper 26 percent and the lower 26 percent, were selected for comparison. The method for selection of the two groups was as follows.

The first attempt was made on the basis of item number 26 of the PRSI, the over-all rating of the instructor. However, this item proved too homogeneous and the mean ratings of the two resulting groups did not differ enough to be statistically significant. It was decided then to average all the items on the PRSI, with the exception of item 26, for each subject and use this score as a basis for selection of the two groups. However, upon inspection of the items, it appeared to the author that not all items were directly applicable to teaching performance and therefore items 12, 16, 20 and 21 were eliminated.* Thus, the final basis for selection of the groups was a "score" derived by averaging each subject's ratings on 21 items of the PRSI. From this distribution of scores the top 13 (26 percent) and the bottom 13 (26 percent) subjects were selected. The mean of the ratings on the PRSI for each of these groups was calculated and the difference between these two means was found to be statistically significant beyond the .001 level of confidence. Thus these groups represented the "best" and the "worst" teachers of the population from which they were selected. Of course, it must be remembered that these are "superior" and

*See Appendix B for the content of these items.

"inferior" teachers as seen by the students who rated them and not "superior" or "inferior" in any absolute sense.

Description of the Sample

The total sample of fifty teachers who voluntarily participated in the study consisted of 38 males and 12 females who ranged in age from 23 to 65. Their educational status ranged from bachelor degrees to doctorates, with five bachelors, 28 masters and 17 doctorate degrees. Teaching experience ranged from one year to 32 years, with the median teaching experience being 6.1 years. They represented all academic areas with the heaviest representation in the humanities and biological science.

Quite by chance, the upper and lower groups which were selected from this total sample, each consisted of 11 males and two females. The upper group (the superior teachers) contained one bachelors degree, nine masters degrees and three doctoral degrees. Their ages ranged from 26 to 55 and they had a mean of 9.9 years of teaching experience. The lower group (the inferior teachers) contained six masters degrees and seven doctoral degrees. Their ages ranged from 38 to 65 and they had a mean of 13.4 years of teaching experience.

Measurement of Variables

The Purdue Rating Scale for Instruction was used as the criterion measure for the selection of the superior and inferior teachers. This particular rating scale was chosen because it has been in publication in revised form since 1950 and has a growing body of studies surrounding it. (Gage, 1963, pp. 367-368) Reliability coefficients reported in the manual range from .83 to .95. (Remmers, 1960) It is a graphic rating scale divided into two parts. The first ten items concern personal qualities of the instructor and the remaining items have to do with situational factors affecting the quality of instruction. Although there is some evidence that forced-choice rating scales avoid the "halo effect" (Gage, 1963, p. 340 ff), which as been attributed to the graphic scale, unsophisticated raters, such as college students, may find it confusing and less meaningful.

The self-rating instrument was developed specifically for this study and was used to measure a subject's perception of himself on ten traits of personality which correspond to the ten traits measured by the GZTS. It is a graphic rating scale of eleven equal-appearing intervals ranging numerically from 0 through 10. This corresponds to the eleven point C Scale developed by Guilford (1950, p. 302) to which the raw scores on the GZTS are transformed. This

made it possible to directly compare the scores from the self-rating scale and the GZTS and thus allowed a measure of "accuracy" of self-concept. Since the scale was a graphic type and since it was intended that the scores be comparable to the scores on the C Scale, it was necessary to determine if the intervals on the self-rating scale were comparable to the intervals on the C Scale. The C Scale intervals are not equal but are in proportion to the area under the normal curve. Thus, a pilot study was undertaken in which two randomly chosen groups of students were given two self-rating scales approximately two weeks apart which were similar in all respects except that one had equal-appearing intervals and the other had the unequal intervals of the C Scale. One group was given the unequal interval scale first and then the equal-appearing interval scale, while the other group was given the equal-appearing interval scale first and the unequal interval scale next. This was done to determine whether the order of presentation had any influence on the student's responses to the self-rating scale. The correlations between the two presentations for the group which used the unequal interval scale first ranged from .93 to .94. The correlations for the other group ranged from .88 to .98. Since the correlations were all within a narrow range which was within chance expectancy,

it was concluded that the order of presentation was of no consequence and that the difference in the intervals of the scales was also inconsequential. Thus the equal-appearing interval scale was chosen for use because it was believed to be less confusing to persons unfamiliar with the intricacies of scaling procedures. The correlations from this pilot study also provided an estimate of the test-retest reliability of the self-rating instrument, and was deemed to be adequate.

Analysis of Data

For each group, means were calculated for each of the ten factors on the self-rating scale and for each of the ten factors of the GZTS. Fisher's *t* tests were used in determining the significance of the differences between:

- (1) the means of the two groups on the self-rating scale;
- (2) the means of the two groups on the GZTS factors; (3) the means of the superior teachers on the self-rating scale factors and the GZTS factors; (4) the means of the inferior teachers on the self-rating scale factors and the GZTS factors.

The means on each of the ten factors of the self-rating scale as well as the means on the ten factors of the GZTS were calculated for the total sample, and the differences between the means on the self-rating scale factors

and the GZTS factors were tested by means of Fisher's t tests for significance.

The PRSI items were inspected to determine which of the 21 items contributed most to the differentiation of the two extreme groups. These data are presented in Appendix B.

CHAPTER V

RESULTS

It was hypothesized that the superior teachers would score in the socially valued direction, i.e., make higher scores, on the GZTS traits than the inferior teachers. Table I presents the means on each of the GZTS traits (or factors) for the superior group of teachers and the inferior group of teachers, along with the difference and t-ratings. Since the GZTS traits are described in Appendix A, only the trait names have been given in this table and the following tables.

