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RELATIONSHIPS OF VISIBLE NONVERBAL BEHAVIORS
AND CHARACTERISTICS OF TEACHERS
TO HIGH SCHOOL STUDENTS' FIRST IMPRESSIONS OF
TEACHERS' ABILITIES IN CLASSROOM CONTROL

BY

MARY CECIL WEYHING

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
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1983

Abstract

The relationships of visible nonverbal behaviors and characteristics of teachers to high school students' immediate impressions of teachers' abilities at classroom control were examined through two studies. The first was a correlational study: 44 college students were videotaped simulating teachers entering a classroom and beginning an initial class meeting. Students from a large comprehensive high school serving a middle-class and working-class town in New England rated the videotaped teachers. Three groups of seven students each rated approximately one-third of the teachers on ability to control a classroom; four groups of six students each rated teachers on attractiveness; three groups of five students each rated teachers on apparent age. Trained scorers, blind to the hypotheses of the study scored the videotapes for nonverbal behaviors and characteristics: number of gestures, number of self-adaptors, time looking at class, time walking, number of smiles, arm position, and dress. Teachers were also categorized on gender, race, and type of equipment used to videotape them. A stepwise multiple regression analysis using the rated and scored variables mentioned above as predictors, and the ratings on

classroom control as the criterion indicated that ratings on perceived ability to control a classroom were best predicted by gender of the teacher (males were rated higher), by having been taped with a studio camera rather than a portable unit which yielded somewhat less sharp black and white contrast than the studio camera, and by the amount of time the teacher looked at the class (more time looking was predictive of higher ratings).

The second study used a subset of ten teacher tapes from the first study as stimulus tapes; there were five tapes of male teachers and five of female teachers. They were chosen to represent the range of ratings from low to high ability to control a class for teachers of each gender. The second study was designed to examine whether ratings on perceived ability to control a classroom would be related to gender of student rater, academic track of student rater, gender of teacher, or order of presentation of teachers. An additional purpose of the second study was to find out whether teachers rated low and high in the first study were similarly rated in the second, to function as a validity check on the first study. Students from the same high school used in the first study participated in the second study; 72 males and 72 females, 36 of each gender from each academic track (low/high), rated the ten teachers

on perceived ability to control a classroom, seeing the tapes in one of four random orders. The analysis indicated that ratings on control were not affected by gender of student rater or academic track of student rater; they were affected by gender of teacher (males were rated higher) but at only two ranks; they were affected by order: the mean rating for one of the orders was lower than the means for each of the other three orders, none of which differed from each other.

Rankings of teachers in the second study exhibited these similarities to rankings in the first: for male teachers all rankings were the same, except that Ranks 4 and 5 were reversed in the second study. Rankings of female teachers in the second study were the same as those in the first except that Ranks 2 and 3 and Ranks 4 and 5 were reversed. There was a clear tendency for teachers ranked low in the first study to be ranked low in the second, and for those ranked high in the first study to be ranked high in the second; ratings from the first study are to that extent validated.

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TABLE OF CONTENTS

Chapter

I.	INTRODUCTION	1
	Importance of First Impressions for Future	
	Control	1
	Probable Importance of Nonverbal Cues	2
	Contribution to the Literature on Nonverbal	
	Behavior	3
	Prior Research	4
	Behaviors Included in the Hypotheses	8
	Smiles	8
	Time Looking	8
	Self-adaptors	9
	Behaviors and Characteristics for	
	Exploratory Investigation	10
	Sex of Teacher and Sex of Student Rater	10
	Gestures	11
	Attractiveness	12
	Arm Position	12
	Academic Track (Low/High) of Student Rater	13
	Age	13
	Race	13
	Dress	13
	Time Walking	13
	Summary	13
	Statement of Hypotheses	14
II.	STUDY 1	16
	Method	16
	Phase 1: Making Stimulus Videotapes	16
	Experimental Confederates (Teachers)	16
	Apparatus	16
	Procedure	17

Phase 2: Scoring the Nonverbal Behaviors of the Teachers	17
Scorers	17
Materials	18
Procedure	18
Interscorer reliability	20
Phase 3: Ratings by Small Groups of High School Students	21
Subjects	21
Apparatus	22
Materials	22
Procedure	23
Interrater reliability	24
Results and Discussion	26
Significant Predictors	29
Results Compared to Hypotheses	31
Summary	32
III. STUDY 2	33
Method	33
Experimental Confederates (Teachers)	33
Subjects	33
Apparatus	34
Materials	34
Procedure	34
Interrater reliability	36
Results and Discussion	37
Preliminary Analysis	37
Primary Analysis	39
Simple Effects	42
The RT Interaction	42
The GR Interaction	44
Main Effects	46
Rank	46
Results Relevant to Research Questions	46
Summary	51

IV.	DISCUSSION	53
	Findings Related to Predictions	53
	Length of Stimulus Videotapes	54
	First Impressions of Ability in Classroom Control	55
	Other Findings	56
	Future Research	57
V.	REFERENCES	59
VI.	APPENDICES	65
	A. Scoring Manual	66
	B. Scoring Sheet for Smiles	73
	C. Scoring Sheet for Gestures	75
	D. Scoring Sheet for Time Looking	77
	E. Scoring Sheet for Time Walking	83
	F. Scoring Sheet for Self Adaptors	89
	G. Scoring Sheet for Dress	91
	H. Scoring Sheet for Position of Arms	96
	I. Form for Rating Classroom Control (Study 1).	100
	J. Form for Rating Attractiveness	105
	K. Form for Rating Apparent Age	109
	L. Intercorrelations of Variables Examined in the Stepwise Multiple Regression Analysis.	114
	M. Forms for Rating Classroom Control, Orders I, II, III, IV (Study 2).	118
	N. Means and Standard Deviations for Orders of Presentation of Teachers	126
	O. Summary of One-Way Analysis of Variance for Ability in Classroom Control	127
	P. Consent Form	128
	Q. Instructions to Experimental Confederates	129

LIST OF TABLES

Table

STUDY 1

1. Sources of Definitions for Scoring of Nonverbal Behaviors and Characteristics, and Interrater Reliabilities Found Previously	19
2. Interrater Reliabilities for each Scored Variable	21
3. Interrater Reliabilities for each Rated Variable	25
4. Means, Standard Deviations, Ranges and Pearson Correlations of Criterion and Predictor Measures	28
5. Stepwise Multiple Regression Analysis: Nonverbal Variable Scores Predicting Ratings on Classroom Control	29

STUDY 2

6. Interrater Reliabilities by Rater Sex, Academic Track, and Order of Presentation	37
7. Means and Standard Deviations of Ratings on Ability in Classroom Control	40
8. Summary of 2 x 2 x 2 x 5 Analysis of Variance for Ability in Classroom Control	41
9. Means for Ranks at each Level of Track	42
10. Means for Gender at each Rank	44

APPENDICES

Table

A.	Intercorrelations of Variables Examined in the Stepwise Multiple Regression Analysis . .	114
B.	Means and Standard Deviations for Orders of Presentation of Teachers	126
C.	Summary of One-way Analysis of Variance for Ability in Classroom Control	127

LIST OF FIGURES

Figure

1. Relationship between Rank of Teacher and Track of Student Rater	43
2. Relationship between Gender of Teacher and Rank of Teacher	45
3. Comparison of Study 1 and Study 2 Mean Scores on Classroom Control by Rank (Male Teachers) . . .	49
4. Comparison of Study 1 and Study 2 Mean Scores on Classroom Control by Rank (Female Teachers) . .	50

INTRODUCTION

When Americans are polled about public education, "lack of discipline" in the schools is usually near the top of their list of concerns (Gallup, 1981; Williams, 1981). Apparently teachers share the concerns of the general public. Swick (1977) cites several surveys of teachers which make clear that teachers worry about classroom control and how to maintain it.

