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ABSTRACT
            The author begins with a general review of source
credibility research, as an introduction to his study on the
dimensions of credibility for teachers in the classroom and the
dimensions of faculty-course evaluation questionnaires. His
investigation utilized 46 semantic differential scales for the
concepts "this teacher" and "this class," using as subjects 575
students enrolled in a basic speech communication course. Factor
analysis of the data for teacher resulted in a four-factor solution:
sociability, extroversion, competence, and composure. Factor analysis
of the course evaluation data resulted in three factors: general
course evaluation, instructional methods, and instructor impact. The
author concludes that future investigations on source credibility
should be directed to specific populations, or source types, such as
teachers in the classroom, an area which has been given "little
attention" in the studies of communication phenomena. (Author/RN)

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Dimensions of Teacher Credibility and Faculty-Course Evaluation

By

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Dimensions of Teacher Credibility and Faculty-Course Evaluation

In the past two decades, there has been considerable concern with the
image of a communicator and its effect upon the receiver's acceptance of a
message. Research in this area has been conducted under a variety of labels:
source credibility, ethos, prestige, status, authority, and competence. The
measurement of this construct in the research literature has employed rankings,
prestige indexes, sociograms, linear rating scales, Thurstone-type attitude
scales, Likert-type scales, and semantic differentials (Andersen and Clevenger,
1963). A comprehensive summary of these early studies has been provided by
Andersen and Clevenger (1963) and of the more recent research by Wenzlaff
(1971).

The research in the area of source credibility has usually confined
itself to two general areas of investigation: 1) determination of the dimen-
sionality of the source credibility construct; 2) assessment of the influence
that source credibility has on the receiver's acceptance of a message. The
present paper may be classified under the former category of investigation.
Most of the recent research involving the determination of the dimensionality
of this construct has employed Likert-type scales and semantic differentials
in conjunction with factor analytic techniques. Consequently, the communi-
cation research involving source credibility effects has measured this vari-
able primarily on the basis of scales generated from factor analytic research.

Table 1 presents a cursory review of these factor analytic studies.
Reported therein are the source concepts that were rated, subject populations
employed, and the major dimensions of source credibility observed.

The results of the factor analytic studies conducted by Berlo, et al. (1961 and 1969) and McCroskey (1966) have been used more extensively than the others and thus have been assumed to be the final answer to the measurement of source credibility. Generally, communication researchers have aligned themselves with one of the above studies and subsequently employed scales resulting from either of these investigations to measure the credibility of message sources. However, as Table 1 indicates, other investigators have isolated seemingly different dimensions of credibility using factor analytic techniques. Though these dimensions appear to differ on a brief examination of Table 1, many similarities exist in the dimensions reported by various researchers. The correspondence in factor structures becomes apparent after an examination of the scales loading on each factor whether it be labeled "culture" (Norman, 1963), "competence" (Berlo, et al., 1969), or "authoritativeness" (McCroskey, 1966). This often superficial variability from one factor structure to another is an artifact of the factor analytic technique employed. No factor analysis can extract factors which were not initially represented in the original scale items and the factors extracted are subsequently labeled on the basis of the experimenter's subjective judgments.

Giffin (1966), in an early review of credibility dimensions, states that five factors have been elicited frequently enough by various researchers to warrant their inclusion as general components of the credibility of a message source. They were: 1) expertness, 2) character, 3) good-will, 4) dynamism,

and 5) personal attraction, likeability, or affiliation. Subsequent factor analytic structures of credibility appear to be still in correspondence with Giffin's summary.

Aside from the inherent subjective factor-labeling practices and inclusion of scale items, factor analytic derived dimensions suffer from the problems of external validity or "generalizability." Tucker (1971) summarized the problem by stating that "the derivation of factors via factor analysis cannot provide an underlying structure that can be expected to remain invariant over concepts, subjects, time, cultures, or experiments." A cursory glance at Table 1 will reveal that the majority of investigations have utilized either real or hypothetical public figures as source concepts. The subjects employed have been consistently drawn from the university student body. With notable exceptions, Berlo, et al. (1969), Norman (1963), McCroskey, et al. (1971), and McDermott (1971), this trend has produced results that are safely generalizable only to the evaluations of public figures by college students.