An inspection of Table I reveals that the superior teachers obtained higher scores on only two of the ten traits, General Activity and Restraint, with neither being statistically significant. In fact, the only significant difference between the two groups is a lower mean on Ascend-ance for the superior teachers. Two other traits, Objec-tivity and Personal Relations, approach significance, but the differences again are in the reverse direction to the hypothesis. Not only does the data fail to support the

hypothesis, but it tends to support the obverse of the hypothesis.

TABLE I
MEAN RAW SCORES ON THE GUILFORD-ZIMMERMAN TEMPERAMENT
SURVEY FOR THE SUPERIOR TEACHERS AND THE INFERIOR
TEACHERS, DIFFERENCES AND T-RATIOS

GZTS FACTORS	SUPERIOR TEACHERS	INFERIOR TEACHERS	DIFFER- ENCES	T-RATIO
General Activity	17.92	16.46	1.46	.589
Restraint	20.23	20.07	.16	.091
Ascendance	11.46	16.38	4.92	2.580*
Sociability	15.38	17.84	2.46	.960
Emotional Stability	18.38	19.76	1.38	.401
Objectivity	17.38	20.84	3.46	1.220
Friendliness	17.46	18.84	1.38	.589
Thoughtfulness	19.92	20.30	.38	.173
Personal Relations	19.07	22.30	3.23	1.430
Masculinity- Femininity	16.69	17.76	1.07	.496

*Significant beyond the .05 level of confidence

At this point it would seem necessary, in order to interpret the above finding, to determine how the total sample of college teachers employed in this study score on the GZTS. Getzels and Jackson (1963, p. 547) point out that

with the use of any standardized personality measure, the most immediate question to be answered is whether or not special populations of subjects differ significantly from the norms provided by the test-maker. Thus, if the two extreme groups of college teachers fail to score in the expected direction on the personality measure, it becomes necessary to know if this is "typical" of college teachers on this instrument or particularly related to the two select groups of college teachers. There are insufficient studies using the GZTS with college teachers to compile reliable norms for such a group, consequently it cannot be known if the scores of the sample of college teachers in the present study are "typical." On the other hand, since there is no reason to assume that the scores are atypical for a college-teacher population, the comparison of the total sample with the norms on the GZTS might provide information that would be helpful in understanding the scores of the superior and inferior teacher groups. This comparison is presented in Table II and it reveals that the total sample differs significantly from the norms on the GZTS on five of the ten traits. Moreover, the direction of the difference is the same for each of the five traits, the teachers having the higher mean. In fact, the teacher sample is lower than the norms on only two of the traits, but not significantly so.

Thus, the total sample of teachers in the present study score in the hypothesized direction on the GZTS. Regardless of the inability to assume typicality of the total sample, the data in Table II tends to emphasize the significance of the reversal of direction of scores for the superior and inferior groups.

TABLE II

RAW SCORE MEANS ON THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY FOR THE TOTAL SAMPLE AND THE STANDARDIZATION SAMPLE, DIFFERENCES AND T-RATIOS

GZTS FACTORS	TOTAL SAMPLE	STAND. SAMPLE	DIFFERENCES	T-RATIO
General Activity	18.04	17.00	1.04	1.25
Restraint	19.64	16.40	3.24	5.00**
Ascendance	14.56	15.00	.44	.55
Sociability	16.96	18.80	1.84	1.91
Emotional Stability	20.24	16.30	3.94	3.76**
Objectivity	19.94	17.40	2.54	2.93**
Friendliness	18.50	14.60	3.90	5.29**
Thoughtfulness	19.62	18.20	1.42	1.83
Personal Relations	21.74	17.10	4.64	6.53**
Masculinity-Femininity	17.50	16.10	1.40	1.61

**Significant beyond the .01 level of confidence

This situation indicates the need for further comparisons, namely, the comparison of both the superior teachers and the inferior teachers with the norms on the GZTS, and the comparison of these two groups with the total sample. Tables III and IV present these comparisons. The data in these tables show that, similarly to the total sample, the superior and inferior teachers differ significantly from the GZTS norms on a number of traits, whereas they do not differ significantly from the total sample on any of the traits. Moreover, on closer inspection of Table III, it can be seen that the inferior teachers differ significantly from the norms on the same traits as the total sample, and in the same direction.

The superior teachers score significantly higher than the norms on two of the traits (Restraint, Friendliness) which the total sample and the inferior teachers also did, but they score significantly lower than the norms on two traits (Ascendance, Sociability) which the inferior teachers and the total sample did not. Although the total sample and the inferior teachers score similarly in comparison to the norms, while the superior teachers differ from both, Table IV reveals no significant differences between the superior teachers and the total sample. However, the largest differences in Table IV are between the superior

teachers and the total sample rather than the inferior teachers and the total sample, and differences of two points or more are found on traits A (Ascendance), P (Personal Relations) and O (Objectivity).

TABLE III
MEAN RAW SCORES ON THE GUILFORD-ZIMMERMAN TEMPERAMENT
SURVEY FOR THE SUPERIOR TEACHERS, THE INFERIOR
TEACHERS AND THE STANDARDIZATION SAMPLE

GZTS FACTORS	SUPERIOR TEACHERS	STAND. SAMPLE	INFERIOR TEACHERS
General Activity	17.92	17.00	16.46
Restraint	20.23*	16.40	20.07*
Ascendance	11.46*	15.00	16.38
Sociability	15.38*	18.80	17.84
Emotional Stability	18.38	16.30	19.76*
Objectivity	17.38	17.40	20.84*
Friendliness	17.46*	14.60	18.84*
Thoughtfulness	19.92	18.20	20.30
Personal Relations	19.07	17.10	22.30*
Masculinity-Femininity	16.69	16.10	17.76

*Significantly different from the standardization sample at or beyond the .05 level of confidence

From all the foregoing comparisons, a number of interesting patterns emerge:

(1) the Total sample of college teachers in this study tend to score higher than the norms on the GZTS traits.