Importance of First Impressions for Future Control

Experienced teacher trainers seem unanimous in urging that beginning teachers convey immediately to their classes their intentions of being fair but firm in their control of the class. The following advice is typical:

Certain specific and practical suggestions are offered here for the teacher concerning his initial encounters with a class. It is essential, in our opinion, that a teacher's first interactions with a group be marked with a certain amount of reserve, even polite distance. Behavior toward the total group should be professional and businesslike since such a start will allow the teacher room to ease up and become more personable and warm if it becomes appropriate....a teacher should seek respect for his task and role before he seeks popularity, closeness, or love from students. (Webster, 1968, pp. 59-60.)

LaGrande (1969), writing about discipline in the secondary school says:

It is imperative...to plan carefully the initial impression you wish to make. One of the common mistakes of the first student-teacher meeting is the attempt of the teacher to try to be too friendly. This is especially true of the new teacher. When establishing needed rapport at the first meeting it is better to be too strict and demanding than to seek to

be everybody's friend. The latter generally gives the impression that the teacher desperately needs the approval of his students. They naturally feel that they are in control of the situation....You are not to be belligerent but you must make your approach serious, sincere and direct. You are not in search of friendship at this time. (pp. 52-53.)

Warnings that a weak initial impression can lead to chaos are common. Faust (1977) notes that if a teacher initially conveys an impression of laxness, and later tries to behave more strictly, students will resent the deprivation of liberties they experience, and may effectively refuse to give them up.

An initial impression of competency at classroom control may foster a positive effect: it may allow the development of a "honeymoon" period between teacher and class, during which the teacher has the chance to begin building a positive relationship with the class and to interest the students in the subject matter. This may be especially encouraging to the beginning teacher, who often cites classroom control as a primary concern (Swick, 1977).

It goes without saying that a strong initial impression will not substitute for good teaching skills, but an initial weak impression may almost preclude the teacher's chance to exercise even the best teaching skills.

Probable Importance of Nonverbal Cues

Experienced teachers advise beginners to immediately convey to their classes firmness, a businesslike attitude, fairness, a demand for respect if they would get off to a

good start regarding classroom control. It is not urged that teachers verbally declare all these attitudes; to do so might be worse than futile. The expectation is that in the course of the initial encounter, the teacher can do much to convey these impressions nonverbally. Whatever impression a teacher wants to convey, it is probable that the teacher's nonverbal behavior and characteristics will be primary vehicles for conveying it (Mehrabian & Ferris, 1967; Mehrabian & Wiener, 1967; Galloway, 1971; Mehrabian, 1972).

Contribution to the Literature on Nonverbal Behavior

Although research on human nonverbal behavior dates back to at least Darwin (1872), it has gained significant momentum and breadth only in the past two or three decades. The era of descriptive research in this field is far from over. Much research, both descriptive and experimental, has been devoted to investigation of isolated bits of behavior; yet many researchers have begun to call for attempts to study nonverbal behaviors in combinations, closer to their actual occurrence in everyday life (Rosenfeld, 1972; Ellsworth & Ludwig, 1972; Duncan & Fiske, 1977; Dittmann, 1978; Weitz, 1979). This study attempts to integrate some of the basic findings in the nonverbal literature with reference to a specific real-life context. It may shed some light on communication which occurs nonverbally, which can easily go almost unnoticed, and yet may have effects on some of the educational outcomes of virtually every person in the

nation.

Prior Research

Teacher trainers advise beginning teachers on the initial impression they should try to convey. This advice on initial impressions is based largely on experience rather than on research. Handbooks for teachers summarize and anthologize the learning of teachers over the years about what works for them in keeping discipline in the classroom (e.g., Weiner, 1980; Stradley & Aspinall, 1975). When they comment on initial impressions, they seem unanimous in emphasizing their crucial importance.

Research on first impressions lends support to the idea that they can have a disproportionate effect on the future of the interactions of the people involved. People form initial impressions based on very little information; then they keep trying to fit new information about the person into their initial gestalt of the person so that it is consistent with this gestalt (Hastorf, Schneider, & Polefka, 1970). Thus it would be predicted that if students form an initial impression of a teacher as a competent disciplinarian, students will begin interpreting new information about that teacher in ways consistent with maintaining that impression, (and will treat the teacher accordingly). Conversely, if students form an initial impression of a teacher as an incompetent disciplinarian, they will keep trying to interpret new information about

that teacher in ways consistent with that impression, and will behave accordingly toward that teacher.

Assuming that the perennial advice of experienced teachers is valid, and that the research on first impressions is applicable, what combination of nonverbal behaviors would help to convey the desired initial impression?

Advice to beginning teachers emphasizes that approval-seeking behavior is to be avoided. Rosenfeld (1966a, 1966b) found that increased smiles, increased gestures (females only), and increased speech disruptions characterized approval-seeking subjects.

What conveys a businesslike, reserved, demanding, serious, direct attitude? The concept of assertiveness seems likely to be useful in solving this problem. Alberti and Emmons (1978) give this definition of assertiveness:

Behavior which enables a person to act in his or her own best interests, to stand up for herself or himself without undue anxiety, to express honest feelings comfortably, or to exercise personal rights without denying the rights of others we call assertive behavior. (p. 2)

A person can be assertive without being businesslike and reserved; assertiveness is a tool for the expression of whatever message the asserter wishes to send. Often, however, the message about which a person wishes to be assertive involves making some demand on another, and demands a self-presentation which is serious and direct.

Alberti and Emmons (1978) advise would-be asserters to get a clear idea of their goals in an encounter, and to be

verbally direct about what it is they want to have happen. In addition, these assertive trainers specify a set of nonverbal behaviors which they have found helpful in achieving assertive goals. Serber (1977) offers clinical data on the effectiveness of these nonverbal behaviors for clients whom he has trained. The recommended nonverbal behaviors are: looking directly at the person to whom one is speaking; standing straight; facing the other person directly; using spontaneous gestures appropriate to emphasize one's message, (and avoiding "nervous" gestures); making one's facial expression congruent with the message; using a loud enough voice volume to be easily heard; using an inflected voice tone, rather than a monotone; keeping one's speech fluent; and timing one's assertions as close as possible to whatever event signalled the need for an assertive communication.

After the explanation of some qualifications and exceptions, it will be hypothesized below that behaviors found associated with approval-seeking will be more characteristic of teachers rated low than high on probable ability to keep discipline in the classroom, and that behaviors recommended by assertive trainers will be more characteristic of teachers rated high than low.

This having been said, it must be noted that there are reasons which make hypothesizing somewhat risky. First, the study of human nonverbal behavior is still young enough that there are few broadly generalizable findings. A second,

related consideration is this: a relatively small part of the nonverbal literature has investigated nonverbal behaviors of a person interacting with a large group; most of the literature focuses on one-to-one interactions. Much of the literature also deals with people who are seated; there are some indications that the same behaviors done by a seated or standing communicator may be received differently. For example, Mehrabian (1969b) found that more direct body orientation by a seated communicator was associated with more liking, but this relationship was not found when the communicator was standing. Some studies have incorporated many highly specific parameters which make it difficult to generalize beyond them. There are a few areas of nonverbal research where the results are consistent enough, and exploration has been broad enough, that it seemed reasonable to use them in making hypotheses for the present research, despite uncertainty about generalizability to this specific situation. Hypotheses have been made about behaviors for which there is that sort of background; for the other behaviors and characteristics, relevant information has been outlined, but their examination has been exploratory.

Following is a list of behaviors which are included in the hypotheses, and a list of behaviors and characteristics which are examined in an exploratory way. These behaviors are included in the hypotheses: number of smiles, time looking, and self-adaptors. These behaviors and characteristics are examined in an exploratory way: gender

of teacher, gestures, attractiveness, arm position, time walking, age, dress, race, sex of student, academic track of student.

Behaviors Included in the Hypotheses

Smiles. Rosenfeld (1966a, 1966b), found an increase in smiling for both males and females when they were trying to get another person to approve of them. Smiling was not related to approval received, however (Rosenfeld, 1966a). It seems likely that teachers who smile more would be rated lower in ability to control a class.