Tucker's (1971) critique of credibility research is basically a restatement of Osgood's et al. (1957) "concept-scale interaction" phenomenon observed in the application of semantic-differential scaling and factor analysis to assess meaning. (This observation has also been consistently ignored by many communication researchers in the area of attitude investigation.) "Concept-scale interaction" has thus far prohibited the development of a generalized attitude measuring instrument and, in the area of source credibility, may likewise hinder the generalizability of dimensions along with their respective scales across source concepts.

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Currently, McCroskey is engaged in a series of studies designed to determine the generalizability of the credibility dimensions and their respective scales across source types and subjects. The source types have been classified into five categories: 1) public figures, 2) mass media, 3) peers, 4) spouses, and 5) organizations. Subject types include adults and students which are further subdivided according to race. The McCroskey, et al. (1971) and McDermott (1971) investigations (see Table 1) are preliminary reports of this effort toward the determination of the generalizability of credibility dimensions and their measurement.

The present investigation is an outgrowth of this research effort and represents a preliminary attempt to determine the dimensionality of a classroom teacher's credibility. While the primary concern of this investigation is the determination of the credibility factor structure for teachers in addition to assessing the importance of the dimensions obtained, a second objective is to compare this structure with that reported in the initial report (McCroskey, et al., 1971) of the McCroskey study.

Researchers in our discipline have given little attention to the classroom as a potential area for the study of communication phenomena. Frequently we refer to the classroom only as a "den of research inequity" from which we rapidly wish to escape in order to avoid the contamination of our findings in terms of external validity. We often bemoan the possibility that our research literature is contributing to a comprehensive rhetoric for the sophomore and is offering little in terms of "real life" communication insights. Yet the classroom is a unique "real life" phenomena and constitutes one in which a larger segment of our population is confronted with yearly. A more

c... .erned effort of directing investigations toward the classroom in terms of communication phenomena would appear to ease the accountability problem in these times of budget crisis as well as provide insights into "real life" situations out of which a communication theory of the classroom may eventually develop.

Method

The current investigation employed forty-six semantic differential scales representing the dimensions reported by Berlo, et al. (1969), Norman (1963), Markham (1968), McCroskey (1966), and Whitehead (1968). All of their scales were included but the several duplications were omitted (Table 2). In conjunction with this instrument, subjects were asked to respond to the Illinois Course Evaluation Questionnaire (CEQ, Form 68) (Spencer, 1968). This form s composed of fifty items designed to assess student attitudes toward a course (Table 3). Both instruments were printed on standard optical scanning answer sheets to allow a Digitek-optical scanning scoring machine to punch IBM cards for the subsequent computer analysis.

The concept rated on the semantic differential scales was "the teacher of this class" and on the CEQ was "this class."

The subjects were 575 students enrolled in 35 sections of an introductory speech-communication course at the University of Illinois. Course sections were taught by 19 instructors with various amounts of teaching experience: 17 instructors were teaching assistants working on advanced degrees; 2 were full-time faculty members. Each subject completed both instruments during the final two weeks of the Fall Semester, 1971-72.

The limitations of this subject population should be stressed. As mentioned previously, concept-scale interaction currently inhibits the generalizability of both factor structures and their respective scale loadings when moving across concepts and subject populations. Therefore, the results of this investigation may be currently applicable only to classes of an introductory nature or 100 level, lower-level undergraduate students, and instructors that are engaged in teaching the entire course content, per respective section, throughout the semester.

Statistical Analysis

The data for teachers and course (CEQ) were independently submitted to principal components factor analysis and varimax rotation. An eigenvalue of 1.0 was established as the criterion for termination of factor extraction. For an item to be considered loaded on a resulting factor, a loading of .60 or higher was required with no loading of .40 or higher on any other factor. For a factor to be considered meaningful, the a priori requirement was established that two scales must be loaded on that factor. For subsequent analysis, no more than six items, those with the highest and purest loadings, were included for any given factor. The original factor scores and generated scores were submitted to step-wise multiple regression analyses with the CEQ serving as the criterion variable.

Results

The factor analysis of the data for the concept "the teacher of this class" resulted in a four factor solution. These four factors were labeled

"sociability," "extroversion," "competence," and "composure." Fifty-nine percent of the variance on these items was accounted for by the four factors. Table 4 reports the items loading on these factors and their secondary loadings.

The factor analysis of the data for the CEQ resulted in a three factor solution. These three factors were labeled "general course evaluation," "instructional methods," and "instructor impact." Sixty-one percent of the variance on these items was accounted for by the three factors. Table 5 reports the items loading on these factors and their secondary loadings.