(2) The group of inferior teachers resemble the total sample quite closely in the way they score on the GZTS traits.

(3) The superior teachers tend to differ from the total sample and the inferior teachers in the way they score on the GZTS traits, in particular, by scoring lower. It should be added, however, that the superior teachers tend to score higher than the GZTS norms.

(4) In every comparison except one (with the total sample), the superior teachers are distinguished on trait A (Ascendance) by scoring significantly lower, and in the comparison with the total sample the difference approaches significance.

(5) Two other traits, O (Objectivity) and P (Personal Relations), appear worthy of mention in that the total sample and the inferior teachers tend to score higher on them than the superior teachers. Although the differences are not statistically significant, they approach significance to a greater degree than any of the remaining traits.

TABLE IV
 MEAN RAW SCORES ON THE GUILFORD-ZIMMERMAN TEMPERAMENT
 SURVEY FOR THE SUPERIOR TEACHERS, THE INFERIOR
 TEACHERS AND THE TOTAL SAMPLE

GZTS FACTORS	SUPERIOR TEACHERS	TOTAL SAMPLE	INFERIOR TEACHERS
General Activity	17.92	18.04	16.46
Restraint	20.23	19.64	20.07
Ascendance	11.46	14.56	16.38
Sociability	15.38	16.96	17.84
Emotional Stability	18.38	20.24	19.76
Objectivity	17.38	19.94	20.84
Friendliness	17.46	18.50	18.84
Thoughtfulness	19.92	19.62	20.30
Personal Relations	19.07	21.74	22.30
Masculinity-Femininity	16.69	17.50	17.76

By way of summarizing the results from the personality measure, it might be said that college teachers, as represented by the total sample in this study, are significantly more serious-minded, self-controlled, more emotionally stable, less sensitive and self-centered, more friendly and agreeable, and more cooperative and tolerant of others, than the general population as represented by the norms on the GZTS. The same can be said for the group of inferior

teachers, while the superior teachers, though they are similarly more serious-minded, self-controlled, and friendly and agreeable, are significantly less ascendant and more submissive, and less sociable and more shy than the general population as represented by the GZTS norms. Furthermore, the superior teachers are significantly less ascendant than the inferior teachers and tend to be less ascendant than the total sample of college teachers. The inferior teachers, moreover, tend to be more objective or "thick-skinned" and more cooperative and tolerant of others than the superior teachers and slightly (although the differences do not approach significance) more objective and cooperative than the total sample of college teachers. On these two traits (Objectivity and Personal Relations) the superior teachers score relatively close to the norms.

It might be noted at this point that the Cattell and Drevdahl study (1955) of eminent teacher-scientists, research-scientists and administrative-scientists, showed the teacher-scientists to be more shy and submissive than the other scientists, as well as more serious-minded, friendly and cooperative. Another pertinent study which should be mentioned, especially since the Guilford-Zimmerman was employed, is Bendig's study (1955) of college teachers of psychology in which the teachers were rated on competence

and empathy scales derived from the Purdue Rating Scale for Instruction and their GZTS scores correlated with these scales. No significant correlations were found with any of the GZTS traits and competence ratings.

In attempting to interpret the failure of the data to confirm hypothesis 1, it is important to point out that the criterion upon which the superior teachers and the inferior teachers were selected was student ratings. Students, as consumers of the teaching service, have immediate and continuous exposure to the dispensers of this service, that is, students see the teacher "in action" daily. Such an empirically based evaluation of teachers apparently differs from an evaluation based upon a logically derived conception. In other words, the logical extension of social desirability from the position of college teacher to the characteristics of the person occupying that position has no empirical support, at least from the present data. Moreover, even though statistical significance is lacking, the data indicate a tendency toward the opposite of the logical expectation.

Why is it that students rate those teachers who tend to be more shy, submissive, sensitive to criticism and more critical and intolerant of others, higher than teachers who tend to be less shy, submissive, etc.? Although it is

purely speculation, it may be that this situation is a reflection of the developmental level of college students. In their adolescent rebelliousness, it is possible that they react negatively to more ascendant and "thick-skinned" teachers and, consequently, tend to rate them low. Guilford and Zimmerman indicate in the GZTS manual (1949, p. 8) that a high score on Ascendance is associated with potential supervisory personnel, and to the student this may mean "authority" against which they tend to rebel. Also, the GZTS manual indicates that a high score on Objectivity can mean that "the person is so insensitive himself that he cannot appreciate the other fellow's possible sensitiveness," (Guilford and Zimmerman, 1949, p. 9). Adolescents, with their emotional lability and sensitiveness, may also react negatively to this tendency in teachers and rate them low. Regarding the trait of Personal Relations, the manual states, "It seems to represent the core of 'getting along with others' . . . , . . . it would seem that the higher the P score the better," (Guilford and Zimmerman, 1949, p. 9). At first glance, it might seem difficult to reconcile the scores of the inferior teachers on this trait with the present line of reasoning since they scored above the superior teachers and the total sample, as well as above the norms. However, by approaching the argument from the "other

side," as it were, and concentrating on the students' reaction to the superior teachers, it could be argued that the adolescent tendency to be critical and intolerant of preceding generations prompts them to identify more with those teachers who tend to be more critical and intolerant of others, particularly, the superior teachers. This is admittedly a weak argument, especially in view of the fact that the superior teachers scored above the GZTS norms on trait P, but their scores were not significantly higher than the norms--and they did, although not significantly, score lower than the inferior teachers and the total sample.