Time Looking. In this report, terms like "looking at the class" and "gaze" will be used in preference to the term "eye contact." Argyle & Cook (1976) cite Cranach's (1971) argument against the use of the term "eye contact," observing that "eye contact" means that each individual is looking directly into the other's eyes. This is very difficult to verify. Cranach proposed that an equally useful and less restrictive term would be "mutual look."

There is strong support for the positive effects of looking at one's addressee. With a few exceptions, more is better. People do find staring aversive (Ellsworth, Carlsmith, & Henson, 1972), and they do not like high gaze from an evaluator giving negative feedback to them (Ellsworth & Carlsmith, 1968), but generally speakers who give high amounts of gaze are preferred to those who give low amounts (Cobin, 1962; Kaufman, 1975).

Speakers who look at their audiences are rated more credible (Beebe, 1974), less nervous and formal (LeCompte & Rosenfeld, 1971), more attractive and less tense (Kleck & Nuessle, 1968), and more attractive and persuasive (LaCrosse, 1975).

People who give more gaze are seen as more extraverted, friendly, self-confident, natural, mature and sincere. People who avoid looking are seen as cold, pessimistic, defensive, evasive, submissive and indifferent (Argyle & Cook, 1976).

Harper, Wiens, and Matarazzo (1978), reviewed the literature on dominance and gaze. Although there seem to be complex qualifications to many findings (related to situations and to personality characteristics of both givers and and receivers of gaze), there is evidence of a positive association between dominance and higher amounts of gaze. Thus it seems likely that teachers who spend more time looking at the class would be rated higher in ability to control a class.

Self-adaptors. Ekman and Friesen (1969) called body-focused movements "self-adaptors," because they believe that these movements originate in childhood, "as part of adaptive efforts to satisfy self or bodily needs, or to perform bodily actions, or to manage emotions...." These researchers further speculate that many such movements are carried over into adulthood as habitual responses which reappear in fragmentary form when situations approximating

the situations where they were learned arise, especially if the person is in public at the time. Many self-adaptors carry a connotation of rudeness (e.g. scratching, grooming) in public, and the person who does them may give the impression of being too preoccupied with other things to be aware of doing them; sometimes they are attributed to nervousness. There is strong evidence for the negative view of self-adaptors. The number of self-adaptors is negatively related to attractiveness (Rosenfeld, 1966a), and persuasiveness (Mehrabian & Williams, 1969), and positively related to chronic psychosis (Grand, Freedman, Steingart, & Buchwald, 1975). Their frequency increases in negative encounters (Freedman, O'Hanlon, Oltman, & Witkin, 1972). Mehrabian and Ksionzky (1972) found a positive relationship between ingratiating behaviors and self-manipulations. Assertive trainers (Alberti & Emmons, 1978) recommend the use of gestures appropriate to emphasize the assertive message, and the inhibition of "nervous gestures." It seems likely that teachers who perform more self-adaptors would be rated lower in ability to control a class.

Behaviors and Characteristics for Exploratory Investigation

Sex of Teacher and Sex of Student Rater. Gender effects were examined because of the common finding of gender differences in the nonverbal literature (Ellsworth & Ludwig, 1972; Allen & Guy, 1974; Duncan & Fiske, 1977; Beekman, cited in Duncan & Fiske, 1977; Hall, 1978, 1979;

Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979). Females across all age groups have been found to be better than males at sending (encoding) and receiving (decoding) nonverbal messages of emotion (Hall, 1978, 1979). Whether the sender is male or female does not seem to affect the relative quality of decoding by females and males. Females are better at decoding both males and other females (Hall, 1979). It was thought that depending on the kinds of emotions displayed by teachers, and depending on whether students considered these emotions relevant to disciplinary ability, female and male students might make quite different judgments about individual teachers. For example, if certain teachers showed signs of fear, and more female students picked this up, those teachers might be rated lower by females than by males.

A factor which might give importance to the gender of the teacher is the widespread cultural stereotype assigning more dominance and power to males than to females. Students might simply assume that males would be more formidable disciplinarians.

Gestures. Rosenfeld (1966a, 1966b) found higher rates of gesturing associated with approval-seeking in females. Since an hypothesis of the present research is that approval-seeking leads to lower ratings of competency in classroom control, it might be expected that higher rates of gesturing by females would lead to lower ratings for them; but balanced against this idea is the weight of research on

public speaking which indicates that audiences respond much more positively to speakers who are facially, gesturally, and vocally active (Thompson, 1967). There is no indication that these effects apply to one gender more than to the other.

Attractiveness. Attractive people are consistently given the benefit of the doubt, and good qualities are associated with them (Dion, Berscheid, & Walster, 1973). Whether the halo effect from attractiveness would extend to inferences about competency in discipline is difficult to guess. Strict disciplinarians are often portrayed in literature as physically unattractive people; this may suggest a cultural stereotype separating attractiveness and discipline. (Granted, the discipline practiced by fictional characters is sometimes as negative as the physical descriptions of them; nevertheless, this literary tendency might exert a subtle influence.)

Arm Position. This variable is used as an index of relaxation of standing posture. Mehrabian (1969a) found that of all the nonverbal behaviors in a set he studied, asymmetry of arm position had the highest association with relaxation of standing posture. Mehrabian (1972) summarized an extensive program of research in which he found that postural relaxation was an important correlate of higher status and dominance. (These findings pertain to one-to-one interactions, and may not hold for speaker-audience communication.) On the other hand, assertive trainers

(Alberti & Emmons, 1978) advise their clients to stand straight for more effective assertions. No hypothesis is made about this behavior because it seems easy to invent rationales for the association of either more or less relaxed postures and perceived competency in classroom control.

Academic Track (Low/High) of Student Rater. There might be differences in how students in high or low academic tracks perceive teachers' probable abilities to control a class. Since, for a variety of reasons, disciplinary problems are greater for lower track classes, it might be expected that lower track students will rate more teachers low on ability to control classes like those in which they are enrolled than will higher track students.

Age, Race, Dress, and Time Walking. These four variables were added to consideration after it was found that teachers in the present research differed on these dimensions; it seemed possible that inclusion of these variables might increase the explanation of variance in ratings.

Summary

The beginning teacher might ask, "How can I convey the immediate impression that I will be an effective classroom disciplinarian? What nonverbal cues do students associate with effective discipline? Does my gender make a difference in their impressions? Does the student's gender or the

student's academic track make a difference in the way he or she sizes up the teacher?" These are the questions addressed in this research. The literature on nonverbal behavior offers some bases for hypothesizing, but there is nothing investigating the question of what combination of nonverbal behaviors and characteristics signal to students that a teacher will be a competent disciplinarian.

This research is divided into two separate studies. Study 1 addresses the questions regarding which nonverbal behaviors and characteristics are associated with perceived competency in classroom control. Study 2 addresses the questions regarding how those perceptions might be related to teacher gender, student gender, and academic track level of student. In addition, Study 2 functions as a validity check on Study 1.

Statement of Hypotheses

The hypotheses which seem justified are listed below:

H1: Approval-seeking nonverbal behaviors of teachers are negatively related to immediate perceptions of ability in classroom control.

Prediction 1: Teachers rated lowest in probable ability to control a class will display more smiles than teachers rated highest.

H2: Assertive nonverbal behaviors of teachers are positively related to immediate perceptions of ability in classroom control.

Prediction 2: Teachers rated highest in probable ability to control a class will display more looking at the class than teachers rated lowest.

Prediction 3: Teachers rated highest in probable ability to control a class will display fewer self-adaptors than teachers rated lowest.

