

To the Graduate Council:

I am submitting herewith a thesis written by Edwin Rice Barnett entitled "Characteristics of Graduate Student Instructors as Related to Students' Judgments of Their Competence." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

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CHARACTERISTICS OF GRADUATE STUDENT INSTRUCTORS
AS RELATED TO STUDENTS' JUDGMENTS OF THEIR COMPETENCE

A Thesis
Presented to
the Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts,
with a major in Psychology

by
Edwin Rice Barnett

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ABSTRACT

The present study seeks primarily to determine if there is a congruence between the perceived similarity of a student to his instructor and the student's judgment of the instructor's competence. To test this hypothesis, an Interpersonal Checklist, consisting of 160 adjectives, was devised and administered to two sets of 50 students during a period of six months. Three instructional sets were utilized with a five-point Likert response system in conjunction with the checklist. One instructional set asked the student to describe his instructor, another asked for a judgment of the extent to which the student thought himself similar to his instructor, and another set asked for a judgment of the extent to which the student thought himself similar to his own father. Also administered was the Student Reaction to Instruction Form LRC-4--a reputable measure of a teacher's effectiveness as judged by students. The results were as follows:

1. The question of whether a relationship exists between the perceived similarity of a student to his instructor and the student's judgment of the instructor's competence was left unresolved. Possible reasons for this phenomenon were discussed.

2. Ten item variables of the Interpersonal Checklist that correlated most highly with the SRI scores for Study One were written in a ten-step multiple regression

equation. The Likert values for the ten selected item variables of the Interpersonal Checklist for Study Two were fed into the equation to test its efficacy in predicting SRI scores of Study Two. This regression equation was largely ineffective for predicting, in individual cases, criterion scores of teaching effectiveness. A validity coefficient of .57 was produced.

3. A list of adjectives whose Likert values correlated .30 or more with the SRI scores for both Study One and Study Two were presented in a list as exemplifying those terms which best describe teachers described as effective by their students. These terms are very similar to those delineated by earlier studies of teacher effectiveness.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. LITERATURE REVIEW.	3
Previous Research.	3
Idealized Formulations	3
Studies Using Data from Groups	4
Studies of Teachers of Known Distinction	6
The Criterion Problem	11
Statement of the Problem	17
III. METHODOLOGY	19
Instruments	19
Study One.	20
Subjects	20
Procedure.	21
Analysis of Data	23
Study Two	24
Subjects	24
Procedure.	25
Analysis of Data	25
IV. DISCUSSION AND SUMMARY	29
BIBLIOGRAPHY	34
APPENDICES	38
A. FORMS	39
B. TABLES	47
VITA	72

LIST OF TABLES

TABLE		PAGE
I.	Comparison of Demographic Variables, Age and Sex, For First Sample (N = 50) and Second Sample (N = 50)	25
II.	Correlations of Criterion Scores (SRI) With Father Similarity Scores and Teacher Similarity Scores For Study One	27
III.	Criterion Scores (SRI), Father Similarity Scores, and Teacher Similarity Scores For Students in Study One (A, B, C, D, E, Represent Instructors)	47
IV.	Correlations of the SRI Scores With the One-to-Five Likert Values For the 160-Item Variables of the Interpersonal Checklist For Study One	50
V.	Correlations of the SRI Scores With the One-to-Five Likert Values For the 160-Item Variables of the Interpersonal Checklist For Study Two	58
VI.	Terms in Stepwise Multiple Regression Equation* With Multiple R, R, Square, RSP Change, Simple R, B, and Beta	66
VII.	Observed SRI Scores of Sample Two and Values From Stepwise Multiple Regression Equation: (F, G, H, I, J Represent Instructors)	67

TABLE

PAGE

VIII.	List of 34 Adjectives From the Inter-	
	Personal Checklist That Correlate With	
	SRI Scores At Least .30 For Both Sample	
	One and Sample Two	70

CHAPTER I

INTRODUCTION

That there exist relationships between a student's perception of his instructor and the student's opinion of his competence as a teacher is a well-accepted fact. Numerous studies have been undertaken in the area of personality dynamics (as related to teacher effectiveness), most of these employing already existing personality inventories, notably the Minnesota Multiphasic Personality Inventory (MMPI), the Sixteen P-F Test, and the Guilford-Zimmerman Temperament Survey. Hence, we find Cook (1955) reporting relationships between Minnesota Teacher Attitude Inventory scores and scores on several scales of the MMPI; Blair (1946) measuring personality adjustments of teachers, using the multiple choice Rorschach Test; and Ohlsen et al., (1955) differentiating projective test response patterns for best and poorest student teachers. Despite the adequate methodology and good experimental design of these exhaustive researches, the question arises as to the validity of the instruments for measuring attitudes for which they were not constructed nor were ever meant to measure. Cook's study (1955) used the MMPI, an instrument standardized on an adult population of mental patients, hardly a group comparable to his group of college instructors. While it would be unfair to denounce these studies as worthless, there is something

to be said for the issue of relevance and simplicity of style in research of this nature.

Perhaps this issue can best be illustrated by referral to a research study of Gough and Pemberton (1952). They delineated eight MMPI "signs" or configurations predictive of success in practice teaching--for example, $Ma \geq 48, \leq 60$ and $Pd \geq 46, \leq 58$. The author suggests that the effort required in establishing MMPI criteria for purposes of predicting teaching success may be useful in a very limited sense. That is, the effort required to score and formulate signs of predictive accuracy is more than most educators would find desirable, or worthwhile in terms of time and effort required.

Before the author proposes his own methodology for exploring the relationship between a student's perception of his instructor's personality characteristics and his judgment of his competence as an instructor, Chapter II, entitled "Literature Review," is inserted herein.

CHAPTER II

LITERATURE REVIEW

I. PREVIOUS RESEARCH

Efforts into the problem of teacher effectiveness can be divided into three categories. First, there are idealized formulations of what the qualifications and functions of college professors should be. The second category refers to studies attempting to obtain empirical data from different groups on what attributes are most admired or believed to be most effective in college teachers. The studies of the third category have to do with the attributes of teachers of known or acknowledged distinction. Several studies of each type will now be summarized.

Idealized Formulations

Idealized formulations or hypotheses concerning the attributes professors should have to be effective teachers are of little worth for this thesis, as these "studies" are not empirical endeavors. They are clinical, intuitive guesses about human nature. Intuitive speculation is not within the realm of pure science and research, but may serve as a generator of hypotheses, whose validity may then be tested by the scientific method.

Studies Using Data From Groups

One of the earliest studies of teacher effectiveness was reported by R. J. Clinton in 1930. He listed in descending order of importance 18 qualities attributed by students to the ideal college professor. Of these 18 qualities, the four most frequently mentioned--"fairness," "interest in students," "pleasing personality," and "humor"--all pertain to social, interpersonal qualities. "Mastery of subject" was ranked fifth in importance, while such qualities as "keenness of intellect" and "wide range of information" rank very far down the list. Bousfield (1940), using a similar approach, found that the order of attributes appeared to have shifted somewhat, in that "mastery of subject" was not placed in the second position, with "organization of material" fourth, and "a clear exposition" in fifth place. However, "fairness" still occupied the most prestigious position, "interestingness of delivery" third, and "interest in students and helpfulness" seventh. As both studies were based upon relatively small numbers of cases and were confined to particular educational institutions, no general conclusions can be drawn except perhaps the great importance attached by students to the personal qualities of their professors. A third study, by Trabue (1950) attempted to summarize the attitudes of 419 presidents of liberal arts colleges concerning the ideal qualifications

of faculty for instructing in the first and second years of college. Through the courtesy of the Executive Director of the Association of American Colleges, two copies of a printed schedule were mailed in 1949 to the presidents of each of the 653 liberal arts colleges belonging to that organization; of these, 419 schedules were completed and returned. The 52 items listed in the printed schedule had been carefully selected from previously published reports regarding the qualifications which various studies had indicated that college instructors "ought to have." The first ten items in the list were concerned with the college teacher "as a scholar." The next 11 items had reference to the teacher "as an instructor." These were followed by eight items regarding the teacher "as a faculty member"; seven, "as a person;" and ten, "as a citizen." Each college executive was instructed to check each trait to show how much weight he usually gives to it "when evidences of it appear in the credentials of an applicant for a position as instructor or assistant professor to teach lower-division college classes." The presidents were told to check each item in one of three columns: (1) highly important, (2) important, and (3) unimportant or undesirable. From these 52 items were culled the 15 deemed as "highly important" by these college presidents. This research tends to emphasize not intellectual distinction and attainment but rather social skills and organizational competency. Hence,