The present writer is aware of only one study (Rezler, 1965) which investigated the influence of student needs upon rating of teachers, and little evidence was produced by the study to show that student needs profoundly influence teacher ratings. Yet the results of the present study would seem to point to the possible fruitfulness of further investigation along this line.

Hypothesis 2 concerned the self-image of the teachers and suggested that the superior teachers would have a more positive self-image than the inferior teachers since self theory postulates a positive relationship between self-image and effective living or adjustment. The theoretical reasoning was that the better teachers should be more

adequately adjusted to life--more effective in the task of living. To put it another way, those teachers more effective in their professional role should be found to have, according to role theory, greater congruence between self and role (among other things). Therefore, they should be effective in living, which necessitates a positive self-image. The measurement of self-image was a self-rating scale consisting of the ten traits measured by the GZTS. Table V presents the scores on the Self-Rating Scale and it should be noted that the means are given in terms of C-Scores.* The reason for using C-Scores on the Self-Rating Scale was to facilitate the accomplishment of the measure of "accuracy-of-self-concept." More specifically, the use of the same scale for the self-rating instrument as was employed by the GZTS facilitated the comparison of the teachers' scores on the two instruments, the comparison being the measure of "accuracy-of-self-concept."

The superior teachers see themselves as more restrained and serious than the inferior teachers as reflected in the significantly higher rating on the Restraint factor. Three other factors approach significance with the superior

*The GZTS profile sheet provides for the transformation of raw scores into standard scores developed by Guilford called C-Scores. For a more detailed description of the C-Score scale, see (Guilford, 1950, pp. 302 ff).

teachers having the higher scores on General Activity and Personal Relations, but a lower score on Ascendance. In general, the superior teachers tend to rate themselves higher than the inferior teachers, as is evidenced by the higher means on seven of the ten traits. Since only one of the traits shows statistical significance, no support can be claimed for hypothesis 2. However, in view of the general direction of the scores, there is some indication that the hypothesis might be credible. This investigator would suggest that further research along this line, employing other instruments, be carried out before the hypothesis is completely rejected.

Since data for the total sample on the GZTS was presented and comparisons drawn between that data and the scores for the superior and inferior teachers, it seems pertinent to do the same for the self-rating instrument. Table VI shows the means on the Self-Rating Scale for the total sample and the superior and inferior teachers.

None of the differences between the total sample and each of the other two groups was significant, although the differences between the inferior teachers and the total sample, generally, tended to be larger than the differences between the superior teachers and the total sample. Generally, both the superior and inferior teachers rate

themselves lower than the total sample. The superior teachers rate themselves higher than the total sample only on General Activity, Restraint, Thoughtfulness and Personal Relations, while the inferior teachers rate themselves higher only on Ascendance, Sociability and Thoughtfulness.

TABLE V
MEAN SCORES ON THE SELF-RATING SCALE FOR THE SUPERIOR
AND INFERIOR TEACHERS, DIFFERENCES AND T-RATIOS

FACTORS	SUPERIOR TEACHERS	INFERIOR TEACHERS	DIFFER- ENCES	T-RATIO
General Activity	7.69	6.77	.92	1.816
Restraint	6.38	5.23	1.15	2.180*
Ascendance	5.08	6.23	1.15	1.806
Sociability	5.92	6.08	.16	.263
Emotional Stability	6.85	6.69	.16	.203
Objectivity	5.15	5.31	.16	.232
Friendliness	7.23	6.85	.38	.576
Thoughtfulness	6.85	6.85	0.00	0.000
Personal Relations	7.69	7.00	.69	1.136
Masculinity-Femininity	5.92	5.85	.07	.082

*Significant beyond the .05 level of confidence

There is a rather restricted range of scores within each of the groups--the superior teachers, the inferior

teachers and the total sample--although the superior teachers have a somewhat larger range than the total sample while the inferior teachers have the most restricted range. Furthermore, none of the mean ratings is below 5 and the highest mean is 7.69. This restricted range which clusters above the middle of the scale may be partly due to the well-known leniency effect with graphic and numerical type rating scales, and partly to a tendency on the part of the teachers to respond to a stereotype of the teacher role. Another point of interest concerns the particular traits which the teachers ranked highest and lowest. The superior teachers rated themselves highest on General Activity and Personal Relations, both means being identical, and the total sample and inferior teachers rated themselves highest on Personal Relations. Both the superior teachers and the total sample rated themselves lowest on Ascendance, while the inferior teachers rated themselves lowest on Restraint.

The superior teachers are more similar in their self-ratings to the total sample than are the inferior teachers. Thus, while the superior teachers and the total sample see themselves as possessing more than average ability to get along with people, but just average in social boldness, the inferior teachers are distinguished by seeing themselves as more socially bold and less restrained

and serious. Like the others, however, the inferior teachers also see themselves as having more than average ability to get along with people.