STUDY 1

Method

Phase 1: Making Stimulus Videotapes

21 + 23

44 students

Experimental Confederates (Teachers). Twenty-one male and twenty-three female college student volunteers were recruited from local college populations. They were asked to participate in a study of first impressions by high school students regarding teachers. The experimental confederates were education students, and students majoring in history and politics. Their field of concentration was considered relatively unimportant since the task of each was simply to give a believable brief portrayal of himself or herself as a teacher entering a classroom for an initial class meeting. The overall task of the group of experimental confederates was to provide a set of performances displaying a range of plausible teacher behaviors. Confederates are hereafter referred to as teachers. A copy of the consent form given to each teacher, detailing the intended uses of the videotapes, is included in the appendices. Also in the appendices is a copy of the set of instructions given to each teacher.

Apparatus. Two cameras and tape decks were used: a Sony video camera, model # 3200, with a Panasonic reel-to-reel deck, model # 3130; and a portable Panasonic video camera, Model # 3085, with a Panasonic reel-to-reel tape deck, model

3085. Lighting was provided by two 650 watt lamps at a height of about 7 feet. Tapes were one-half inch black and white reel-to-reel tapes. These tapes were then copied onto one-half inch cassettes, which were used for ratings and scoring.

Procedure. Teachers were videotaped simulating the following: entering a classroom, calling the class to order, introducing themselves, making a few comments on the course subject (American history), and beginning to call the roll of students. The tapes were later edited to a standard length: the initial 60 seconds.

Teachers were taped in three different locations. Rooms were used which had the same configuration of door, blackboard, and teacher's desk. The camera was placed to give the view of a front row student. The classroom was empty except for the cameraperson and the researcher, but since the tape showed only the teacher, it was impossible to tell that there were actually no students present.

During the taping, some teachers' performances were collected on each of four different reel-to-reel tapes. These four sets of tapes were later copied in random order onto one cassette tape.

Phase 2: Scoring the Nonverbal Behaviors of the Teachers

Scorers. Four trained scorers, blind to the hypotheses of the study, scored the videotaped teachers on each of seven nonverbal behavior variables: dress, gestures, time

looking at class, time walking, number of smiles, number of self-adaptors, and arm position. Scorers were each paid \$3.50 per hour. Only three of the scorers were used for any one variable.

Materials. Materials were a scoring manual and scoring sheets, copies of which may be found in the appendices.

Procedure. Scorers practiced scoring each type of behavior until it was clear that they understood the criteria for the identification of the behavior, and were in very close agreement on practice scores. During actual scoring, scorers were encouraged to replay segments of the videotape as many times as necessary to record each type of action or to time it with a stopwatch. Only one variable was scored per pass of the tape (as recommended by Duncan & Fiske, 1977).

Sources for some of the definitions of these scored variables were available in the literature. They are shown in Table 1 below.

Definitions following Mehrabian (1969a) were used for self-adaptors and gestures.

The method of ostensive definition (Duncan & Fiske, 1977; Rosenfeld, 1966b) was used for smiles and time looking. Those researchers found that raters achieved higher reliabilities in rating smiles after being shown examples of smiles and non-smiles than they achieved when explicit definitions were attempted. Looking was also defined ostensively because Duncan and Fiske (1977) reported

Table 1
Sources of Definitions for Scoring
of Nonverbal Behaviors and Characteristics,
and Interrater Reliabilities Found Previously

Behavior or Characteristic	Source of Definition	Reported Interrater r
Self-adaptors	Mehrabian, 1969a	.93
Gestures	Mehrabian, 1969a	.98
Number of Smiles	Duncan and Fiske, 1977	.92
Time Looking	Duncan and Fiske, 1977	.94
Arm Position	Adapted from descriptions by Mehrabian, 1969a	--

interrater reliabilities of .94 and .92 using this method, and the less restrictive concept of gaze described above on page 8, whereas Mehrabian (1969a) reported an interrater reliability of .55 using the concept of "eye contact" (each participant looking directly into the other's eyes).

Standing posture relaxation was scored on a 3-point scale from 2 = very relaxed (arms moderately to extremely asymmetrical), to 0 = least relaxed (arms symmetrical). This scale was adapted from Mehrabian's (1969a) criteria for postural relaxation. Ratings of arm asymmetry were used as the relaxation index for the present research because Mehrabian (1969a) reported that in two prior experiments, arm asymmetry had the highest loading on the factor of

relaxation of all the indicators used. In the present research, the tapes of the teachers did not show legs and feet, but did show hands and arms, so the data on arm asymmetry was available on all teachers. Scorers were provided with definitions and with sketches of these arm positions as examples in the scoring manual.

A description of the data generated follows: scores for dress could vary from 1 to 3; for number of gestures from 0 to any number; for time looking at the class from 0 to 60 seconds; for time walking from 0 to 60 seconds; for number of smiles from 0 to any number; for number of self-adaptors from 0 to any number; and for arm position from 0 to 4. The score of each videotaped teacher on each variable was the average of the scores assigned by all three scorers. Teachers were also categorized on the following variables: sex (male = 0, female = 1), race (white = 0, non-white = 1), camera (portable camera = 0, studio camera = 1), and major (non-education major = 0, education major = 1).

Interscorer Reliability. Agreement between scorers was determined by Winer's (1971) formula for interrater reliability (pp. 282ff). This formula is used to compute the statistic r_k , the estimate of the reliability of the mean of k measurements. The ratio of the mean square for treatment to the mean square of the residual for each scored variable was computed to determine whether to apply an adjustment for anchor points described by Winer (1971, pp. 289ff). The ratio was significant for each scored variable, and all the

values for r_k for scored variables are anchor-point adjusted. The reliability of the mean score was calculated because this was the reliability of interest: each teacher's score on each variable was the mean of the scores assigned to that teacher on that variable by the three scorers.

A summary of the interrater reliabilities for each scored variable is given in Table 2.

Table 2
Interrater Reliabilities for each Scored
Variable (N = 44)

Scored Variables	N of Scorers	r_k^*
Gestures (number)	3	.99
Arm Position	3	1.00
Smiles (number)	3	.98
Dress	3	.94
Self Adaptors	3	.99
Time Looking	3	.98
Time Walking	3	.99

* adjusted for anchor points

Phase 3: Ratings by Small Groups of High School Students

Subjects. Male and female high school students from a large comprehensive high school in an industrial town of mostly working-class and middle-class people participated.

Twenty-four students in groups of 9, 8, and 7

respectively, viewed the 44 teacher tapes, each group viewing about one-third of the teachers, and rating them on their probable ability to control classes like the ones in which the student raters were enrolled at their school. (Two raters from the first group and one rater from the second group were randomly dropped in order to equalize their numbers with that of the third group.)

Sixteen students in groups of 4 each viewed the teacher tapes and rated the teachers on attractiveness, each group rating about one-third of the tapes, except for the last group of 4 raters, which rated two teachers who had not been rated by the preceding group of raters due to their running out of time.

Eighteen students in groups of 6 each viewed the 44 teacher tapes, each group rating about one-third of the teachers on their apparent age.

Apparatus. Cassettes were played back for raters on a Panasonic cassette deck, model # 8310. The display was an Emerson model # BT 121 television set.

Materials. Materials were videotapes, edited to the initial 60 seconds for each teacher, and rating sheets for ratings on ability in classroom control, attractiveness, and apparent age. Classroom control was rated on a 6-point scale : "1" = "very poor," to "6" = "excellent." Attractiveness was rated on a 9-point scale: "1" = "extremely unattractive," to "9" = "extremely attractive," (after Miller, 1970). Apparent age was rated in four

categories: "Under 25;" "25-39;" "40-54;" and "over 54."

The score of each teacher on each of these variables was the average of the ratings assigned by all raters.

Copies of all the above-mentioned materials may be found in the appendices.