"encouragement of individual thought," "emotional stability," "friendliness," "tolerance," and "sympathy with problems of college students" are all ranked in top positions. Among these college presidents, furthermore, there is a preference for the kind of instructor who identifies himself chiefly as a college teacher rather than as a specialist in a particular subject field. It is interesting to note that among the 15 desirable attributes listed, there was no allusion to high scholarly attainment. It would appear then that the majority of the college presidents esteem the character-developing functions of the college professor over his research functions. A later study, which appears to be the most recent, was undertaken by Eble at the University of California, David Campus (1972). From a selected sampling of student opinion, these eight qualities emerged as the most important: (1) is a dynamic and energetic person, (2) explains clearly, (3) has an interesting style of presentation, (4) seems to enjoy teaching, (5) has a genuine interest in students, (6) is friendly toward students, (7) encourages class discussion, and (8) discusses points of view other than his own.

Studies of Teachers of Known Distinction

The studies of the third category have to do with the attributes of teachers of known or acknowledged distinction. Kelly's study of "great" teachers is perhaps the most

illuminating (Kelly, 1929). Here we find that the teachers rated as "great" were primarily characterized by interest in students--"sympathy," "enthusiam," and similar qualities. "Knowledge and mastery of the subject matter" ranked third, while "intellectual breadth" and "industry" were, respectively, eleventh and twelfth. Again it would appear that the qualities esteemed in the college professor are primarily related to his personality, and only secondarily related to his intellectual distinction and capabilities.

Ryans' classic research (1967) on teacher effectiveness found three prominent patterns of observable classroom behavior or behaving styles: "Pattern X--friendly, understanding, sympathetic teacher behavior; Pattern Y--responsible, businesslike, systematic teacher behavior; and Pattern Z--stimulating, imaginative teacher behavior. Mitzel (1960) added, however, that "more than a half-century of research effort has not yielded meaningful, measurable criteria around which the majority of the nation's educators can rally. No standards exist which are commonly agreed upon as the criteria of teacher effectiveness" (1960, p. 182).

Despite the lack of agreement on a set of standards which could be used as the criteria of effectiveness for all teachers in all fields, there is excellent agreement among students, and between faculty and students, about the effectiveness of given teachers. The Center for Research

and Development in Higher Education, which conducted a study of University teaching for the Davis Campus, University of California, disclosed this important finding (Hildebrand and Wilson, 1970). In this monumental study, spanning a period of four years, four surveys were conducted: 338 students described the teaching of instructors they regarded as their best and worst instructors; 119 members of the faculty described the teaching of colleagues they regarded as best and worst instructors; 162 members of the faculty described the ways they distributed their time among various academic pursuits; and 1,115 students independently described the teaching of instructors previously rated by other students and/or faculty as to effectiveness of teaching.

The major findings of this study were as follows:

(1) best and worst teachers engage in the same professional activities and allocate their time among academic pursuits in about the same ways. That is, the mere performance of activities associated with teaching does not assure that the instruction is effective. (2) 85 items were listed that characterized best teachers as perceived by students, and 54 items were listed that characterized best teachers as perceived by colleagues. All items statistically discriminated best from worst teachers with a high level of significance. The student evaluations are of principal interest here: scales for student characterization of

effective teaching were established by factor analysis of 91 items describing the teaching of 338 best teachers as identified by respondents to the 1967 survey. (The method was a principle components analysis with a varimax rotation.) After several analyses, a five-factor solution was selected as giving the maximum number of distinct and interpretable components of effective teaching. Hildebrand's conceptual interpretations were as follows: Scale 1, Analytic/Synthetic Approach, (i.e., scholarship, with emphasis on breadth, analytic ability, and conceptual understanding); Scale 2, Organization/Clarity, (i.e., skill at presentation, but not merely rhetorical skill); Scale 3, Instructor-Group Interaction, (i.e., rapport with the class as a whole, sensitivity to class response, and skill at securing active class participation); Scale 4, Instructor-Individual Student Interaction, (i.e., mutual respect and rapport between the instructor and the individual student); and Scale 5, Dynamism/Enthusiasm, (i.e., the flare and infectious enthusiasm that comes with confidence and excitement for the subject, and pleasure in teaching). Responses describing the performance of worst teachers were also factor analyzed, but the results did not provide readily interpretable scales. Also, the items showed less consistent relationships than they did for best teachers. In short, ineffective teachers were characterized most accurately by their lack of attributes associated with effective teaching,

rather than by possession of attributes of poor teaching. Scales for the characterization of effective teachers by colleagues (prepared by factor analysis of 67 items describing the behavior of 84 best teachers identified by 119 faculty members) were as follows: research activity and recognition, intellectual breadth, participation in the academic community, relations with students, and concern for teaching. The only discernable or important difference between students' evaluations of their professors and colleagues' evaluations can be seen by a comparison of the two lists of attributes. The lists are almost identical, but there was one class of items that appeared to differentiate students' evaluations from colleagues' evaluations; that is, the professors' colleagues tended to value more highly values such as "mastery of subject" and "intellectual acumen" than did students.

The Purdue Rating Scale for Instruction was initially developed in 1926, and intensive research has accompanied its various refinements. This research, in essence, concludes: "A third of a century of use . . . have (sic) demonstrated that student evaluation is a useful, convenient, reliable and valid means of self-supervision and self-improvement for the teacher (Remmers and Weisbrodt, 1965). As for validity, McKeachie (1969) has written that ". . . student ratings do have some validity. Teachers rated as

effective by students tend to be those teachers whose students learn most."

I. THE CRITERION PROBLEM

It has not been uncommon for student evaluation of teaching to be criticized on the grounds that (1) student ratings tend to be capricious, (2) students are uninformed about issues of evaluation, (3) since teaching is an art, quantitative evaluations are worthless, or (4) teaching quality cannot be measured independently of the subject matter.

There is now research evidence to refute most of these criticisms. As for the charge that student evaluations are capricious, data collected by Gerald H. Whitlock (1967) tend to refute it. As one of a series of researches on judgmental processes, the evaluative responses of students to teaching stimuli (specific things an instructor did) were investigated as a function of the "strength" of the stimulus. The first step, however, was to discover precisely what the student observes being done by the teacher that causes the student to evaluate that teacher's performance in a particular way, (i.e., "excellent" instead of "average"). To be brief, it was discovered that, on the average, students' judgments, that is, their ratings of teacher effectiveness, are a consistent and predictable function of the relative number of specimens of effective and ineffective performance

they had observed. The equation expressing the judgmental response magnitude in terms of the stimulus magnitude (their observations) was discovered to be a power function ($R = XS^n$), an equation applicable to a wide variety of perceptual and judgmental continua.