TABLE VI
MEAN SCORES ON THE SELF-RATING SCALE FOR THE SUPERIOR
TEACHERS, THE INFERIOR TEACHERS AND
THE TOTAL SAMPLE

FACTORS	SUPERIOR TEACHERS	TOTAL SAMPLE	INFERIOR TEACHERS
General Activity	7.69	7.38	6.77
Restraint	6.38	6.02	5.23
Ascendance	5.08	5.54	5.23
Sociability	5.92	6.04	6.08
Emotional Stability	6.85	6.96	6.69
Objectivity	5.15	5.82	5.31
Friendliness	7.23	7.28	6.85
Thoughtfulness	6.85	6.50	6.85
Personal Relations	7.69	7.60	7.00
Masculinity-Femininity	5.92	6.12	5.85

The only published data in the literature on the self-images of college teachers with which the present data can be compared is from the study by Beardslee and O'Dowd (1959). A measure of self-image was obtained from 95 percent

of the faculty at one institution where the students had previously rated college professors (as an occupational stereotype) on the same instrument. The teachers rated themselves, as compared with the student ratings, higher on such qualities as "caution," "stability," "adaptability," "absence of emotional problems," and "calmness;" they rated themselves lower on "self-assertiveness," "individualism," "realism," "confidence," "strength" and "popularity."

Although no comparisons with the data from the present study can be made in terms of self-image as it relates to some criterion of effectiveness in teaching, the Beardslee and O'Dowd data can be compared to the self-image of the total sample, at least in an indirect manner. The total sample rated themselves lowest on Ascendance or social boldness, which corresponds to the teachers in the Beardslee and O'Dowd study rating themselves relatively lower on "self-assertiveness;" however, the total sample in this study did not tend to rate the traits associated with control (Restraint, Objectivity, Emotional Stability) among the highest of the ten GZTS traits whereas the teachers in the Beardslee and O'Dowd study did rate themselves higher on these qualities. It is interesting to note, however, that the superior teachers and the total sample, compared to the inferior teachers, did tend to rate themselves

higher on those traits associated with control, and rated themselves lower on social boldness ("self-assertiveness").

Thus, in a general way, it seems that college teachers (and, perhaps, the "better" college teachers) tend to see themselves as rather controlled, reserved individuals who do not "put themselves forward" in society.

Hypothesis 3 which predicted that the superior teachers would perceive themselves more accurately by having a closer correspondence between self-rating and GZTS scores, was not supported by the data. Tables VII and VIII present the self-rating scores and the GZTS scores for the superior teachers and the inferior teachers respectively. An inspection of these tables reveals significant differences between the self-rating and the GZTS on a greater number of traits for the superior teachers than for the inferior teachers. Thus, the data indicate that, contrary to the hypothesis, the inferior teachers perceive themselves more accurately than the superior teachers.

In line with the procedure employed in discussing the other two hypotheses, data on the "accuracy-of-self-concept" for the total sample is presented in Table IX.

Table IX reveals that the total sample of teachers differ significantly between the self-rating and the GZTS scores on seven of the ten traits which indicates a lack of

accuracy in their self-concept. The superior teachers, with significant differences on six traits, were next most accurate, and the inferior teachers, with significant differences on four traits, were the most accurate in regard to self-concept.

TABLE VII
MEAN SCORES ON THE SELF-RATING SCALE AND THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY FOR THE SUPERIOR TEACHERS, DIFFERENCES AND T-RATIOS

GZTS FACTORS	SELF-RATING SCALE	GZTS	DIFFERENCES	T-RATIO
General Activity	7.69	5.31	2.38	3.867**
Restraint	6.38	6.62	.24	.759
Ascendance	5.08	3.38	1.70	4.080**
Sociability	5.92	3.77	2.15	4.928**
Emotional Stability	6.85	5.31	1.54	2.588*
Objectivity	5.15	5.00	.15	.297
Friendliness	7.23	6.15	1.08	1.854
Thoughtfulness	6.85	6.00	.85	1.506
Personal Relations	7.69	5.38	2.31	4.159**
Masculinity-Femininity	5.92	3.92	2.00	2.381*

**Significant beyond the .01 level of confidence

* Significant beyond the .05 level of confidence

TABLE VIII
 MEAN SCORES ON THE SELF-RATING SCALE AND THE GUILFORD-
 ZIMMERMAN TEMPERAMENT SURVEY FOR THE INFERIOR
 TEACHERS, DIFFERENCES AND T-RATIOS

GZTS FACTORS	SELF-RAT- ING SCALE	GZTS	DIFFER- ENCES	T-RATIO
General Activity	6.77	4.54	2.23	4.822**
Restraint	5.23	6.54	1.31	2.615*
Ascendance	6.23	5.15	1.08	1.820
Sociability	6.08	4.62	1.46	3.263**
Emotional Stability	6.69	6.08	.61	.944
Objectivity	5.31	6.31	1.00	1.927
Friendliness	6.85	6.69	.16	.218
Thoughtfulness	6.85	6.08	.77	.933
Personal Relations	7.00	6.77	.23	.309
Masculinity- Femininity	5.85	3.85	2.00	2.759*

**Significant beyond the .01 level of confidence

* Significant beyond the .05 level of confidence

Further inspection of Tables VII, VIII and IX shows that all the teachers tend to consistently over-estimate themselves, i.e., rate themselves higher than they score on the GZTS, although the superior teachers tend toward slightly greater over-estimation than the inferior teachers.

An examination of Tables VII, VIII and IX, in regard to the particular traits perceived most and least accurately,

brings out two interesting points:

(1) The total sample was apparently most accurate in their perception of traits O (Objectivity), R (Restraint), and T (Thoughtfulness), in that order. The superior teachers were most accurate in their perceptions of these same three traits, and in the same rank order. The inferior teachers were most accurate on traits F (Friendliness), P (Personal Relations), E (Emotional Stability), T (Thoughtfulness), O (Objectivity), and A (Ascendance), in that order. Thus, the superior teachers and the total sample are quite similar in regard to which traits they perceive most accurately in themselves, while the inferior teachers are distinguished by more accurately perceiving themselves on traits F, P, E, and A.