Interpretation

Examination of Tables 4 and 1 indicate a similarity in the investigation's resultant factor structure for "teachers" with that for "peers" reported by McCroskey, et al. (1971). The "sociability" factor of this study contains the two dominant scales of the McCroskey, et al. (1971) study (friendly-unfriendly, awful-nice). These, however, are the only scales that are held in common by both studies on this factor. The "dynamism" factor of the McCroskey, et al. (1971) study may be interpreted as equatable with the "extroversion" dimension of this study. Again, only two scales (meek-aggressive, bold-timid) have identical loadings on this factor in both studies. The "composure" factors in both investigations have two scales in common (nervous-poised, calm-anxious); whereas, the "competence" dimension in this study was not composed of any identical scales.

Examination of the CEQ factor structure reveals that students' evaluation of a course fall along three general dimensions. The first factor

labeled "general course evaluation" appears to be an assessment of the qual-
ity of the curriculum's content and its impact on the student. The second
factor, "instructional methods," involves as assessment of the instructor's
teaching strategy in terms of its interaction with the course content and
quality of dissemination to the student. The third factor, "instructor im-
pact," appears to involve the students' evaluation of the instructor as an
individual performing the role of the teacher. A more thorough assessment
of this latter factor would initially appear to be available through the in-
corporation of the credibility scales for teachers in subsequent student
evaluations of a course. The effects of credibility would undoubtedly also
interact with the other two factors mentioned above.

Statistical Analysis (step-wise multiple regression analysis)

After the factor structures for "teachers" and the CEQ were determined,
factor scores were computed. All scales (with a limit of six) that were
loaded on a given factor were summed and divided by the number of scales
loaded on the factor. The scores used for the regression equations are
based on raw data rather than generated factor scores. A comparison of dif-
ferent methods of deriving factor scores is currently being conducted. The
original factor scores were submitted to step-wise multiple regression
analyses (Dixon, 1970) with the three factor CEQ structure serving as the
criterion variables. Subsequent analyses were performed with the four factor
teacher credibility structure serving as the criterion variables. The
criterion established for terminating the multiple regression analyses was
when extraction of an additional step would account for less than a one per-
cent increase in variance accounted for from the analysis.

Results

Teacher Credibility Table 6 reports the correlations among the teacher factors. The results of the step-wise multiple regression analysis are reported in Table 7. Table 7 reports the regression equations for the three criterion variables based on the computed factor scores. Table 9 reports the original correlations between the factor scores and the criterion variables.

CEQ

Correlations among the CEQ factors are reported in Table 10. Table 11 reports the results of the step-wise multiple regression analyses in the same form as Table 7 for teachers. Table 13 reports the correlations between the factor scores and the criterion variables.

Interpretation

In the ideal case factor analysis should yield dimensions which are uncorrelated, the results of the factor analysis of the current data did not do so. For teachers, the "sociability," "competence," and "composure" dimensions. Although these correlations with the exception of the "competence" and "sociability" dimensions are not high, it is evident that these dimensions are not completely independent. Similarly, the CEQ dimensions are correlated with one another.

An important consideration of this investigation was to determine what could be predicted by the factors obtained for the teacher source type in terms of the CEQ and vice-versa. An examination of Table 7 indicates that two dimensions of teacher source type enter into each of the three equations. These dimensions are "sociability" and "competence." Table 8 reports the

percent of variance accounted for per respective CEQ criterion factor and designates the major contributor in each equation.

Table 11 indicates that two CEQ factors enter into each of the four regression equations with the teacher credibility dimensions serving as the criterion variables. These dimensions are "general course evaluation" and "instructor impact." Table 12 reports the percent of variance accounted for per respective credibility criterion factor and designates the major contributor in each equation.

It would appear from the regression analyses that one should select which dimensions to measure on the basis of what he wishes to predict in regard to either the CEQ or teacher credibility. An examination of Tables 7, 8, 11, and 12 will provide this information.