Students are not so uninformed about teaching that their judgments of teaching effectiveness are worthless. The finalists in the competition for the annual Outstanding Teacher Award on the University of Tennessee Campus must be nominated by each of three groups: faculty, alumni, and students. These finalists were then rated by their students on a teacher performance specimen checklist, all specimens of which had been obtained from a sample of students. Of the 56 items on the checklist, 49 were checked as more favorable for the candidates for the Outstanding Teacher Award than for an unselected sample of professors. Hence, students can differentiate between top-rated teachers--by students, alumni, and faculty--and an unselected sample of teachers. This same checklist of 56 items, after further refinements and research by Douglass (1968), was published as Form LRC-4. The Student Reaction to Instruction is now widely used as an instrument for self-evaluation and student evaluation at the University of Tennessee (Appendix A).

Further evidence has accumulated which suggests that students know when they are learning, and can identify those teacher practices (i.e., performance specimens) that are

productive or preventive of learning. In a thesis by Douglass (1968), a specimen checklist was administered to students in classes that were taught by different instructors but who used identical final exams. (Some of these items were included in Form LRC-4.) In those cases where the classes differed significantly on the final exam, they also differed significantly in the average ratings the students gave the professor and in the expected direction. Also, where the classes did not differ significantly on the final exam, neither did the students' ratings of the teacher. Students know when they are learning and when they are not learning; furthermore, they know precisely which teacher behaviors produce or prevent learning. All evidence considered, the Student Reaction to Instruction has proven itself to be a reputable means for evaluating instruction.

Recent evidence (Rodin and Rodin, 1973), however, has indicated that students tend to rate most highly those instructors from whom they learn least. The argument for using student evaluation forms is that this is an effective shortcut method of evaluating learning in the classroom. A criticism often leveled against the subjective criterion is that a student's evaluation of his instructor might depend upon the grades he receives from that instructor--hence, subjective evaluations may not be close approximations to objective evaluations of teacher effectiveness. Data collected by Remmers at Purdue University (1928), which

supposedly demonstrated that grades do not influence student ratings of instructors, have been extensively cited; however, the data do not support this conclusion. Ratings of 11 instructors were obtained from 409 students in the top half of the class. They were also asked to mark an "X" on their rating sheets. A biserial correlation between grades and ratings was then computed. Remmers found correlations for individual traits of individual instructors varying from $-.86$ to $+.89$. He concluded that there was practically no relationship between the student's grades and his judgment of the instructor. A closer look at the data seems to indicate that there is some relationship between grades and evaluations, although the direction and the extent of this relationship vary from one instructor to the next.

Two direct attempts to measure the correlation between objective and subjective criteria were made by Remmers (1949) and Elliot (1950). The results of these two experiments do not justify the conclusion that there is a positive relationship between objective and subjective criteria, for in both cases the observed correlations of $+.27$ and $+.24$ are not significantly different from zero. Both studies were inadequate in that there were no accurate measures of how much a student has learned. The experiment by Rodin and Rodin differs from all other studies of this nature in that the objective criterion has been more carefully defined and controlled.

In this study, the instructors were teaching assistants in a large undergraduate calculus course with an enrollment of 300 students. The course content was defined by 40 paradigm problems. Comprehension of a problem was tested with a specific problem, and if the student missed that problem, he was allowed to take variants of it (up to six times) until he passed. Also, all the students received a uniform sequence of variants constructed by the professor. Grading was done by the teaching assistants, as follows: if there was any error, the entire problem was scored as a miss. The final grade was determined by the number of problems passed. The number of attempts needed to pass a problem had no effect on the grade.

Three measures were obtained for each of the 12 sections: initial ability in calculus, amount learned by the students, and student evaluation of the instructor. As these data were collected in the third quarter of the course, a measure of the students' initial ability was available from their previous performance. Each section was assigned an initial ability score based on the mean grade obtained by the students in that section in the preceding quarter. The amount learned in each section in the current quarter was defined by the mean grade obtained in that section. The instructor for each section received a student evaluation score based on the mean rating given him by students in that section. These (anonymous) student evaluations of instructors

were made during a large lecture session at the end of the quarter. The evaluation procedure involved the students giving letter grades (A, B, C, D, F) to his "total teaching performance." These letter grades were then transformed numerically in the usual way ($A = 4$, $B = 3$, and so on). In preference to a simple correlation between the objective and subjective measures of teaching effectiveness, a partial correlation between the two measures was obtained. This statistic "partials out" the effect due to initial ability, or in effect, describes the relation between amount learned from the instructor and student rating of the instructor, with initial ability held constant. The partial correlation between the objective and subjective measures of teaching ability, with initial ability held constant, was $-.746$. The ordinary Pearson correlation between the two measures was $-.754$. A correlation in the vicinity of $.7$ accounts for about one-half of the variance in student evaluation of their teachers. The residual variance can probably be explained by the fact that student evaluations, to a very great degree, reflect the personal and social qualities of an instructor.

It is not easy to explain the discrepant results of Douglass and Rodin. The Rodin study appears to be the more rigorously done, and should not be taken lightly.

In any event, the evidence, presented by Douglass (1968), suggests that students are capable of specifying those teacher behaviors that are productive of learning,

regardless of their evaluations of that teacher.

III. STATEMENT OF THE PROBLEM

The chief conclusion to be reached is that students are capable of making meaningful statements and judgments of their teacher's competence. A secondary conclusion is that students' opinions of their professors can vary widely--so widely, in fact, that the widespread use of questionnaires and checklists is justified. As we have seen, the research thus far reviewed has dealt with what one might term, for lack of a better descriptor, objective data. The question--that is, what terms can be formulated that describe instructors who have proven their competence in teaching--has been operationalized and tested empirically.

Rarely, though, has any strictly phenomenological study of this issue been undertaken. The chief thrust of this research is to determine if there exists a congruence between the perceived similarity of a student to his instructor (the phenomenological aspect) and an objective measure of teaching performance. The experimenter, being aware of the pitfalls of research of this nature, asked the subjects to describe their perceived similarity to another individual, producing an interesting but somewhat expected result. These same students were asked to describe their instructors on an adjective checklist and the data from that were correlated against the objective measure of teaching performance, producing an updated, global description of the

effective professor. Other, less important, issues are discussed in some detail.

CHAPTER III

METHODOLOGY

I. INSTRUMENTS

There were basically two instruments used in the present study. The first was an instrument developed by the author and hereafter known as the Interpersonal Checklist, with accompanying face sheet (Appendix A). Development of this instrument began in the spring quarter of 1972. The end result was a 160-item checklist containing adjectives. The adjectives were culled from a list of 600 items used in tests constructed by Harrison and Gough (1958); Lorr, McNair, and Droppleman (1971); Borgatta (1961); Clyde (1963); Nowlis and Green (1957); and Zuckerman (1960). Six judges, all clinical psychology graduate students, were asked to sort, independently of one another, the 600 items printed on three-inch by five-inch index cards, into three categories: (1) descriptive of introversive, withdrawn behavior, (2) neutral category, and (3) descriptive of extroversive, interpersonal behavior. The judges were asked to work quickly but accurately. When each judge had declared that he had finished the task, the examiner counted the number of items placed in the neutral category and if this number exceeded 50, the judge was asked to shuffle through this stack of cards, make another reassessment, and sort that excess of

50 cards into one of the two remaining categories, leaving precisely 50 items in the neutral category. The criteria for inclusion in the Interpersonal Checklist were as follows: (1) placement of an item in category three, descriptive of extroversive, interpersonal behavior, by at least four judges, and (2) placement in category one, descriptive of introversive, withdrawn behavior, by not more than two judges. These criteria were conjunctive. This procedure yielded 178 items, of which 18 were discarded by the author because they, in his opinion, did not seem to fit neatly into this third category. Preceding this list of 160 items was a face sheet with three instructional sets and spaces for biographical and demographic information (Appendix A).

Other instrumentation included the SRI-Form LRC-4 and scan sheets with 160 five-scale Likert response spaces (Appendix A).