It is interesting to note that both the superior and inferior teachers underestimated themselves on trait R (Restraint), but the inferior teachers underestimated themselves to a significantly greater degree. On trait A (Ascendance), both the superior and inferior teachers overestimated themselves to a significantly greater degree. It should be remembered that the comparisons of these two groups on the Self-Rating Scale (Table V) revealed the superior teachers to have perceived themselves as significantly more restrained and serious (trait R) than the inferior

teachers, and less ascendant (trait A) than the inferior teachers, although the difference only approached significance.

TABLE IX
MEAN SCORES ON THE SELF-RATING SCALE AND THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY FOR THE TOTAL SAMPLE,
DIFFERENCES AND T-RATIOS

GZTS FACTORS	SELF-RATING SCALE	GZTS	DIFFERENCES	T-RATIO
General Activity	7.38	5.26	2.12	8.23**
Restraint	6.02	6.40	.38	1.63
Ascendance	5.54	4.58	.96	3.57**
Sociability	6.04	4.32	1.72	7.68**
Emotional Stability	6.96	6.08	.88	3.26**
Objectivity	5.82	5.90	.08	.295
Friendliness	7.28	6.46	.82	2.79**
Thoughtfulness	6.50	5.80	.70	1.63
Personal Relations	7.60	6.44	1.16	3.90**
Masculinity-Femininity	6.12	4.34	1.78	4.61**

**Significant beyond the .01 level of confidence

(2) The total sample, the superior and the inferior teachers perceived themselves least accurately on trait G (General Activity), tending toward overestimation.

(3) Two other traits which were commonly perceived inaccurately by each of the groups and the total sample were Sociability and Masculinity-Femininity.

In summary, then, the data on accuracy-of-self-concept indicates that the inferior teachers perceive themselves more accurately than the superior teachers and more accurately than teachers-in-general, as represented by the total sample. Particularly do they more accurately perceive how friendly they are, how well they get along with others, how socially bold they are, and how emotionally stable they are. The superior teachers not only perceive themselves to be significantly more restrained and serious than the inferior teachers, but are more accurate in this perception. The superior teachers see themselves as more submissive (less socially bold) than the inferior teachers, but are significantly more submissive than they perceive themselves to be.

Keeping in mind the criterion on which these two groups of teachers were selected, namely, student-ratings, the data may very well reflect differences in role-conception between students and teachers. A study by Maslow and Zimmerman (1956) indicated that college teachers rate their colleagues on a different basis than students rate them, even though there was substantial agreement as to who the

best teachers were. The teachers rated other teachers on the basis of subject-matter competence and "creativity" whereas the students rated the teachers on the basis of personality characteristics. Since the teachers in the present study rated themselves on personality characteristics, with no regard for the dimension of effectiveness-ineffectiveness, they may have responded to a common role-conception of the college-teacher role and thus the similarity in self-ratings noted earlier were obtained. However, the students were asked to rate the teachers on an instrument (the Purdue Rating Scale for Instruction) obviously oriented to an "effective-ineffective" or "better-poorer" dimension, i.e., it called for a "ranking" on items concerning teaching quality. In view of the Maslow and Zimmerman finding that students evaluate teachers on the basis of personality, then it would seem reasonable to assume that the students evaluated the teachers in the present study on a similar basis, even though not requested to do so directly. In other words, even though the students were asked to rate the teachers in regard to teaching activities, they may have been influenced by the personality characteristics of the teachers. Thus, these personality characteristics might then be reflected in the scores on the personality measure, the GZTS. Furthermore, if the

teachers responded to a common role-conception which carried with it certain personality characteristics, and if the students were responding essentially to two role-conceptions, namely, the superior-teacher role and the inferior-teacher role, then the differentiation of these roles should be reflected in the GZTS. Thus, the students' conception of the superior-teacher role is more disparate with the teachers' common role-conception than is the students' conception of the inferior-teacher role. Therefore, the greater agreement between the inferior teachers' self-rating and the GZTS scores.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Fifty teachers at Phillips University, a small, church-affiliated, liberal arts college with a graduate seminary, volunteered to participate in a study of college teachers. They were rated by their students on the Purdue Rating Scale for Instruction, were administered a self-rating scale, consisting of the traits measured by the Guilford-Zimmerman Temperament Survey, and then given the Guilford-Zimmerman Temperament Survey. The upper 26 percent and the lower 26 percent, based on the Purdue Rating Scale for Instruction were compared on the Self-Rating Scale, the Guilford-Zimmerman Temperament Survey, and the discrepancy between the self-rating scores and the GZTS scores as a measure of accuracy of self-concept. It was hypothesized that: (1) the upper 26 percent (the superior teachers) would score in the socially valued direction on more of the GZTS factors than the lower 26 percent (the inferior teachers), (2) the superior teachers would rate themselves on the self-rating scale more positively than would the inferior

teachers, and (3) the superior teachers would perceive themselves more accurately than would the inferior teachers. The results did not confirm hypothesis 1 or hypothesis 3, and only provisional support was obtained for hypothesis 2.

Conclusions

The major conclusions from the study are:

(1) Superior teachers, as represented by the teachers rated in the upper 26 percent of the sample employed in this study, do not generally possess more socially valued personality characteristics than the inferior teachers or the total sample of teachers. Paradoxically, they possess some qualities which are contrary to those commonly (and logically) believed to be associated with the role of college teacher.