Discussion

Because of the limitations mentioned previously, this present study must be considered a preliminary attempt to assess the dimensionality of a teacher's credibility. However, the current results suggest that scales and dimensions generated through previous factor analytic studies are not completely generalizable to the teacher in the classroom setting. This amounts to additional support of Osgood's, et al. (1957) concept-scale interaction observation and Tucker's (1971) critique of current credibility research. It seems clear that four dimensions of teacher credibility exist for the specified situation in which this investigation was conducted. Although there is a close correspondence with the McCroskey, et al. (1971) report on "peer" credibility in terms of dimensionality, the scale loadings indicate a variation in the overall structure when moving from one source type to

another and employing a different population of subjects. This variability
occurred even though both studies employed identical semantic differential
scales prior to factor analysis. It is extremely likely that variability in
both factor dimensions and scale loadings will be observed when one moves
from teachers in the current setting to those in other classroom situations,
e.g. mass lecturers, graduate courses, graduate and undergraduate students,
etc. Currently, investigation of this variability within "teacher" source
types is being conducted to assess future generalizability.

Course evaluations (see Costin, et al., 1971, and Meredith, 1969, for a
thorough discussion of current practices) appear to neglect the importance
of a teacher's credibility in the classroom. The influence of a message
source's credibility upon communication effectiveness has become almost a
truism in current communication theory. Therefore, its assessment in terms
of instructional behaviors and, most importantly, its genesis and effective-
ness in the classroom warrants inclusion in any comprehensive theory of in-
struction.

Subject to revision on the basis of current studies and analyses in
progress, several tentative conclusions may be offered at this time. The
first is that the dimensions of source credibility and their respective
scales vary on the basis of what source type is being evaluated. This phe-
nomenon will possibly hold when one varies "teacher type" and other situa-
tional factors, e.g. classroom population, content, level of instruction,
etc. Therefore, one set of scales and their respective dimensions cannot
currently be conceived of as being generalizable within source types or

<u>across</u> source types. The correspondence between scales that are given to subjects on an a priori basis and those subjects may actually use in everyday evaluation of message sources has not been demonstrated to date. In an attempt to prevent artificiality of credibility dimensions, investigations should be directed toward specific populations in an effort to elicit the actual evaluative constructs employed when assessing the credibility of specific source types. A comparison of these constructs with scales currently being used, in addition to their subsequent factor structures, will determine if this may be a problem of future concern.

The investigation of teachers as source types, in terms of initial and terminal "ethos," may allow us to speculate as to the determinants of effective instruction and overall course evaluation in regard to the students' perceptions. The development of Likert-type items that correspond to the semantic differential scale items per respective factor structure would allow a more insightful analysis of 'student-perceived beliefs regarding behaviors that are important determinants in assessment of an instructor's credibility. This technique has proven more fruitful in determining audiences' perceptions of dramatic events than standard semantic differential scaling techniques (Cronkhite, <u>et al</u>., 1971).

As noted above, these tentative conclusions are based upon assumptions that require additional verification through future research efforts. Currently, many of these speculations are in the process of being investigated and their results may contribute to a more comprehensive theory of communication in the classroom.

BIBLIOGRAPHY

Andersen, Kenneth, "An Experimental Study of the Interaction of Artistic and Nonartistic Ethos in Persuasion," Unpublished doctoral dissertation, University of Wisconsin, 1961.

Andersen, Kenneth and Theodore Clevenger, Jr., "A Summary of Experimental Research in Ethos," Speech Monographs, 30, 1963, 59-78.

Berlo, David K., James B. Lemert and Robert J. Mertz, "Dimensions for Evaluating the Acceptability of Message Sources," Public Opinion Quarterly, 33, 1969, 563-576.

Costin, Frank, William T. Greenough and Robert J. Menges, "Student Ratings of College Teaching: Reliability, Validity, and Usefulness," Review of Educational Research, 41, 1971, 511-535.

Cronkhite, Gary, Diane Mishler and John Kirk, "The Dimensions of Perception of a Dramatic Production," Speech Monographs, 38, 1971, 132-142.

Fulton, R. B., "The Measurement of Speaker Credibility," Journal of Communication, 20, 1970, 270-279.

Giffin, Kim, "The Dimensions of Source Credibility," Communication Research Center, University of Kansas, 1966. (mimeographed)

Markham, David, "The Dimensions of Source Credibility of Television Newscasters." Unpublished doctoral dissertation, University of Oklahoma, 1965.

McCroskey, James C., "Scales for the Measurement of Ethos," Speech Monographs, 33, 1966, 65-72.

McCroskey, James C., Michael D. Scott and Thomas J. Young, "The Dimensions of Source Credibility for Spouses and Peers." Communication Research Center, Illinois State University, 1971. (Paper presented at Western Speech Association Convention, Fresno, California, November, 1971).