II. STUDY ONE

Subjects

A total of 50 students and five instructors was employed in the first study. A sampling of instructors was taken in the following manner: the investigator visited the heads of five liberal arts programs and asked for a listing of professors teaching day and night classes. Only those classes with enrollments of 25 to 30 students were

employed. Each professor was assured that anonymity would be strictly maintained. Each class member was asked to count off, and a pre-selected series of ten numbers was read off by the investigator. Those students that had been assigned that number were asked to participate in the study.

Procedure

A form of the SRI-Form LRC-4, one copy of the Interpersonal Checklist with accompanying face sheet, and three scan sheets with 160 five-scale Likert response spaces were distributed to each of the students. The following was read to the students: "This is a study to determine what students think of their teachers. Before I tell you what I want you to do, let me assure you that none of your responses to these questionnaires will be reviewed by your instructor, so please answer all the items as frankly as possible. Now, look at the form, Student Reaction to Instruction, read the directions, and fill out the form." After a suitable period of time, the examiner said, "Now look at the sheet which asks for your Social Security Number and other information and fill out this form." When this had been finished, the examiner stated: "Now read the first set of instructions. Let's read them together, shall we: Here is a list of words that describe how people act toward other people. Please read each word carefully. Then fill in the one space on the answer sheet that best describes your present instructor,

since you have known him in this classroom situation. Look at each adjective or phrase, decide to what degree it is descriptive of your instructor, and record your answer on the answer sheet. The numbers on the scan sheet refer to these phrases: (1) not at all, (2) a little, (3) moderately, (4) quite a bit, and (5) extremely." Please write your responses on the scan sheet, making sure that you do not leave any spaces blank."

When the first scan sheet had been completed, the examiner said: "Now look at the second set of instructions on the face sheet." Thereupon, the examiner read that set of instructions to the class: "Here is a list of adjectives which describe ways people are similar to other people. Please read each item carefully, and decide to what extent you are similar to your present instructor. Please be certain you have marked all items on the answer sheet. Your choices are: (1) not at all similar to my instructor, (2) a little similar, (3) neither similar nor dissimilar, (4) quite similar to my instructor, and (5) very similar to my instructor."

Thereupon the examiner read the third set of instructions to the class: "Here is a list of adjectives which describe ways people are similar to other people. Please read each item carefully, and decide to what extent you are similar to your father. Please be certain you have marked all items on the answer sheet. Your choices are: (1) not

at all similar to my father, (2) a little similar, (3) neither similar nor dissimilar, (4) quite similar to my father, and (5) very similar to my father."

It took approximately 30 minutes to complete all forms. Collection of data took place toward the end of the summer quarter of 1972. The timing of data collection was crucial, as it was necessary that the student have had time to form an opinion of the instructor's competence and have some feel for the instructor's personality.

Analysis of Data

The ratio of the number of effective performance (E) on the SRI-Form LRC-4 checked to the number of specimens of ineffective performance (I) was the method of scoring, as prescribed in the SRI manual. If, for example, the number of effective performances was 36 and the number of ineffective performances was seven, the score was $36/7$, or 5.14 (rounding to the nearest hundredth). If no E's were checked, the value of one was assigned to the numerator of the ratio; thus, a form with no E's checked and six I's checked yielded a score of one-sixth, or .17. If no I's were checked, a value of one was assigned to the denominator of the ratio; thus, a form with 14 E's checked and no I's checked yielded a score of 14.0.

After all data had been collected, the SRI scores were calculated ($\frac{E}{I}$) for each student. A simple summing of the

values for the "Similarity to Teacher" scan form and the "Similarity to Father" scan form were calculated and the correlations were computed. In addition, the correlations of each item variable of the Interpersonal Checklist with the criterion SRI scores were calculated over all subjects, producing 160 correlation coefficients. The next step was to devise a method that could predict teaching success by some linear combination of variables. To accomplish this, ten item variables from the Interpersonal Checklist that had been found to correlate most highly with the SRI criterion scores were isolated for further study. A step-wise multiple regression equation using these items was written which would hopefully predict SRI criterion values for independently selected samples of students.

The computer program for data analysis was the Statistical Package for the Social Science, often known as simply SPSS.

III. STUDY TWO

Subjects

Two weeks before the end of spring quarter of 1973 in May, another sample of 50 students, roughly equivalent with respect to age and sex with the first sample of the previous year, was tested for purposes of cross-validation. A comparison of the demographic variables of the two samples was made (Table I).

TABLE I
COMPARISON OF DEMOGRAPHIC VARIABLES, AGE AND SEX,
FOR FIRST SAMPLE (N = 50) AND
SECOND SAMPLE (N = 50)

	First Sample	Second Sample
Mean Age	18.2*	18.4*
Number of Male Students	30	32
Number of Female Students	20	18

*Values are rounded to the nearest tenth.

Procedure

The procedure utilized for recruitment of subjects, explanations as to what was to be done, and so on, were the same as those for the first sample of 50 students--except that the "Father Similarity" and "Teacher Similarity" forms were not distributed. That is, the students of this sample were instructed to describe their instructors with the five-point Likert scale of the Interpersonal Checklist, to fill out the accompanying scan sheet, and to describe his effectiveness by means of the SRI-Form LRC-4.

Analysis of Data

As with the first sample of students, the SRI forms were graded. In addition, the correlations of each item

variable of the Interpersonal Checklist with the criterion of SRI scores were calculated over all subjects, producing 160 correlation coefficients. In addition, the individual one-to-five Likert values (of Sample Two) for the ten items isolated for study from Sample One were fed into the multiple regression equation to determine if those values matched, or were approximately equal to, the actual criterion scores of effective teaching of Study Two.

Table II shows the correlations of the criterion scores (SRI) with "Father Similarity" scores and "Teacher Similarity" scores for Study One. Note that all the correlation coefficients are at the .001 level of significance.

Table III (Appendix B) shows the SRI scores, "Father Similarity" scores, and "Teacher Similarity" scores for a sampling of 50 students from five classes taught by five professors for Study One.

Table IV (Appendix B) shows the correlations of the SRI scores with the one-to-five Likert values for the 160-item variables of the Interpersonal Checklist for Study One. These values ranged from -0.55 ("dull") to 0.70 ("praising").

Table V (Appendix B) lists the correlations of the SRI scores with the one-to-five Likert values for the 160-item variables of the Interpersonal Checklist for Study Two. These values ranged from -.058 ("peculiar") to 0.72 ("likeable").

TABLE II
CORRELATIONS OF CRITERION SCORES (SRI) WITH
FATHER SIMILARITY SCORES AND TEACHER
SIMILARITY SCORES FOR STUDY ONE

	Criterion	Father Similarity
Criterion		
Father Similarity	.7865*	
Teacher Similarity	.8043*	.9365*

*Denotes significance at the .001 level.

The next step was to devise a method that could predict teaching success by some linear combination of variables. To accomplish this, the ten-item variables of the Interpersonal Checklist that correlated most highly with the SRI scores for Study One were isolated for further study as shown in Table VI (Appendix B). These variables, ten in number, were: variable 100, praising; variable 32, good-natured; variable 150, witty; variable 20, likeable; variable 44, agreeable; variable 33, versatile; variable 111, imaginative; variable 71, respected; variable 21, cheerful; and variable 56, kindly.

A step wise multiple regression equation was written using these item variables of the Interpersonal Checklist

from Study One. It is summarized as follows (rounding off to three decimal places): criterion = variable 100 x 3.482 + variable 32 x 2.201 - variable 155 x 2.447 - variable 20 x 2.012 - variable 44 x 1.773 + variable 33 x 1.090 - variable 111 x .910 + variable 71 x 1.545 - variable 21 x .941 - variable 56 x .561 - 14.796.

Thereupon the Likert values for the ten selected item variables of the Interpersonal Checklist for Sample Two were fed into the regression equation. Table VII (Appendix B) presents a comparison of the observed criterion SRI scores of Sample Two with the calculated regression values. A glance at this table indicates that only in a few instances do the observed criterion scores match or approximate closely the calculated regression values. More will be said of this in the following chapter.