(2) Superior college teachers, as represented by those in this study, tend to conceive of themselves, personality-wise, quite similarly to the inferior teachers, possibly reflecting a common role-conception.

(3) Superior college teachers, as represented by those in this study, do not estimate their personality characteristics as accurately as do the inferior teachers, which may be partly a result of the method of assessing accuracy--essentially a discrepancy between teacher-conception and student-conception of the college-teacher role.

(4) Students' conception of the college-teacher role, in terms of personality characteristics, indicates that the characteristics commonly valued by the teachers themselves are associated by the students with inferior teachers.

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APPENDIX A

A copy of the Self-Rating Scale used in the study.

Trait Descriptions for the Guilford-Zimmerman Temperament
Survey.

NAME _____

DATE _____

"Normal" or Average Range

Apathetic												Enthusiastic
Inactive	0	1	2	3	4	5	6	7	8	9	10	Active
Slow	<hr/>											Energetic
Impulsive												Serious
Carefree	0	1	2	3	4	5	6	7	8	9	10	Restrained
	<hr/>											
Avoid conspicuous												Socially bold
Submissive	0	1	2	3	4	5	6	7	8	9	10	Ascendant
	<hr/>											
Shy												Social Interest
Seclusive	0	1	2	3	4	5	6	7	8	9	10	Sociable
	<hr/>											
Emotional												Stable
Unstable	0	1	2	3	4	5	6	7	8	9	10	Not Emotional
	<hr/>											
Self-centered												Not Self-centered
Sensitive to criticism	0	1	2	3	4	5	6	7	8	9	10	Objective--can take criticism
	<hr/>											
Hostile												Friendly
Belligerent	0	1	2	3	4	5	6	7	8	9	10	Agreeable
	<hr/>											
Not inclined to think about life												Meditative
Interested in activity	0	1	2	3	4	5	6	7	8	9	10	Philosophically inclined
	<hr/>											

Intolerant
Uncooperative

0 1 2 3 4 5 6 7 8 9 10

Feminine
Likes music,
art, etc.

0 1 2 3 4 5 6 7 8 9 10

Tolerant
Cooperative

Masculine
Likes sports,
mechanical
activities,
etc.

TRAIT DESCRIPTIONS FOR THE GUILFORD-ZIMMERMAN
TEMPERAMENT SURVEY

Positive Qualities	vs	Negative Qualities	Number of Items
E - Emotional stability (opposite to a combination of the former traits of C, cycloid disposition, and D, depressive tendencies)			
Evenness of moods,..... interests, energy, etc.	vs	Fluctuation of moods,.... energy, interests, etc.	7
Optimism; cheerfulness..	vs	Pessimism; gloominess....	7
.....	vs	Perseveration of ideas... and moods	6
.....	vs	Daydreaming.....	3
Composure.....	vs	Excitability.....	2
Feeling in good health..	vs	Feeling in ill health....	2
.....	vs	Feelings of guilt,..... loneliness or worry	3
.....			
O - Objectivity			
Being "thickskinned"....	vs	Hypersensitiveness.....	10
.....	vs	Egoism; self centered-... ness	8
.....		Suspiciousness; fancying. of hostility	6
.....		Having ideas of refer-... ence	4
.....		Getting into trouble.....	2
F - Friendliness (former trait of agreeableness, Ag)			
Toleration of hostile... action	vs	Belligerence; readiness.. to fight	10
.....		Hostility, resentment....	7
.....		Desire to dominate.....	5

Positive Qualities	Negative Qualities	Number of items
F - Friendliness (continued)		
Acceptance of domina-.... vs tion	Resistance to domina-.... tion	5
Respect for others..... vs	Contempt for others.....	2
T - Thoughtfulness (formerly called "thinking introversion")		
Reflectiveness; mediatativeness		8
Observing of behavior in others		6
Interested in thinking... vs	Interested in overt..... activity	5
Philosophically inclined.....		4
Observing of self.....		4
Mental poise..... vs	Mental disconcertedness..	3
P - Personal Relations (formerly cooperativeness, Co)		
Tolerance of people..... vs	Hypercriticalness of..... people; fault finding habits	13
Faith in social insti-... vs tutions	Criticalness of instit-.. tutions	8
.....	Suspiciousness of..... others	6
.....	Self pity.....	3
G - General Activity		
Rapid pace of activities. vs	Slow and deliberate pace.	6
Energy; vality..... vs	Fatigability.....	6
Keeping in motion..... vs	Pausing for rest.....	4
Production; efficiency... vs	Low production, ineffi-.. ciency	4
Liking for speed..... vs	Liking for slow pace.....	3
Hurrying..... vs	Taking time.....	2
Quickness of action..... vs	Slowness of action.....	2
Enthusiasm; liveliness.....		2

<u>Positive Qualities</u>	<u>Negative Qualities</u>	<u>Number of items</u>
---------------------------	---------------------------	------------------------

R - Restraint (opposite of former trait of rathymia)

Serious-mindedness.....		8
..... vs Happy-go-lucky; carefree..		5
Deliberate..... vs Impulsive.....		5
..... vs Excitement-loving.....		5
Persistent effort.....		3
Self-control.....		3

A - Ascendance

Self defense..... vs Submissiveness.....		9
Leadership habits..... vs Habits of following.....		7
Speaking with indivi-.... vs Hesitation to speaking....		5
duals		
Speaking in public..... vs Hesitation to speaking....		2
Persuading others.....		2
Being conspicuous..... vs Avoiding conspicuousness..		2
Bluffing.....		2

S - Sociability (formerly called "social extraversion,"
opposite "social introversion" or shyness)