Procedure. Subjects were asked to volunteer during study periods to view some videotapes and make some ratings of some of their first impressions of the people in the videotapes. Before subjects began the ratings, the researcher introduced herself, thanked the subjects for volunteering to participate and gave these instructions: "I am studying high school students' first impressions of teachers they've never seen before. Here's what's going to happen. In a minute I'm going to show you several short videotapes of teachers each going in to the first class meeting of a new school year. None of these teachers has ever worked in this town, but I want you to imagine that you could be in their classes. First you will see on the screen a code number for the teacher. Then you will see the teacher for a few moments. (There is no audio; you will just see the video.) Then there will be a few seconds of blank screen to give you time to give the teacher a rating. Here is what you will rate the teacher on: how good you think he or she would be at keeping control of classes like those you are in here at this school; keeping control of ordinary kinds of disturbances, like talking - we're not thinking of violent behavior, physical assaults or things

like that. Not how good you think the teacher would be at making students understand the subject matter, but just this one thing: how good the teacher would be at keeping control of the class. Please look at your rating sheets." The researcher then explained the 6-point scale on which the teachers were to be rated, and instructed the subjects in filling out the demographic information on the cover sheet. (For subjects who rated attractiveness or apparent age, these instructions were essentially the same, with the appropriate description of the rating task and rating scale.)

Before the showing of each teacher's tape, a code number for that teacher appeared on the screen. The teacher's tape then ran for 60 seconds; there was then 20 seconds of blank screen to allow subjects to make their ratings.

Interrater Reliability. Agreement between raters was determined by Winer's (1971) formula for interrater reliability (pp. 282ff). This formula is used to compute the statistic r_k , the estimate of the reliability of the mean of k measurements. The ratio of the mean square for treatment to the mean square of the residual for each rated variable was computed to determine whether to apply an adjustment for anchor points described by Winer (1971, pp. 289ff). The ratio was significant for one or more rater groups for each rated variable, and all the values for r_k for rated variables are anchor-point adjusted. The reliability of the

mean rating was calculated because this was the reliability of interest: each teacher's score on each rated variable was the mean of the ratings assigned by all raters for that teacher on that variable. A summary of interrater reliabilities for rated variables is given in Table 3.

Table 3
Interrater Reliabilities
for each Rated Variable (N=44)

Rated Variables	N of teachers	N of Raters	r_k^*
<u>Classroom Control</u>			
Teacher group #1	15	7	.14
Teacher group #2	13	7	.10
Teacher group #3	16	7	.80
<u>Attractiveness</u>			
Teacher group #1	15	4	.67
Teacher group #2	13	4	.58
Teacher group #3a	14	4	.75
Teacher group #3b	2	4	.43
<u>Apparent age</u>			
Teacher group #1	15	6	.69
Teacher group #2	13	6	.82
Teacher group #3	16	6	.92

* adjusted for anchor points

All interrater reliabilities, shown in Table 3, are reasonably high with the exception of those for the raters who rated teacher groups 1 and 2 on classroom control ($r_k = 0.14$ and 0.10 respectively). Raters who rated the teachers in group 3 on classroom control had a fairly high interrater reliability ($r_k = .80$). As will be seen in Table 6, Study 2 yielded considerably higher interrater reliabilities (range from $r_k = .47$ to $r_k = .91$) for ratings on the same variable for a subset of the same teachers rated in Study 1, which is presently under discussion. Thus it seems reasonable to think that the variable can be reliably rated. It will also be seen in Study 2 that teachers rated high in Study 1 were also rated high in Study 2, and that teachers rated low in Study 1 were also rated low in Study 2. Thus, the second study, where interrater reliabilities were good, gives support to the high/low classroom control ratings of the first study, where interrater reliabilities were in themselves not reassuring. It seems worthwhile to consider the data generated by the raters of classroom control in Study 1, with the understanding that caution is needed in interpreting results.

STUDY 1

Results and Discussion

In this study the relationship between a single criterion, perceived ability to control a classroom, and a

set of twelve nonverbal variables used as potential predictors was investigated. It was of interest to find out which of the nonverbal variables had the strongest relationship to the criterion scores, which the next strongest, and so on.

Table 4 shows means, standard deviations, minimum and maximum scores, and correlations for each of the 12 potential predictor variables with the criterion, ability in classroom control.

The method of analysis chosen was stepwise multiple regression analysis because this method analyzes the relationship between a single criterion variable and a set of potential predictor variables. The stepwise feature allows examination of the rank order in which predictors contribute to prediction of the criterion. The single strongest predictor is selected first, and the analysis successively adds the predictors which make the next strongest unique contribution to overall prediction, until a predetermined stopping point of statistical significance is reached. A selection criterion of $p < .05$ for the change in R^2 was used to determine the stopping point for the stepwise analysis. Scores were analyzed using the set of 12 nonverbal variables as potential predictors, and the ratings on ability in classroom control as the criterion.

Table 4

Means, Standard Deviations, Ranges, and Pearson
Correlations of Criterion and Predictor Measures (N=44)

Variable	<u>Mean</u>	<u>SD</u>	Min.	Max.	<u>r</u>
Criterion					
Classroom Control	4.02	0.71	1	6	
Predictors					
Attractiveness	5.19	1.15	1	9	.29*
Age	1.78	.50	1	4	.10
Gestures (number)	5.39	5.24	0	19	.20
Sex	1.52	0.50	0	1	-.34*
Race	1.07	0.25	0	1	.17
Camera	1.41	0.50	0	1	.24
Self-adaptors (number)	4.60	5.97	0	21	.19
Time Looking (secs.)	45.24	8.56	0	60	.20
Smiles (number)	0.49	0.87	0	4	-.22
Arm position	0.45	0.97	0	4	.04
Dress	2.26	0.66	1	3	-.09
Time Walking (secs.)	1.82	5.73	0	60	.11

* $p < .05$

Table 5 summarizes the results of the stepwise multiple regression analysis. The final multiple $R = 0.54$. Table A in the appendices shows the intercorrelation matrix of all variables.

Table 5

Stepwise Multiple Regression Analysis: Nonverbal Variable Scores Predicting Ratings on Classroom Control

Predictor Variable	Rank	R^2 Change	df	F	R^2
Sex	1*	.11**	1,42	10.940	.11
Camera	2	.11**	2,41	6.573	.22
Time Looking	3	.07**	3,40	3.823	.29

* negative weight

** $p < .05$.

Significant Predictors

Sex of teacher was coded so that male = 0, and female = 1. The negative regression weight for sex indicates that lower scores on sex (i.e., scores indicating male teachers) were the most important predictors of high scores on perceived ability to control a classroom. This result probably has roots in the greater physical power of males, and also in cultural stereotypes like the one which envisions fathers as tougher disciplinarians than mothers.

The two cameras were coded so that the portable

camera = 0, and the studio camera = 1. Those taped with the studio camera received higher scores on ability to control a classroom than did those taped with the portable camera. There was better black-and-white contrast with the studio camera, though the nonverbal behaviors and characteristics of teachers were clearly visible with both. Perhaps the tapes with sharper contrast had a subtle, more professional aura which raters transferred to the teachers as well.

Time Looking had been hypothesized to be positively related to scores on ability to control a classroom, and these results indicate that that hypothesis was supported. This result accords with the literature on dominance and gaze cited in the introduction to this report; it accords with research in public speaking, and with conventional public speaking dicta; and it accords with the advice of assertiveness trainers. Although the zero-order correlation of time looking with the criterion was not significant, ($\underline{r} = .20$, $\underline{p} > .05$), its correlation with previously selected predictors apparently was low enough to allow its selection.

Although the zero-order correlation of attractiveness with the criterion was significant ($\underline{r} = .29$, $\underline{p} < .05$), it was not selected in the stepwise multiple regression analysis. Apparently its correlation with some of the previously selected predictors resulted in its noninclusion in the linear prediction set.

Results Compared to Hypotheses

H1: Prediction 1. The prediction that more smiles would be associated with lower scores on ability to control a classroom was not supported. It may be that this hypothesis should be made gender-specific: perhaps it would be supported for males but not for females. The number of teachers in the present research does not allow for legitimate subanalyses by gender, but Pearson correlations of scores on ability to control a classroom and the other nonverbal behaviors were run for male and female teachers separately to get ideas for future hypothesis development. The overall correlation of scores for smiles and scores for control was $r = -0.22$, n.s.; but for males it was $r = -0.52$, $p < .05$, while for females it was $r = 0.01$, n.s. These two correlation coefficients were compared using Fisher's z transformation. It was found that the correlations of scores on ability to control with scores for the number of smiles for males and for females were not significantly different from each other: (critical ratio = 1.81, n.s.). Perhaps with a larger sample there would be a significant difference in these correlations for males and females. It would seem reasonable that in a replication with twice as many subjects of each gender, an hypothesis that more smiles would be associated with lower scores on control for male teachers would be in order.