Table VIII (Appendix B) shows a listing of attributes descriptive of effective teachers. This criterion was employed to cull out items: if the correlation between the value of the one-to-five Likert scale correlated .30 or more with the SRI scores for both Study One and Study Two, the item was included in the list. Use of this criterion produced 34 items.

CHAPTER IV

DISCUSSION AND SUMMARY

Before any serious discussion of the implications of this study is undertaken, it is important that the "control" measure employed--the "Father Similarity" scores and "Teacher Similarity" scores of Table IV--be looked at closely. The extremely high correlation between the "Teacher Similarity" scores and the "Father Similarity" scores of Study One ($r = .94$) corroborates the existence of a phenomenon Mischel (1968) has termed stimulus generalization, a response set frequently biasing paper and pencil research. That is, since stereotyped, highly generalized verbal descriptions about personality traits tend to be reinforced pervasively in our culture, subtle discriminations in answers to trait questionnaires should not be expected. A much more stinging exposition of this phenomenon has been made by Mischel (1956), who has called such trait descriptions "personality description after the manner of P. T. Barnum." Mischel is correct in pointing out that clinicians are wont to make inferences from trait questionnaires which may carry high confidence because of high population base rates, regardless of the test's validity.

Considering the significant correlation between the "Father Similarity" scores and the SRI scores for Study One ($r = .79$) and the correlation between the "Teacher Similarity" scores and the SRI scores for Study One ($r = .80$), one should

proceed with extreme caution in making any generalizations concerning the extent to which a student sees himself similar to his instructor and his judgment of that teacher's effectiveness. The strong positive Pearsonian relationships thus described do not necessarily indicate that students' perceptions of their teachers are affected by their perceptions of their fathers. However, they do suggest that stimulus generalization is operative here. One would feel more secure in making the statement that a student's perceived similarity to his instructor was related (in the hypothesized direction) to his judgment of that teacher's effectiveness only if (1) the correlation between the "Father Similarity" scores and the SRI scores was negative, or negligibly positive, and also if (2) the correlation between the "Teacher Similarity" scores and the SRI scores was quite high. Furthermore, note that the "Teacher Similarity" scores and "Father Similarity" scores correlate highly ($r = .94$), further confusing the issues.

Nevertheless, the wise clinician, an assiduous follower of Mischel and Meehl, a close associate, would point out that the correlation coefficients thus quoted are themselves meaningless. Since subtle discriminations to global terms, such as appear on the Interpersonal Checklist, cannot be expected, statistical operations on their values cannot communicate anything except further trivia. Thus the question--whether or not a student's perceived similarity to his instructor's related in a predictable fashion to the

student's judgment of the teacher's competence--must remain clouded.

The multiple regression equation that had been written from the first sample of 50 students was generally ineffective in predicting the observed SRI scores of Sample Two. The correlation between these two variables--between the observed SRI scores of Sample Two and the values generated from the regression equation--is .57, which for a sample size of 50 is significant at the .001 level. This coefficient may be termed a validity coefficient, a measure of the effectiveness of the regression equation in predicting observed criterion scores of an independently selected sample. The magnitude of this coefficient is impressive but mistakenly so; it should be remembered that the value of a regression equation lies chiefly in its ability to predict in individual cases. The reader is referred to Table VII (Appendix B). It should be noted that in many cases, as in case number I-4, the regression equation is almost totally worthless for its designed purpose. (For case I-4 the SRI score for Sample Two was 1.13, and the value predicted from the regression equation was 11.)

A group of adjectives was isolated from the list of 160 adjectives of the Interpersonal Checklist for further study. This list of adjectives represents those items of the Interpersonal Checklist which correlated most highly with the SRI scores for both Study One and Study Two, thus corroborating the results of earlier studies by Eble (1967)

and Hildebrand and Wilson (1970). Most noticeable are those adjectives whose meanings might best be subsumed under the term "likeableness"--adjectives such as "charming," "cheerful," "popular," "outgoing," "praising," and "witty." It is wise to point out that the adjective "likeable" was included in the Interpersonal Checklist, and was one of the ten chosen for inclusion in the multiple regression equation because of its very high correlation with the SRI criterion for Study One and Study Two. Perhaps a second classification may be termed "dependability and interest," with terms such as "tolerant," "persuasive," and "reliable" further delineating the category. Such a gut classification is arbitrary, of course, and factor analysis could simplify the issue, but that is beyond the scope of this thesis.

To conclude briefly: first, the hypothesis that students tend to rate their instructors as effective (as measured by the SRI-Form LRC-4) if they see their instructors as similar to them on a number of variables was left unresolved. This was chiefly because students, and most people apparently, make global descriptions of others because society reinforces verbal, highly generalized descriptions of personality traits. The conclusions of earlier research--that students value personal, warm qualities in their teachers--must, therefore, be taken with a grain of salt. This thesis does not attempt to make such an assertion.

Future researchers, in the author's opinion, should

concentrate on improving and developing new devices and techniques for selection of competent teachers. It is tragic that most teachers today are chosen on the basis of letters of reference, amount of teaching experience, and the like, rather than through direct observation of classroom performance and appraisals of actual learning in the classroom. Even more tragic is the fact that students can be stunted intellectually or become bored with a subject by exposure to a dull, listless, and unenthusiastic instructor. If the scientists of tomorrow would concentrate their hours of research on developing better pre-selection devices, then perhaps there would be less need for these post facto evaluative efforts.

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APPENDICES

APPENDIX A

FORM LRC-4--Student Reaction to Instruction

Course _____ Instructor's Name _____

Directions: Listed below are performance statements which represent the kind of things students might observe their professor doing sometime during the quarter. Read each statement and if you definitely remember having observed it to occur during this class, then place a check mark to the left of the statement. If you do not immediately remember having observed it in this class during this quarter, then do not check the statement. Remember, check only those things you personally saw the professor in this class do this quarter.

- _____ 1. Presented examples of what he wanted by way of homework, papers, etc.
- _____ 2. Lectured above students' level of comprehension repeatedly.
- _____ 3. Required excessive and unnecessary memorization.
- _____ 4. Learned students' names quickly.
- _____ 5. Refused to discuss exams.
- _____ 6. Embarrassed many students by his use of profanity.
- _____ 7. Arranged "help sessions" for students.
- _____ 8. Introduced humor to stimulate class interest.
- _____ 9. Made a dramatic gesture to emphasize an important point.
- _____ 10. Failed to return exams.
- _____ 11. Adjusted his pace to the needs of the class.
- _____ 12. Utilized visual aids to clarify lesson materials.
- _____ 13. Used leading questions to force a student to answer his own questions.
- _____ 14. Repeated material to the point of monotony.

- ___15. Extended his office hours in order to further assist students.
- ___16. Ignored students' need for extra help.
- ___17. Stimulated students to intellectual effort far beyond that required by most courses.
- ___18. Refused to explain the basis for his grading system.
- ___19. Related the course material to real-life situations.
- ___20. Became angry or sarcastic when corrected by a student.
- ___21. Failed to take any measure to prevent cheating.
- ___22. Lectured fluently without aid of notes.
- ___23. Prepared hand-out sheets to complement lectures.
- ___24. Course requirements remained vague and disorganized.
- ___25. Allowed students to work in committees on material too difficult for individual students.
- ___26. Summarized material in a manner which aided retention.
- ___27. Became confused when attempting to explain important points.
- ___28. Presented each lesson within class time.
- ___29. Came to class unprepared.
- ___30. Refused to consider alternative solutions to problems.
- ___31. Requested and obtained students' questions and reactions.
- ___32. Refused to admit that he was unable to answer some questions.
- ___33. Differentiated between significant and non-significant material.
- ___34. Introduced unfamiliar words or concepts without clarification.