McDermott, Patrick J., "Scales for the Measurement of Organization Credibility." Communication Research Center, University of Utah, 1971. (Paper presented at Western Speech Association Convention, Fresno, California, November, 1971).

Meredith, Gerald M., "Dimensions of Faculty-Course Evaluation," The Journal of Psychology, 73, 1969, 27-32.

Norman, Warren T., "Toward an Adequate Taxonomy of Personality Attributes: Replicated Factor Structures in Peer Nomination Personality Ratings," Journal of Abnormal and Social Psychology, 66, 1963, 574-583.

Osgood, Charles E., George J. Suci and Percy H. Tannenbaum, The Measurement
    of Meaning, Urbana: University of Illinois Press, 1957.

Schweitzer, Don and Gerlad P. Ginsburg, "Factors of Communicator Credibility,"
    in Carl W. Backman and Paul F. Secord (eds.), Problems in Social Psy-
    chology. New York: McGraw-Hill Book Co., 1966, 94-102.

Spencer, R. E., The Illinois Course Evaluation Questionnaire: Manual of
    Interpretation. (Rev. ed.) Research Report No. 270, Champaign, Ill;
    University of Illinois, Office of Instructional Resources, Measurement
    and Research Division, 1968. (mimeographed)

Tucker, R. K., "On the McCroskey Scales for the Measurement of Ethos," Central
    States Speech Journal, 22, 1971, 127-129.

Wenzlaff, Velma, "Source Credibility: A Summary of Experimental Research,"
    Paper presented at the 1971 Convention of the Speech Communication
    Association of America, San Francisco.

Whitehead, Jack L. Jr., "Factors of Source Credibility," Quarterly Journal
    of Speech, 54, 1968, 59-63.

TABLE 1

	Berlo and Lemert (1961) and Berlo, Lemert and Mertz (1969)	Andersen (1961)	Norman (1963)
Source Concept:	Public figures and interpersonal sources	Public figures	Peers (interpersonal judgments)
Subjects:	University students and wives; adults	University students	University students
Major Factors:	1) trustworthiness 2) competence 3) dynamism 4) sociability	1) evaluative 2) dynamism	1) agreeableness 2) extroversion 3) emotional stability 4) conscientiousness 5) culture

	McCroskey (1966)	Schweitzer and Ginsburg (1966)
Source Concept:	Public figures	Public figures: 1 high and 1 low in credibility
Subjects:	University students and high school students	University students
Major Factors:	1) character 2) authoritativeness	(High credible source) 1) trustworthiness 2) graciousness and delivery factors (Low credible source) 1) trustworthiness 2) expertise 3) delivery factors

TABLE 1 (CONT.)

	Markham (1965)	Whitehead (1968)	Fulton (1970)
Source Concept:	Professional Newscasters	Public figures: 1 high and 1 low in credibility	Public speakers (undergraduates)
Subjects:	University students	University students	University students
Major Factors:	1) reliable-logic-evaluative 2) activity 3) nice-guy	1) trustworthiness 2) competence 3) dynamism 4) objectivity	1) agreeableness 2) conscientiousness 3) culture

	McCroskey, Scott, and Young (1971)	McDermott (1971)
Source Concept:	Spouse and Peers	Established business, gov't., and professional organizations
Subjects:	Adults	University students
Major Factors:	(Spouses) 1) Character 2) Dynamism 3) Competence 4) Extroversion 5) Composure 6) Sociability (Peers) 1) Sociability 2) Composure 3) Dynamism 4) Competence	1) reliable (qualification) 2) confidence 3) sociability 4) composure

Table 2

[table of date/status boxes — illegible]