H2: Prediction 2. The prediction that more time looking at the class would be associated with higher scores on

ability to control was supported. This finding is discussed above.

H2: Prediction 3. The prediction that fewer self-adaptors would be associated with higher scores on control was not supported. This may be due to the fact that the definition of the behavior includes all hand-to-body movements, whereas the usual notion of the "nervous movements" which tend to be socially annoying, is somewhat more restricted (e.g., to behaviors like scratching). The teachers in this research tended to do few of the "nervous movement" self-adaptors and more behaviors which technically fit the definition, but were probably not socially annoying (e.g. repeatedly touching the index finger of one hand to the palm of the other emphasizing serial points in the discourse the teacher was making). Future research including self-adaptors should make subcategories in the definition of this behavior.

Summary

In Study 1 it was found that ratings on perceived ability to control a classroom were best predicted by gender of the teacher (males were rated higher), by the teacher's having been taped with a studio camera rather than a portable unit which yielded somewhat less sharp black and white contrast than the studio camera, and by the amount of time the teacher looked at the class (more time looking was predictive of higher ratings).

STUDY 2

Method

Experimental Confederates (Teachers). Average scores on perceived ability to control a classroom were compiled from Study 1 data for each teacher. Male teachers were rank-ordered from highest to lowest average scores; female teachers were rank-ordered from highest to lowest average scores. Each group was divided into 5 clusters of ranks. Then one member of each cluster was randomly chosen to represent that cluster of ranks. Thus was developed a set of 5 male and 5 female teachers to represent the range of scores on perceived ability to control a classroom. Tapes of two additional teachers, one male and one female were chosen at random from the remaining group of 34 teachers to serve as practice items before the ratings of the 10 representing the range of ranks.

Subjects. Ninety-eight male and 98 female high school student volunteers were recruited from study periods at a large comprehensive high school in an industrial town with a lower class to middle class population. There were 78 volunteers from the low academic track, and 118 volunteers from the high track. In order to equalize cell N's at nine (the smallest cell N in the sample) 52 subjects were dropped at random from cells containing more than nine. Thus data from 72 male and 72 female students was used in the

experiment. Thirty-six of each gender were from the high academic track and thirty-six of each gender were from the low academic track. Academic track status was determined by the level of English in which the student was enrolled. There are six levels in the curriculum, and the top three are taken by potentially college-bound students, while the bottom three are taken by students who are not preparing for college.

Apparatus. A Panasonic model # 8310 cassette deck was used to show the teachers' videotapes to subjects. The display was an Emerson model # BT 121 television set.

Materials. Rating sheets like those used by the subjects are shown in the appendices. Tapes of the ten teachers to be rated plus the two tapes to be used for practice were arranged in four different orders following the method described by Attneave (1957): (a) random ordering; (b) "inside-out" version of the first ordering; (c) reverse of the first ordering; (d) reverse of the second ordering. Each of these four orders was preceded by the two practice tapes, with two orders showing the female teacher first, and two orders showing the male teacher first.

Procedure. Each of the 144 subjects was assigned to one of the four orders of presentation such that 36 subjects from each gender/track combination were assigned to each order of presentation.

Before subjects began the ratings, the researcher

introduced herself, thanked the subjects for volunteering to participate and gave these instructions: "I am studying high school students' first impressions of teachers they've never seen before. Here's what's going to happen. In a minute I'm going to show you several short videotapes of teachers each going in to the first class meeting of a new school year. None of these teachers has ever worked in this town, but I want you to imagine that you could be in their classes. First you will see on the screen a code number for the teacher. Then you will see the teacher for a few moments. (There is no audio; you will just see the video.) Then there will be a few seconds of blank screen to give you time to give the teacher a rating. Here is what you will rate the teacher on: how good you think he or she would be at keeping control of classes like those you are in here at this school; keeping control of ordinary kinds of disturbances, like talking - we're not thinking of violent behavior, physical assaults or things like that. Not how good you think the teacher would be at making students understand the subject matter, but just this one thing: how good the teacher would be at keeping control of the class. Please look at your rating sheets." The researcher then explained the 6-point scale on which the teachers were to be rated, and instructed the subjects in filling out the demographic information on the cover sheet.

Before the showing of each teacher's tape, a code number for that teacher appeared on the screen. The

teacher's tape then ran for 60 seconds; there was then 20 seconds of blank screen to allow subjects to make their ratings.

Interrater Reliability. Reliability of ratings was examined for each combination of student sex, academic track, and order of presentation: males in the low track, orders I-IV; males in the high track, orders I-IV; females in the low track, orders I-IV; and females in the high track, orders I-IV.

Agreement between raters was determined by Winer's (1971) formula for interrater reliability (pp. 282ff). This formula is used to compute the statistic r_k , the estimate of the reliability of the mean of k measurements. The ratio of the mean square for treatment to the mean square of the residual for each rated variable was computed to determine whether to apply an adjustment for anchor points described by Winer (1971, pp. 289ff). The ratio was significant for 15 of the 16 groups. All values for r_k have been anchor-point adjusted. The reliability of the mean rating was calculated for each group because this was the reliability of interest since the analysis to follow examines the differences between and within these groups. Interrater reliabilities are given in Table 6.

Table 6
Interrater Reliabilities (r_k)* by
Rater Sex, Academic Track, and Order of
Presentation (N = 9)

Sex	Male		Female	
Academic Track	Low	High	Low	High
Order				
I	.91	.89	.78	.82
II	.78	.85	.82	.90
III	.68	.88	.47	.91
IV	.71	.80	.69	.86

* adjusted for anchor-points

STUDY 2

Results and Discussion

Preliminary Analysis

Initially the ratings on ability in classroom control were analyzed using a one-way analysis of variance design comparing the four orders of presentation of teachers. The alpha level was set at $p < .01$.

Means and standard deviations for the four orders of presentation are shown in Table B in the appendices.

Homogeneity of variance was tested using Bartlett's test, and results indicated that the assumption was met (chi-square (3) = 4.98, n.s.).

The results of the one-way analysis of variance are presented in Table C in the appendices. There was a significant main effect for order of presentation of teachers: $F(3, 1436) = 8.97, p < .01$. A Tukey gap test revealed that Order III differed from all three other orders, $p < .05$. There were no other significant differences among orders. Since order of presentation had little a priori meaning, and since this was an extremely sensitive test because of the large number of degrees of freedom, and since the calculation of an omega squared statistic indicated that the order variable accounted for less than two percent of the total variance (omega squared = .016), it was decided to comment on this main effect and then to reanalyze the data without the order variable. One of the four random orders of presentation (Order III) produced a significantly lower mean than the other three orders: people making public speaking presentations have long known that they might be evaluated differently depending on who presented ahead of them. Perhaps the ordering of teachers in Order III had some idiosyncratic quality not existing in the other three orders which led to a lowering of scores. Probably the fact that order of presentation did not make a difference in three of the four orders is more important than the fact that it did make a difference in one of the orders. That it did not make a difference in three of the four orders suggests that evaluation of teachers was to a great extent separate from the order of presentation.

Primary Analysis

The ratings on ability in classroom control were analyzed using a four-way analysis of variance design ($2 \times 2 \times 2 \times 5$) with each of the following factors: (a) sex of student rater (male, female), (b) academic track of student rater (low, high), (c) gender of teacher (male, female), (d) rank of teacher based on mean scores from Study 1 (1, 2, 3, 4, 5; with "5" being the highest rank). There were repeated measures across the last two factors.