- ___ 35. Praised his class for good work.
- ___ 36. To the extent possible, scheduled exams so as to reduce conflicts.
- ___ 37. Used class discussions to bring out contrasting views.
- ___ 38. Displayed favoritism.
- ___ 39. Demonstrated extensive knowledge of the literature in his suggestions for outside reading.
- ___ 40. Demonstrated tolerance toward students' personal beliefs even when they conflicted with course materials.
- ___ 41. Announced exams too late for students to prepare sufficiently.
- ___ 42. Introduced new and stimulating ideas about the subject.
- ___ 43. Clearly stated the purposes and objectives of the course.
- ___ 44. Forced the students to shoulder the entire burden of gaining knowledge of the subject.
- ___ 45. Lectured in a manner which held class attention.
- ___ 46. Announced one type of test but gave another.
- ___ 47. Displayed nervousness and fear when covering difficult material.
- ___ 48. Demonstrated the importance and significance of his subject matter.
- ___ 49. Gave ample notice for lengthy assignments.
- ___ 50. Exposed the students to the leading authorities in the field.
- ___ 51. Lectured in a low monotone.
- ___ 52. Answered students' questions as completely as possible.
- ___ 53. Made a disparaging remark to a student in the presence of other students.

- ____ 54. Displayed patience when students asked irrelevant and disruptive questions.
- ____ 55. Lectured in a rambling fashion.
- ____ 56. Deliberately wasted class time rather than covering course material.

FACE SHEET

Social Security Number _____ Age _____ Sex _____

Instructions--Set Number One

For Scan Sheet Number One

Here is a list of words that describes how people act toward other people. Please read each word carefully. Then fill in the one space on the answer sheet that best describes your present instructor, since you have known him in this classroom situation. Look at each adjective or phrase, decide to what degree it is descriptive of your instructor, and record your answer on the answer sheet. The numbers on the scan sheet refer to these phrases: (1) not at all, (2) a little, (3) moderately, (4) quite a bit, and (5) extremely. Please write your answers on the scan sheet, making sure that you do not leave any spaces blank.

Instructions--Set Number Two

For Scan Sheet Number Two

Here is a list of adjectives which describe ways people are similar to other people. Please read each item carefully, and decide to what extent you are similar to your present instructor. Please be certain you have marked all items on the answer sheet. Your choices are: (1) not at all similar to my instructor, (2) a little similar,

(3) neither similar nor dissimilar, (4) quite similar to my instructor, and (5) very similar to my instructor.

Instructions--Set Number Three

For Scan Sheet Number Three

Here is a list of adjectives which describe ways people are similar to other people. Please read each item carefully, and decide to what extent you are similar to your father. Please be certain you have marked all items on the answer sheet. Your choices are: (1) not at all similar to my father, (2) a little similar, (3) neither similar nor dissimilar, (4) quite similar to my father, and (5) very similar to my father.

INTERPERSONAL CHECKLIST

Be Sure To Answer All Items

- | | |
|-------------------|--------------------|
| 1. silent | 46. full of pity |
| 2. stimulated | 47. adaptable |
| 3. forceful | 48. lustful |
| 4. tactless | 49. foresighted |
| 5. critical | 50. offended |
| 6. serious | 51. affected |
| 7. considerate | 52. assertive |
| 8. charming | 53. tactful |
| 9. obnoxious | 54. independent |
| 10. mature | 55. conscientious |
| 11. resourceful | 56. kindly |
| 12. disrespectful | 57. intelligent |
| 13. thoughtful | 58. decisive |
| 14. informal | 59. not dependable |
| 15. accommodating | 60. businesslike |
| 16. kind | 61. peculiar |
| 17. idealistic | 62. rational |
| 18. moderate | 63. cynical |
| 19. loyal | 64. peaceable |
| 20. likeable | 65. reserved |
| 21. cheerful | 66. impatient |
| 22. stern | 67. interested |
| 23. egotistic | 68. outgoing |
| 24. popular | 69. disinterested |
| 25. rigid | 70. obedient |
| 26. deceived | 71. respected |
| 27. sorry | 72. unrealistic |
| 28. argumentative | 73. playful |
| 29. dependent | 74. genial |
| 30. polite | 75. appreciative |
| 31. dependable | 76. quarrelsome |
| 32. good-natured | 77. mischevious |
| 33. versatile | 78. bashful |
| 34. shy | 79. dignified |
| 35. irresponsible | 80. discreet |
| 36. reliable | 81. aloof |
| 37. meek | 82. absent-minded |
| 38. complaining | 83. shy |
| 39. honest | 84. dull |
| 40. selfish | 85. effeminate |
| 41. active | 86. obliging |
| 42. cruel | 87. proud |
| 43. civilized | 88. restrained |
| 44. agreeable | 89. fairminded |
| 45. submissive | 90. sarcastic |

91. outspoken
92. opinionated
93. tolerant
94. wise
95. nagging
96. unkind
97. unfriendly
98. hostile
99. compliant
100. praising
101. intolerant
102. sophisticated
103. prejudiced
104. darling
105. individualistic
106. patient
107. violent
108. suggestible
109. conservative
110. ambitious
111. imaginative
112. spontaneous
113. humble
114. immature
115. modest
116. conventional
117. bold
118. industrious
119. opportunistic
120. fault-finding
121. progressive
122. whiny
123. withdrawn
124. sympathetic
125. noisy
126. aggressive
127. snobbish
128. bullying
129. inhibited
130. greedy
131. rude
132. evasive
133. arrogant
134. humorous
135. returning
136. self-centered
137. ready to fight
138. loud
139. persuasive
140. mannerly

141. sexy
142. bossy
143. demanding
144. talkative
145. loveable
146. sociable
147. reliable
148. generous
149. contrary
150. formal
151. open-hearted
152. affectionate
153. fickle
154. understanding
155. witty
156. boastful
157. frank
158. show-off
159. trusting
160. uninhibited

APPENDIX B

TABLE III

CRITERION SCORES (SRI), FATHER SIMILARITY
SCORES, AND TEACHER SIMILARITY SCORES
FOR STUDENTS IN STUDY ONE (A, B, C,
D, E, REPRESENT INSTRUCTORS)

Student	SRI Score	Father Similarity Score	Teacher Similarity Score
A 1	21.0	510	537
A 2	7.0	341	225
A 3	18.0	529	632
A 4	8.67	463	537
A 5	18.00	651	753
A 6	15.00	513	481
A 7	24.00	695	752
A 8	18.00	767	741
A 9	3.25	292	273
A 10	8.0	301	275
B 1	4.33	309	297
B 2	12.00	463	481
B 3	23.00	648	748
B 4	12.00	505	475
B 5	8.00	350	325
B 6	9.00	415	365
B 7	17.00	581	633
B 8	15.00	547	597

TABLE III (Continued)

Student	SRI Score	Father Similarity Score	Teacher Similarity Score
B 9	19.1	498	598
B 10	6.0	327	251
C 1	16.0	651	747
C 2	23.0	748	751
C 3	23.0	651	722
C 4	19.0	433	534
C 5	18.00	525	479
C 6	26.00	484	501
C 7	12.00	379	465
C 8	10.0	411	321
C 9	15.0	658	701
C 10	5.0	299	361
D 1	5.00	403	359
D 2	2.0	414	349
D 3	1.00	415	421
D 4	3.0	403	492
D 5	18.0	595	601
D 6	1.00	376	325
D 7	9.00	362	322
D 8	1.00	394	400
D 9	1.00	378	327
D 10	4.00	371	331

TABLE III (Continued)

Student	SRI Score	Father Similarity Score	Teacher Similarity Score
E 1	1.00	348	333
E 2	6.50	521	475
E 3	1.00	413	329
E 4	1.75	386	405
E 5	3.67	275	350
E 6	16.00	559	621
E 7	19.00	558	634
E 8	17.00	601	639
E 9	2.50	343	400
E 10	8.00	429	436