Having many friends and.. vs Few friends and acquaint-.		9
acquaintances	ances	
Entering into conversa-.. vs Refraining from conver-...		6
tions	tions	
Liking social activi-.... vs Disliking social activi-..		5
ties	ties	
Seeking social contacts.. vs Avoiding social contacts..		5
.....	Shyness.....	3
Seeking limelight..... vs Avoiding limelight.....		2

M - Masculinity

Interest in masculine.... vs Interest in feminine.....		7
activities and	activities and	
vocations	vocations	
Not easily disgusted..... vs Easily disgusted.....		5
Hardboiled..... vs Sympathetic.....		4
Resistant to fear..... vs Fearful.....		3
.....	Romantic interests.....	3

<u>Positive Qualities</u>	<u>Negative Qualities</u>	<u>Number of items</u>
Inhibition of emotional.. vs expressions	Emotional expres-..... siveness	3
Little interest in..... vs clothes and styles	Much interest in..... clothes and styles	2
.....	Dislike of vermin.....	2

APPENDIX B

A list of the items on the Purdue Rating Scale for Instruction, with those items deleted from calculations of total rating score indicated by an asterisk.

Mean rating on each item for the superior-teacher group and the inferior-teacher group and differences between the means on each item.

Descriptive statistical data from the Purdue Rating Scale for Instruction for the superior-teacher group and the inferior-teacher group.

PURDUE RATING SCALE FOR INSTRUCTION

Item No.

1. Interest in subject.
2. Sympathetic attitude toward students.
3. Fairness in grading.
4. Liberal and progressive attitude.
5. Presentation of subject matter.
6. Sense of proportion and humor.
7. Self-reliance and confidence.
8. Personal peculiarities.
9. Personal appearance.
10. Stimulating intellectual curiosity.
11. Suitability of the method or methods by which subject matter of the course is presented (recitation, lecture, laboratory, etc.).
- *12. Suitability of the size of the class (consider the subject matter and type of class-lecture, laboratory, etc.).
13. The degree to which the objectives of the course were clarified and discussed.
14. The agreement between the announced objectives of the course and what was actually taught.
15. Suitability of the reference materials available for the course.
- *16. Suitability of the laboratory facilities available for the course.
17. Suitability of the assigned textbook.
18. The use made of tests as aids to learning.
19. Amount of freedom allowed students in the selection of the materials to be studied (considering the subject matter).
- *20. How the course is fulfilling your needs (consider your ultimate as well as your immediate goals).
- *21. Range of ability in the class (are there too many extremely dull or extremely bright students?).
22. Suitability of the amount and type of assigned outside work.
23. The weight given to tests in determining the final grade for the course.

24. Coordination of the tests with the major objectives of the course.
25. Frequency of tests.
- *26. The overall rating of the instructor.

<u>PRSI Item No.</u>	<u>Mean Rating Upper 26%</u>	<u>Mean Rating Lower 26%</u>	<u>Difference</u>
1	94.16	82.42	11.74
2	87.44	78.05	9.39
3	88.81	78.64	10.17
4	86.36	77.17	9.19
5	86.93	60.87	26.06
6	88.78	72.28	16.50
7	91.48	80.07	11.41
8	85.93	70.91	15.02
9	92.47	85.96	6.51
10	85.15	65.69	19.46
11*	41.80	31.20	10.60
13	41.47	31.42	10.05
14	44.41	32.17	12.24
15	37.96	36.81	1.09
17	40.31	33.14	7.17
18	40.51	29.01	11.50
19	35.38	32.95	2.43
22	40.68	33.20	7.48
23	38.99	33.51	5.48
24	42.89	30.67	12.22
25	36.95	32.05	4.90

*Beginning with item 11, the rating is on a five-point scale instead of the ten-point scale which is used for items 1 through 10.

A mean and standard deviation of the distribution of differences for items 1 through 10 and for items 11 through 25 were computed so that the difference for any given item might be evaluated in terms of the normal curve.

For items 1 - 10: M = 12.53, s.d. = 5.59

For items 11 - 25: M = 7.74, s.d. = 3.74

On this basis, item 5 is a highly differentiating item since it represents a difference of more than 2 s.d. above the mean difference.

SUPERIOR TEACHERS

INFERIOR TEACHERS

<u>Subject Number</u>	<u>Mean Rating PRSI</u>	<u>Subject Number</u>	<u>Mean Rating PRSI</u>
15	66.65	14	54.58
19	61.31	17	49.78
23	61.88	18	46.12
28	62.10	20	51.86
38	63.21	22	49.74
39	62.53	34	53.63
44	63.33	35	55.20
49	66.11	58	45.95
59	64.84	65	56.24
63	62.42	68	60.30
73	62.83	75	56.27
74	64.09	86	55.59
87	61.35	88	55.40

Mean Rating for Superior Teachers = 63.28*

Mean Rating for Inferior Teachers = 53.13*

Mean Number of Student Ratings Per Teacher for Superior Teachers = 24.38**

Mean Number of Student Ratings Per Teacher for Inferior Teachers = 21.92**

* The difference between the mean ratings on the PRSI for the two groups is significant beyond the .01 level of confidence.

** The difference between the mean number of student ratings per teacher for the two groups is not statistically significant.

VITA

Kenneth Eldon Sorey

Candidate for the Degree of

Doctor of Education

Thesis: A STUDY OF THE DISTINGUISHING PERSONALITY CHARACTERISTICS OF COLLEGE FACULTY WHO ARE SUPERIOR IN REGARD TO THE TEACHING FUNCTION

Major Field: Student Personnel and Guidance

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