TABLE 2

Left	Scale	Right		Left	Scale	Right
INTELLIGENT	□□□□□□□	UNINTELLIGENT		UNTRAINED	□□□□□□□	TRAINED
SOCIABLE	□□□□□□□	UNSOCIABLE		UNSYMPATHETIC	□□□□□□□	SYMPATHETIC
NERVOUS	□□□□□□□	POISED		ADMIRABLE	□□□□□□□	CONTEMPTIBLE
CHEERFUL	□□□□□□□	GLOOMY		AWFUL	□□□□□□□	NICE
TENSE	□□□□□□□	RELAXED		QUALIFIED	□□□□□□□	UNQUALIFIED
SINFUL	□□□□□□□	VIRTUOUS		EXTROVERTED	□□□□□□□	INTROVERTED
BELIEVABLE	□□□□□□□	UNBELIEVABLE		JUST	□□□□□□□	UNJUST
GOOD-NATURED	□□□□□□□	IRRITABLE		UNPLEASANT	□□□□□□□	PLEASANT
INTELLECTUAL	□□□□□□□	NARROW		TIMID	□□□□□□□	BOLD
COOPERATIVE	□□□□□□□	NEGATIVISTIC		ENERGETIC	□□□□□□□	TIRED
OUTGOING	□□□□□□□	WITHDRAWN		GOOD	□□□□□□□	BAD
DISHONEST	□□□□□□□	HONEST		REPULSIVE	□□□□□□□	ATTRACTIVE
MEEK	□□□□□□□	AGGRESSIVE		UNINFORMED	□□□□□□□	INFORMED
VALUABLE	□□□□□□□	WORTHLESS		COMPOSED	□□□□□□□	EXCITABLE
SELFISH	□□□□□□□	UNSELFISH		INCOMPETENT	□□□□□□□	COMPETENT
CALM	□□□□□□□	ANXIOUS		CRUEL	□□□□□□□	KIND
INEXPERIENCED	□□□□□□□	EXPERIENCED		TALKATIVE	□□□□□□□	SILENT
VERBAL	□□□□□□□	QUIET		EXPERT	□□□□□□□	INEXPERT
LOGICAL	□□□□□□□	ILLOGICAL		PASSIVE	□□□□□□□	ACTIVE
UNDEPENDABLE	□□□□□□□	RESPONSIBLE		IMPRESSIVE	□□□□□□□	UNIMPRESSIVE
HEADSTRONG	□□□□□□□	MILD		ADVENTUROUS	□□□□□□□	CAUTIOUS
FRIENDLY	□□□□□□□	UNFRIENDLY		CRUDE	□□□□□□□	REFINED
CONFIDENT	□□□□□□□	LACKS CONFIDENCE		RELIABLE	□□□□□□□	UNRELIABLE

Table 3

	SA A D SD	I learn more when other teaching methods are used.		
	SA A D SD	It was a waste of time.		
	SA A D SD	Overall, the course was good.		
	SA A D SD	The textbook was very good.		
	SA A D SD	The instructor seemed to be interested in students as persons.		
	SA A D SD	More courses should be taught this way.		
	SA A D SD	The course held my interest.		
	SA A D SD	I would have preferred another method of teaching in this course.		
	SA A D SD	It was easy to remain attentive.		
	SA A D SD	The instructor did not synthesize, integrate or summarize effectively.		
	SA A D SD	Not much was gained by taking this course.		
	SA A D SD	The instructor encouraged the development of new viewpoints and appreciations.		
	SA A D SD	The course material seemed worthwhile.		
	SA A D SD	It was difficult to remain attentive.		
	SA A D SD	Instructor did not review promptly and in such a way that students could understand their weaknesses.		
	SA A D SD	Homework assignments were helpful in understanding the course.		
	SA A D SD	There was not enough student participation for this type of course.		
	SA A D SD	The instructor had a thorough knowledge of his subject matter.		
	SA A D SD	The content of the course was good.		
	SA A D SD	The course increased my general knowledge.		
	SA A D SD	The types of test questions used were good.		
	SA A D SD	Held my attention throughout the course.		
	SA A D SD	The demands of the students were not considered by the instructor.		
	SA A D SD	Uninteresting course.		
	SA A D SD	It was a very worthwhile course.		
	SA A D SD	Some things were not explained very well.		
	SA A D SD	The way in which this course was taught results in better student learning.		
	SA A D SD	The course material was too difficult.		
	SA A D SD	One of my poorest courses.		
	SA A D SD	Material in the course was easy to follow.		
	SA A D SD	The instructor seemed to consider teaching as a chore or routine activity.		
	SA A D SD	More outside reading is necessary.		
	SA A D SD	Course material was poorly organized.		
	SA A D SD	Course was not very helpful.		
	SA A D SD	It was quite interesting.		
	SA A D SD	I think that the course was taught quite well.		
	SA A D SD	I would prefer a different method of instruction.		
	SA A D SD	The pace of the course was too slow.		
	SA A D SD	At times I was confused.		
	SA A D SD	Excellent course content.		
	SA A D SD	The examinations were too difficult.		
	SA A D SD	Generally, the course was well organized.		
	SA A D SD	Ideas and concepts were developed too rapidly.		
	SA A D SD	The content of the course was too elementary.		
	SA A D SD	Some days I was not very interested in this course.		
	SA A D SD	It was quite boring.		
	SA A D SD	The instructor exhibited professional dignity and bearing in the classroom.		
	SA A D SD	Another method of instruction should have been employed.		
	SA A D SD	The course was quite useful.		
	SA A D SD	I would take another course that was taught this way.		