TABLE IV

CORRELATIONS OF THE SRI SCORES WITH THE
ONE-TO-FIVE LIKERT VALUES FOR THE
160-ITEM VARIABLES OF THE
INTERPERSONAL CHECKLIST
FOR STUDY ONE

Variable Number	Item	Correlation With Criterion
1	silent	-0.4153
2	stimulated	0.3737
3	forceful	0.1525
4	tactless	-0.3461
5	critical	0.0013
6	serious	-0.2231
7	considerate	0.4786
8	charming	0.4425
9	obnoxious	-0.3659
10	mature	0.3897
11	resourceful	0.4453
12	disrespectful	0.0414
13	thoughtful	0.2579
14	informal	-0.1516
15	accommodating	0.3074
16	kind	0.4594
17	idealistic	-0.0075

TABLE IV (Continued)

Variable Number	Item	Correlation With Criterion
18	moderate	0.0309
19	loyal	0.4067
20	likeable	0.5788
21	cheerful	0.5522
22	stern	-0.0111
23	egotistic	-0.4555
24	popular	0.4937
25	rigid	-0.2415
26	deceived	-0.3562
27	sorry	-0.3100
28	argumentative	0.1032
29	dependent	0.2274
30	polite	0.4007
31	dependable	0.4422
32	good-antured	0.6330
33	versatile	0.5203
34	shy	-0.0982
35	irresponsible	-0.3728
36	reliable	0.4019
37	meek	-0.1141
38	complaining	-0.2290
39	honest	0.2082

TABLE IV (Continued)

Variable Number	Item	Correlation With Criterion
40	selfish	-0.3676
41	active	0.4325
42	cruel	-0.2765
43	civilized	0.1475
44	agreeable	0.5533
45	submissive	0.0081
46	full of pity	0.1752
47	adaptable	0.3705
48	lustful	-0.2050
49	foresighted	0.2184
50	offended	0.1047
51	affected	0.1543
52	assertive	0.2853
53	tactful	0.3018
54	independent	0.0640
55	conscientious	0.3274
56	kindly	0.5545
57	intelligent	0.2335
58	decisive	0.2290
59	not dependable	-0.4803
60	businesslike	-0.0641
61	peculiar	-0.2907

TABLE IV (Continued)

Variable Number	Item	Correlation With Criterion
62	rational	0.2897
63	cynical	-0.3259
64	peaceable	0.1448
65	reserved	-0.2945
66	impatient	-0.2362
67	interested	0.3716
68	outgoing	0.4861
69	disinterested	-0.4627
70	obedient	0.2493
71	respected	0.5385
72	unrealistic	-0.3822
73	playful	0.3967
74	genial	0.2586
75	appreciative	0.4652
76	quarrelsome	-0.2232
77	mischevious	-0.0753
78	bashful	0.1529
79	dignified	0.2615
80	discreet	-0.0520
81	aloof	-0.1533
82	absent-minded	-0.2825
83	shy	-0.1981

TABLE IV (Continued)

Variable Number	Item	Correlation With Criterion
84	dull	-0.5562
85	effeminate	0.2014
86	obliging	0.2771
87	proud	-0.0518
88	restrained	-0.1966
89	fairminded	0.2369
90	sarcastic	-0.3077
91	outspoken	0.1081
92	opinionated	-0.2893
93	tolerant	0.4392
94	wise	0.3063
95	nagging	-0.1775
96	unkind	-0.2944
97	unfriendly	-0.0949
98	hostile	-0.1730
99	complaint	0.0069
100	praising	0.7017
101	intolerant	-0.0950
102	sophisticated	0.1523
103	prejudiced	-0.1272
104	darling	0.1875
105	individualistic	0.2317

TABLE IV (Continued)

Variable Number	Item	Correlation With Criterion
106	patient	0.1811
107	violent	-0.0018
108	suggestible	-0.0000
109	conservative	-0.1909
110	ambitious	0.1071
111	imaginative	0.5197
112	spontaneous	0.2785
113	humble	0.1355
114	immature	-0.3763
115	modest	-0.0679
116	conventional	0.0003
117	bold	0.2310
118	industrious	0.4598
119	opportunistic	-0.1743
120	fault-finding	-0.2918
121	progressive	0.4562
122	whiny	-0.0927
123	withdrawn	-0.3795
124	sympathetic	0.0932
125	noisy	-0.0369
126	aggressive	0.2491
127	snobbish	-0.2701

TABLE IV (Continued)

Variable Number	Item	Correlation With Criterion
128	bullying	-0.0416
129	inhibited	-0.1377
130	greedy	-0.2360
131	rude	-0.3949
132	evasive	-0.5453
133	arrogant	-0.4463
134	humorous	0.4559
135	revealing	0.1476
136	self-centered	-0.4312
137	ready to fight	-0.0058
318	loud	0.1385
319	persuasive	0.4438
140	mannerly	0.2673
141	sexy	-0.1272
142	bossy	-0.1214
143	demanding	-0.0119
144	talkative	0.6022
145	loveable	0.2630
146	sociable	0.4925
147	reliable	0.4942
148	generous	0.4034
149	contrary	-0.3271

TABLE IV (Continued)

Variable Number	Item	Correlation With Criterion
150	formal	-0.0244
151	open-hearted	0.4584
152	affectionate	0.1723
153	fickle	-0.1862
154	understanding	0.3901
155	witty	0.5876
156	boastful	-0.2188
157	frank	0.2047
158	show-off	-0.2068
159	trusting	0.5302
160	uninhibited	0.2167

TABLE V
CORRELATIONS OF THE SRI SCORES WITH THE
ONE-TO-FIVE LIKERT VALUES FOR THE
160-ITEM VARIABLES OF THE
INTERPERSONAL CHECKLIST
FOR STUDY TWO

Variable Number	Item	Correlation With Criterion
1	silent	-0.2216
2	stimulated	0.2306
3	forceful	-0.1038
4	tactless	-0.4648
5	critical	-0.2971
6	serious	-0.0227
7	considerate	0.6163
8	charming	0.6077
9	obnoxious	-0.3736
10	mature	0.4530
11	resourceful	0.3307
12	disrespectful	-0.3404
13	thoughtful	0.4334
14	informal	0.0202
15	accommodating	0.5088
16	kind	0.5363
17	idealistic	0.0535

TABLE V (Continued)

Variable Number	Item	Correlation With Criterion
18	moderate	0.3981
19	loyal	0.4517
20	likeable	0.7191
21	cheerful	0.7102
22	stern	-0.1066
23	egotistic	-0.5438
24	popular	0.4319
25	rigid	-0.2630
26	deceived	-0.1729
27	sorry	-0.3123
28	argumentative	-0.1252
29	dependent	0.0736
30	polite	0.6164
31	dependable	0.4007
32	good-natured	0.6731
33	versatile	0.5378
34	shy	-0.2075
35	irresponsible	-0.2623
36	reliable	0.4048
37	meek	0.1481
38	complaining	-0.2103
39	honest	0.1835

TABLE V (Continued)

Variable Number	Item	Correlation With Criterion
40	selfish	-0.2739
41	active	0.5898
42	cruel	-0.3415
43	civilized	0.3981
44	agreeable	0.5557
45	submissive	0.1952
46	full of pity	0.0378
47	adaptable	0.3821
48	lustful	-0.1925
49	foresighted	0.3607
50	offended	-0.1081
51	affected	-0.1108
52	assertive	0.0671
53	tactful	0.3039
54	independent	0.2012
55	conscientious	0.4453
56	kindly	0.6382
57	intelligent	0.0228
58	decisive	0.1969
59	not dependable	-0.2475
60	businesslike	0.1039
61	peculiar	-0.5766

TABLE V (Continued)