Table 7 shows means and standard deviations of ratings on ability in classroom control.

Homogeneity of variance was tested using Bartlett's test, and results indicated that the assumption was not met, ($\chi^2(39) = 101.78, p < .01$). Because of the robustness of the analysis of variance technique, and because of the conservatism of Bartlett's test, it was decided to continue with the analysis of variance but set the alpha level at the more conservative $p < .01$ for all analyses.

Table 8 summarizes the results of the overall analysis of variance. Significant differences were found for the following main effects: (a) gender of teacher, $F(1, 140) = 36.43, p < .01$; (b) rank of teacher, $F(4, 560) = 88.04, p < .01$. Two of the two-way interactions were significant: (a) rank of teacher $\times$ track of student, $F(4, 560) = 3.79, p < .01$; (b) gender of teacher $\times$ rank of teacher, $F(4, 560) = 7.50, p < .01$.

Table 7
Means and Standard Deviations of Ratings
on Ability in Classroom Control (N = 36)

Rater Sex		Male		Female	
Academic Track		Low	High	Low	High
Male Teachers					
M1	<u>M</u>	3.028	2.917	3.333	3.250
	<u>SD</u>	1.320	1.228	1.309	1.381
M2	<u>M</u>	3.361	3.556	3.583	3.500
	<u>SD</u>	1.222	1.182	1.052	1.424
M3	<u>M</u>	4.278	4.139	4.222	4.000
	<u>SD</u>	1.799	1.496	1.588	1.621
M4	<u>M</u>	4.444	4.917	4.778	5.083
	<u>SD</u>	1.182	1.079	1.072	0.770
M5	<u>M</u>	4.222	4.306	4.250	4.639
	<u>SD</u>	1.017	1.167	1.025	1.073
Female Teachers					
F1	<u>M</u>	2.917	2.611	2.889	2.333
	<u>SD</u>	1.079	1.022	1.008	0.862
F2	<u>M</u>	3.194	3.417	3.639	3.778
	<u>SD</u>	1.369	1.156	1.268	1.312
F3	<u>M</u>	3.250	3.000	3.556	3.306
	<u>SD</u>	1.079	1.287	1.340	0.980
F4	<u>M</u>	4.528	4.583	4.222	4.972
	<u>SD</u>	0.845	1.105	1.098	0.736
F5	<u>M</u>	3.806	4.000	4.194	4.389
	<u>SD</u>	1.215	1.373	1.508	1.479

Table 8
Summary of 2 x 2 x 2 x 5 Analysis of Variance
for Ability in Classroom Control (N = 36)

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
<u>Between</u>				
Sex of student (S)	10.68	1	10.68	3.16
Track of student (T)	0.90	1	0.90	0.27
ST	0.02	1	0.02	0.01
Error	473.66	140	3.38	
<u>Within</u>				
Gender of teacher (G)	46.94	1	46.94	36.43*
GS	0.22	1	0.22	0.17
GT	0.34	1	0.34	0.26
GST	0.28	1	0.28	0.22
Error	180.42	140	1.29	
Rank of teacher (R)	536.17	4	134.04	88.04*
RS	2.22	4	0.56	0.37
RT	23.07	4	5.77	3.79*
RST	2.49	4	0.62	0.41
Error	852.64	560	1.52	
GR	31.82	4	7.95	7.50*
GRS	10.11	4	2.53	2.38
GRT	2.07	4	0.52	0.49
GRST	4.03	4	1.01	0.95
Error	593.78	560	1.06	

* $p < .01$

Results will be reported in this order: simple effects and then main effects. Following this will be an examination of results pertinent to the five questions posed in this study (Study 2).

Simple Effects

The RT Interaction. Table 9 shows means for ranks at each level of track.

Table 9

Means for Ranks at Each Level of Track (N=72)

	1	2	Ranks 3	4	5
Low track	3.04	3.44	3.83	4.49	4.12
High track	2.78	3.56	3.61	4.89	4.33

In order to interpret the significant interaction, simple effects tests were performed. Tests for tracks at each level of rank showed that a significant difference occurred only at Rank 4, $F(1,606) = 5.95$, $p < .05$, indicating that students in the low track had rated the fourth-ranked teachers significantly lower than had students in the high track. None of the other differences was significant. Figure 1 illustrates the RT interaction.

Figure 1. Relationship between Rank of Teacher and Track of Student Rater.

The GR Interaction. Means for each gender at each rank are shown in Table 10.

Table 10
Means for Genders at each Level of Rank (N=144)

	Ranks				
	1	2	3	4	5
Males	3.13	3.50	4.16	4.81	4.35
Females	2.69	3.51	3.28	4.58	4.10

In order to interpret the significant interaction, simple effects tests were performed. The tests for differences between genders at each of the five levels of rank were significant for Rank 1, $F(1, 695) = 12.86, p < .01$, and at Rank 3, $F(1, 695) = 50.64, p < .01$. In both instances, the male teacher at that rank had a significantly higher mean rating than did the female teacher.

Figure 2 illustrates the GR interaction.

Figure 2. Relationship between Gender of Teacher and Rank of Teacher.

Main Effects

Rank. There was a main effect for rank of teacher $F(4, 560) = 88.04, p < .01$. This indicates that raters made significant discriminations between some of the teachers at some ranks. In order to determine where significant differences occurred, a Tukey gap test was performed. The mean rating for Rank 1 (2.91) was significantly lower than the mean rating for Rank 2 (3.50), and for Rank 3 (3.72), which were not significantly different from each other. These three were all significantly lower than the mean rating for Rank 5 (4.23), and all four were significantly lower than the mean rating for Rank 4 (4.69).

Gender of Teacher. Although the F ratio for gender of teacher was significant, $F(1, 140) = 36.43, p < .01$, an examination of the GR interaction showed that this should not be interpreted as a true main effect for gender. (See Table 10 and Figure 2 above.) There were significant differences between genders at only two of the five ranks, with males being rated higher than females in both instances.

Results Relevant to Research Questions

1. Was sex of student rater related to ratings on ability in classroom control? No. Sex of student rater was not significantly related to ratings on ability in classroom

control $F(1, 140) = 3.16$, n.s.

2. Was gender of teacher related to ratings on ability in classroom control? No, not as an overall main effect. Although the F ratio for gender was significant, $F(1, 140) = 36.43$, $p < .01$, an examination of the GR interaction showed that there was not a true main effect for gender. (See Table 10 and Figure 2 above.) There were significant differences between genders at only two of the five ranks, with males being rated higher than females in both instances.

3. Was academic track level of student rater related to ratings on ability in classroom control? No. Academic track level was not significantly related to ratings of teachers, $F(1, 140) = 0.27$, n.s.

4. Was order of presentation of teachers related to ratings on ability in classroom control? As was discussed above, order of presentation of teachers did have a significant effect on ratings of teachers: one of the four random orders produced a lower mean than did the other three orders, $F(3, 1463) = 8.97$, $p < .01$. Since order of presentation had little a priori meaning, and since this was an extremely sensitive test because of the large number of degrees of freedom, and since the calculation of an omega squared statistic indicated that the order variable accounted for less than two percent of the total variance ($\omega^2 = .016$), it was decided to comment on this main effect and then to reanalyze the data without the order variable.

5. Were the relative ranks of male teachers and the relative ranks of female teachers the same in Study 2 as they had been in Study 1? The GR interaction was examined for the answer to this question. Means for males and females at each rank are shown in Table 10 above.

Simple effects tests of the GR interaction at the 2 levels of gender revealed that gender of teacher and rank of teacher interacted significantly for males $F(4, 1085) = 50.26, p < .01$, and for females $F(4, 1085) = 59.74, p < .01$. In order to determine where the significant differences occurred, pairwise comparisons by gender were made using Tukey procedure "a," in which all differences between pairs are tested against the highest critical value for the chosen alpha level (Winer, 1971, p. 198). The Tukey test on ranks for males indicated that significant differences exist at all pairwise comparisons except ranks 1 and 2, and ranks 3 and 5, $p < .05$. The Tukey test on ranks for females indicated that significant differences exist at all pairwise comparisons except ranks 2 and 3, $p < .05$.