SAMPLE MARKS:

USE
PENCIL
ONLY

RESPONSE CODE:

MARK SA   IF YOU STRONGLY AGREE WITH THE ITEM

MARK A   IF YOU AGREE MODERATELY WITH THE ITEM

MARK D   IF YOU DISAGREE MODERATELY WITH THE ITEM

MARK SD   IF YOU STRONGLY DISAGREE WITH THE ITEM

IF PART II OR III IS TO BE USED MARK HERE ———>

COMPLETE SECTIONS BELOW ACCORDING TO YOUR INSTRUCTOR'S DIRECTIONS:

OPTIONAL PART II ITEMS 51-75			OPTIONAL PART III ITEMS 76-100
51	SA A D SD		
52	SA A D SD		
53	SA A D SD		
54	SA A D SD		
55	SA A D SD		
56	SA A D SD		
57	SA A D SD		
58	SA A D SD		
59	SA A D SD		
60	SA A D SD		
61	SA A D SD		
62	SA A D SD		
63	SA A D SD		
64	SA A D SD		
65	SA A D SD		
66	SA A D SD		
67	SA A D SD		
68	SA A D SD		
69	SA A D SD		
70	SA A D SD		
71	SA A D SD		
72	SA A D SD		
73	SA A D SD		
74	SA A D SD		
75	SA A D SD		

TABLE 4

Teacher Scales

Factor Loadings for Items Selected

Scale	Sociability	Extroversion	Competence	Composure
Sociable-Unsociable	.71	.26	.05	-.15
Cheerful-Gloomy	.73	.17	.01	-.18
Good-Natured-Irritable	.82	-.01	.07	-.17
Cooperative-Negativistic	.76	.05	.26	-.09
Friendly-Unfriendly	.79	.16	.12	-.11
Awful-Nice	.75	.02	.31	-.13
Meek-Aggressive	.06	.67	.03	-.06
Verbal-Quiet	.18	.69	.04	-.07
Timid-Bold	.01	.71	.21	.05
Talkative-Silent	.03	.65	.24	-.02
Expert-Inexpert	.14	.39	.69	-.14
Crude-Refined	.21	.01	.61	-.25
Reliable-Unreliable	.30	.10	.63	-.12
Nervous-Poised	.25	.23	.13	-.73
Tense-Relaxed	.36	.25	.10	-.71
Calm-Anxious	.17	.03	.18	-.67

					Total
Eigenvalue	3.87	2.25	1.60	1.70	(9.42)
Variance	.24	.14	.10	.11	(.59)
Variance Accounted for on Two Best Items	.65	.49	.44	.52	

TABLE 5

C.E.Q. Factor Loadings for Items Selected

Items	General Course Evaluation	Instructional Methods	Instructor Impact	
7 The course held my interest	-.78	-.24	-.30	
13 The course material seems worthwhile	-.75	-.07	-.22	
22 Held my attention throughout the course	-.77	-.25	-.24	
24 Uninteresting course	.77	.38	.15	
25 It was a very worthwhile course	-.82	-.12	-.29	
35 It was quite interesting	-.80	-.16	-.33	
26 Some things were not explained very well	.25	.60	.27	
39 At times I was confused	.04	.66	.10	
43 Ideas and concepts were developed too rapidly	.11	.67	-.13	
42 Generally, the course was well organized	-.39	-.12	-.63	
47 The instructor exhibited professional dignity and bearing in the classroom	-.06	.01	-.65	

				Total
Eigenvalue	3.89	1.57	1.33	(6.79)
Variance	.35	.14	.12	(.61)
Variance Accounted for on Two Best Items	.66	.45	.41	

TABLE 6

Correlations Among Teacher Factors

	Sociability	Extroversion	Competence	Composure
Sociability	--	.31	.71	.50
Extroversion		--	.40	.14
Competence			--.	.49
Composure				--