Variable Number	Item	Correlation With Criterion
62	rational	0.1914
63	cynical	-0.3254
64	peaceable	0.4813
65	reserved	0.0940
66	impatient	-0.4949
67	interested	0.4624
68	outgoing	0.6337
69	disinterested	-0.3051
70	obedient	0.4952
71	respected	0.6193
72	unrealistic	-0.4243
73	playful	0.4394
74	genial	0.4080
75	appreciative	0.3871
76	quarrelsome	-0.2177
77	mischevious	-0.1650
78	bashful	-0.1622
79	dignified	0.4191
80	discreet	0.2178
81	aloof	-0.1753
82	absent-minded	-0.2101
83	shy	-0.1762

TABLE V (Continued)

Variable Number	Item	Correlation With Criterion
84	dull	-0.5365
85	effeminate	-0.2312
86	obliging	0.4965
87	proud	0.0008
88	restrained	0.0183
89	fair-minded	0.4679
90	sarcastic	-0.5502
91	outspoken	-0.1225
92	opinionated	-0.4238
93	tolerant	0.5366
94	wise	0.1791
95	nagging	-0.2761
96	unkind	-0.2933
97	unfriendly	-0.2298
98	hostile	-0.3506
99	compliant	-0.0268
100	praising	0.3419
101	intolerant	-0.2656
102	sophisticated	0.1756
103	prejudiced	-0.1705
104	darling	0.4383
105	individualistic	0.1219

TABLE V (Continued)

Variable Number	Item	Correlation With Criterion
106	patient	0.2051
107	violent	-0.2602
108	suggestible	-0.0590
109	conservative	0.0137
110	ambitious	0.1041
111	imaginative	0.1269
112	spontaneous	-0.0211
113	humble	0.3578
114	immature	-0.3291
115	modest	0.3464
116	conventional	0.2767
117	bold	0.0441
118	industrious	0.1813
119	opportunistic	0.0144
120	fault-finding	-0.4159
121	progressive	0.1751
122	whiny	-0.3516
123	withdrawn	-0.4062
124	sympathetic	0.2187
125	noisy	-0.3206
126	aggressive	-0.1413
127	snobbish	-0.3400

TABLE V (Continued)

Variable Number	Item	Correlation With Criterion
128	bullying	-0.2498
129	inhibited	-0.1458
130	greedy	-0.1591
131	rude	-0.4851
132	evasive	-0.4634
133	arrogant	-0.5012
134	humorous	0.3188
135	revealing	0.1645
136	self-centered	-0.5013
137	ready to fight	-0.2428
138	loud	-0.2786
319	persuasive	0.4241
140	mannerly	0.3419
141	sexy	0.1209
142	bossy	-0.4521
143	demanding	-0.3938
144	talkative	0.3086
145	loveable	0.4844
146	sociable	0.6474
147	reliable	0.4052
148	generous	0.6113
149	contrary	-0.4014

TABLE V (Continued)

Variable Number	Item	Correlation With Criterion
150	formal	0.2698
151	open-hearted	0.5555
152	affectionate	0.3740
153	fickle	-0.0919
154	understanding	0.5963
155	witty	0.5475
156	boastful	-0.4092
157	frank	0.3198
158	show-off	-0.3387
159	trusting	0.5851
160	uninhibited	0.2902

TABLE VI

TERMS IN STEPWISE MULTIPLE REGRESSION EQUATION*
 WITH MULTIPLE R, R, SQUARE, RSP CHANGE,
 SIMPLE R, B, AND BETA

Variable	Item	Multiple R	R Square	RSQ Change	Simple R	B	Beta
100	praising	0.70169	0.49236	0.49236	0.70169	3.48196	0.49539
32	good-natured	0.76608	0.58688	0.09452	0.63302	2.20118	0.26854
155	witty	0.78567	0.61728	0.03039	0.58762	2.44718	0.40350
20	likeable	0.79575	0.63322	0.01594	0.57879	-2.01212	-0.26379
44	agreeable	0.80753	0.65210	0.01889	0.55334	1.77281	0.19252
33	versatile	0.81050	0.65691	0.00480	0.52028	1.08958	0.12044
111	imaginative	0.81328	0.66143	0.00452	0.51971	-0.91023	-0.13281
71	respected	0.81570	0.66537	0.00394	0.53847	1.54452	0.17752
21	cheerful	0.81974	0.67198	0.00661	0.55220	-0.94095	-0.14609
56	kindly	0.82074	0.67362	0.00164	0.55448	-0.56079	-0.07845

*Summary of Regression Equation. Criterion = variable 100 x 3.482 + variable 32 x 2.201 + variable 155 x 2.447 - variable 20 x 2.012 + variable 44 x 1.773 + variable 33 x 1.090 - variable 111 x .910 + variable 71 x 1.545 - variable 21 x .941 - variable 56 x .561 - 14.796.

TABLE VII

OBSERVED SRI SCORES OF SAMPLE TWO AND VALUES
FROM STEPWISE MULTIPLE REGRESSION

EQUATION: (F, G, H, I, J,
REPRESENT INSTRUCTORS)

Case Number	Observed Criterion Scores of Sample Two	Calculated* Regression Values
F 1	2.67	6
F 2	2.25	10
F 3	7.5	19
F 4	.45	4
F 5	19.00	21
F 6	.14	6
F 7	.23	3
F 8	3.25	9
F 9	23.00	10
F 10	7.0	14
G 1	1.4	-3
G 2	.89	15
G 3	13.00	17
G 4	12.00	20
G 5	25.00	23
G 6	20.1	13
G 7	5.0	9
G 8	.30	-4
G 9	1.33	8

TABLE VII (Continued)

Case Number	Observed Criterion Scores of Sample Two	Calculated* Regression Values
G 10	1.00	3
H 1	1.38	3
H 2	.82	14
H 3	3.33	6
H 4	1.4	9
H 5	.11	11
H 6	17.00	18
H 7	3.00	-1
H 8	3.67	11
H 9	2.5	4
H 10	1.83	8
I 1	3.0	4
I 2	4.0	13
I 3	17.0	17
I 4	1.13	11
I 5	.42	9
I 6	1.75	8
I 7	5.67	15
I 8	1.75	8
I 9	.67	2
I 10	.67	8
J 1	2.0	14

TABLE VII (Continued)

Case Number	Observed Criterion Scores of Sample Two	Calculated* Regression Values
J 2	.50	9
J 3	.33	20
J 4	3.5	10
J 5	8.00	8
J 6	16.00	13
J 7	10.00	10
J 8	5.00	15
J 9	2.00	2
J 10	6.00	20

*Calculated regression values are rounded off to nearest integer. This is standard operating procedure with the computer program SPSS.

TABLE VIII

LIST OF 34 ADJECTIVES FROM THE INTERPERSONAL
CHECKLIST THAT CORRELATE WITH SRI SCORES
AT LEAST .30 FOR BOTH SAMPLE
ONE AND SAMPLE TWO

Variable Number of Interpersonal Checklist	Adjective
7	considerate
8	charming
16	kind
20	likeable
21	cheerful
24	popular
30	polite
31	dependable
32	good-natured
33	versatile
36	reliable
41	active
43	civilized
44	agreeable
47	adaptable
53	tactful
55	conscientious
56	kindly

TABLE VIII (Continued)

Variable Number of Interpersonal Checklist	Adjective
67	interested
68	outgoing
73	playful
75	appreciative
93	tolerant
100	praising
134	humorous
139	persuasive
144	talkative
146	sociable
147	reliable
148	generous
151	open-hearted
154	understanding
155	witty
159	trusting

VITA

Edwin Rice Barnett was born in Memphis, Tennessee on October 7, 1947. He was educated in the Memphis, Tennessee public school system, graduating from Treadwell High School in 1965. He attended Southwestern College where he graduated in 1969 and received the Master of Arts degree in psychology in 1974.