TABLE 7

Regression Equations for Teacher Factor Scores

Criterion	Percentage of Variance Predicted	Equation
1. (General)	33	Y = 83.74 - .44 (Sociability) -.52 (Competence)
2. (Method)	14	Y = 22.24 - .04 (Sociability) - .18 (Competence)
3. (Instructor)	38%	Y = 18.66 - .08 (Sociability - .13 (Competence)

TABLE 8

Teacher Credibility predicts _____% of _____:

Percentage	Criterion Factor	Major Contribution
33%	General	(Sociability 30%)
14%	Method	(Competence 13%)
38%	Instructor	(Sociability 35%)

TABLE 9

Correlations Between Teacher Factor

Scores and Criterion Variables

Criterion Variable	Sociability	Factor Extroversion	Competence	Composure
1. (General)	.55	.26	.49	.30
2. (Method)	.33	.18	.30	.18
3. (Instructor)	.59	.24	.55	.34

TABLE 10

Correlations Among CEQ Factors

	General	Method	Instructor
General	--	.52	.68
Method		--	.43
Instructor		--	--

TABLE 11

Regression Equations for CEQ Factor Scores

Criterion	Percentage of Variance Predicted	Equation
1. (Sociability)	30	$Y = 97.73 - .25$ (General) -1.95 (Instructor)
2. (Extroversion)	8	$Y = 26.13 - .06$ (General) $-.20$ (Instructor)
3. (Competence)	34	$Y = 30.68 - .08$ (General) $-.80$ (Instructor)
4. (Composure)	13%	$Y = 28.22 - .05$ (General) $-.51$ (Instructor)

TABLE 12

CEQ predicts _____% of _____.

Percentage	Criterion Factor	Major Contributor
39%	Sociability	(Instructor 35%)
8%	Extroversion	(General 7%)
34%	Competence	(Instructor 30%)
13%	Composure	(Instructor 12%)

TABLE 13

Correlations Between CEQ Factor Scores and

Criterion Variables

Criterion Variable	General	Factor Method	Instructor
1. (Sociability)	.55	.33	.55
2. (Extroversion)	.20	.18	.24
3. (Competence)	.49	.30	.55
4. (Composure)	.30	.18	.34

TABLE 14

Teacher Scales

Factor Loadings for items with .60/.40 loadings

| | 4 Factors | | | |
Scale	Sociability	Extroversion	Competence	Composure
sociable-unsociable	.71	.26	.05	-.15
nervous-poised	.25	.23	.13	-.73
cheerful-gloomy	.73	.17	.01	-.18
tense-relaxed	.30	.25	.10	-.71
good-natured-relaxed	.82	-.01	.07	-.17
cooperative-negativistic	.76	.05	.26	-.09
meek-aggressive	.06	.67	.03	-.06
valuable-worthless	.67	.17	.37	-.12
calm-anxious	.17	.03	.18	-.67
verbal-quiet	.18	.69	.04	-.07
friendly-unfriendly	.79	.16	.12	-.11
unsympathetic-sympathetic	.68	-.04	.33	-.07
admirable-contemptible	.70	.12	.35	-.18
awful-nice	.75	.02	.31	-.13
just-unjust	.68	.08	.37	-.10
unpleasant-pleasant	.68	.13	.33	-.12
timid-bold	.01	.71	.21	.05
talkative-silent	.03	.65	.24	-.02
expert-inexpert	.14	.39	.69	-.14
crude-refined	.21	.01	.61	-.25
reliable-unreliable	.30	.10	.63	-.12

TABLE 15
CEQ
Factor Loadings for items with .60/.40 loadings

3 Factors

Scale	General Course Evaluation	Methods	Instructor
2	.73	.22	.23
3	-.71	-.23	-.29
6	-.65	-.26	-.39
7	-.78	-.24	-.30
8	.61	.38	.19
9	-.73	-.28	-.20
11	.70	.23	.18
13	-.75	-.07	-.22
14	.69	.37	.09
19	-.73	-.18	-.27
20	-.73	-.12	-.25
22	-.77	-.25	-.24
24	.77	.38	.15
25	-.82	-.12	-.29
26	.25	.60	.27
29	.64	.35	.22
34	.66	.38	.16
35	-.80	-.16	-.33
39	.04	.66	.10
40	-.73	-.09	-.36
42	-.39	-.12	-.63
43	.11	.67	-.13
47	-.06	.10	-.65

Other non-criterion loadings-

		Methods	Instructor
		items	items
		15	5
		26	12
		28	18
		32	
		33	
		38	