Figures 3 and 4 illustrate the rankings within each gender in Study 1 compared to the rankings within each gender in Study 2.

Figure 3. Comparison of Study 1 and Study 2 Mean Ratings on Classroom Control by Rank for Male Teachers.

Figure 4. Comparison of Study 1 and Study 2 Mean Ratings on Classroom Control by Rank for Female Teachers.

As can be seen in Figures 3 and 4, the rankings for Study 1 and Study 2 are similar for both males and females. For both genders, the teacher ranked highest (Rank # 5) in Study 1 was placed one rank lower (Rank # 4) in Study 2. Although the correspondence between ranks across studies is not perfect, there is a clear tendency for teachers ranked low in the first study to be ranked low in the second, and for teachers ranked high in the first study to be ranked high in the second. This is seen more clearly in the case of male teachers than in the case of females. The similarities of rankings afford validation for ratings on classroom control given in Study 1.

Summary

Data from Study 2 indicated that ratings on perceived ability of teachers to control a classroom were not significantly related either to the sex or the academic track of the student rater. Nor were they related to the gender of the teacher except in conjunction with rank of teacher. At the points of interaction between gender and rank, male teachers were rated higher than female teachers. In one of four random orders, the overall mean rating was lower than for the other three orders. Rankings of male teachers and rankings of female teachers were not identical in Study 1 and Study 2, but there were strong similarities: the same teachers who were ranked low in the first study

were also ranked low in the second, and teachers who were ranked high in the first study were also ranked high in the second.

DISCUSSION

The primary purpose of this research was to investigate the effects of teachers' visible nonverbal behaviors and characteristics on high school students' immediate first impressions of the teachers' abilities in classroom control. Study 1 was designed for this investigation. In addition, an investigation was made of the effects of certain other factors which might bear on the ratings given to teachers: gender of the student rater, academic track level of the student rater, order in which students saw and rated the teachers. Study 2 was designed to investigate the effects of these factors. A final purpose for Study 2 was to carry out a verification check on ratings assigned in Study 1: if the much larger group of raters in the second study agreed well with the small groups of raters in the first study, it would provide support for the validity of Study 1 ratings.

Findings Related to Predictions

Three predictions were made regarding nonverbal behaviors and characteristics which might have significant effects; all other behaviors and characteristics were examined in an exploratory way. It was predicted that teachers who spent more time looking at the class would be rated higher in perceived ability to control a classroom; that teachers who displayed fewer self-adaptors would be rated higher; and that teachers who smiled more would be

rated lower. The first prediction was supported; the second and third were not. There was strong support in the literature for a positive relationship between time looking at an audience and positive evaluations. It would have been surprising had the first prediction not been supported. Although the second and third predictions were not supported, it was suggested that certain changes in future research might result in positive findings. It was suggested that future research should define at least two subcategories for self-adaptors: (a) one for socially annoying hand-to-body movements such as scratching, and (b) one for other hand-to-body movements such as tapping the palm of the hand with the other hand emphasizing points in a series. With this refinement in the definition, an inverse relationship would be predicted between ratings on perceived ability to control a classroom and the self-adaptors in subcategory "a." It was also suggested that future research should employ a large enough number of male and female teachers to allow separate analyses by gender; that smiling might negatively affect the ratings of males, but not those of females.

Length of Stimulus Videotapes. Stimulus videotapes of teachers were standardized in length to the first 60 seconds of each teacher's tape. When teachers were videotaped they were given a set of items to accomplish (entering the classroom, calling the class to order, introducing themselves, making a few comments on the course and on

course requirements, and calling the roll of students). They were told that this would probably take two or three minutes. They were not asked to try to stretch out their performances. This was to leave them free to act as spontaneously and naturally as they could. Tapes then were standardized to the length of the briefest tape, which was 60 seconds. The question arises whether with longer tapes and thus more opportunities for the occurrence of low-incidence behaviors such as self-adaptors, there would have been stronger correlations between some of these behaviors and ratings on ability to control the classroom. This speculation must be balanced by the observation that the student raters did not always wait even 60 seconds before marking their rating sheets: many times they were seen marking their rating sheets before a tape had finished. Apparently students' first impressions of teachers' abilities in classroom control are formed very quickly indeed.

First impressions of ability in classroom control. The student raters in this research were asked to give their first impressions with a highly specific focus. These first impressions seem to have been formed very quickly. Several different avenues of speculation seem interesting. Probably these impressions are based in part on stable, highly visible nonverbal characteristics like gender, and the cultural stereotypes associated with them. Possibly they are based in part on very subtle nonverbal behaviors such as

momentary facial expressions signalling confidence or fear. It may be that the significant correlation of amount of time spent looking at the class and rated ability in classroom control in this research is related to this latter speculation: possibly teachers who are comfortable with looking at the class more also show facial expressions that students have learned to associate with confidence.

Other Findings

In both studies males were rated higher than females; this result may have flowed from cultural stereotypes. Female teachers may have to work harder than males at proving themselves capable of classroom control.

Teachers videotaped with a studio camera were rated higher than those videotaped with a portable camera; the better black and white contrast of the tapes made with the studio camera may have subtly affected raters to ascribe generally more competence to the latter group.

It was found that neither the gender, nor the academic track of the student raters was related to ratings of teachers.

In one of the four random orders of presentation, ratings were significantly lower than in the other three orders. It was suggested that the fact that three orders were not significantly different from each other was more important than the fact that one order yielded lower ratings: ratings appeared to be reasonably independent of

order of presentation.

There were 44 teachers rated in Study 1; a subset of 5 male and 5 female teachers were chosen from Study 1 to represent the range of ratings from low to high for each gender, and these 10 teachers were rated in Study 2. An important question of this research program was whether the ratings of Study 2 would be similar to those of Study 1 (and thus offer evidence for the validity of Study 1 ratings). For male teachers all rankings were the same, except that ranks 4 and 5 were reversed in the second study. For female teachers rankings in the second study were the same as those in the first except that ranks 2 and 3 and ranks 4 and 5 were reversed. There was a clear tendency for teachers ranked high in Study 1 to be ranked high in Study 2, and for teachers ranked low in Study 1 to be ranked low also in Study 2; Study 2 ratings thus lend validation to the ratings made in Study 1.

Future research

More research is needed to identify the nonverbal cues used by high school students in forming their immediate impressions of teachers' abilities in classroom control. As mentioned above, one important area of followup research should employ a large enough group of teachers to allow separate analyses of nonverbal variables by gender of teacher.

The present research program investigated only visible

nonverbal behaviors and characteristics as they related to ratings of ability to control a classroom. Audible nonverbal behaviors and characteristics (e.g. tone of voice, loudness, fluency of verbal expression) would probably also exert important influences on ratings. A research design which separated ratings on the visible and audible components of the same performances, and on the total performance (i.e. both visible and audible components available to raters) would be useful.

Additionally, research using other populations of high school raters (e.g. students from inner city schools, students diagnosed as learning disabled, students diagnosed as emotionally disturbed) would be of interest.

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APPENDICES

TABLE OF CONTENTS

Appendix

A.	Scoring Manual	66
B.	Scoring Sheet for Smiles	73
C.	Scoring Sheet for Gestures	75
D.	Scoring Sheet for Time Looking	77
E.	Scoring Sheet for Time Walking	83
F.	Scoring Sheet for Self Adaptors	89
G.	Scoring Sheet for Dress	91
H.	Scoring Sheet for Position of Arms	96
I.	Form for Rating Classroom Control (Study 1).	100
J.	Form for Rating Attractiveness	105
K.	Form for Rating Apparent Age	109
L.	Intercorrelations of Variables Examined in the Stepwise Multiple Regression Analysis.	114
M.	Forms for Rating Classroom Control, Orders I, II, III, IV (Study 2).	118
N.	Means and Standard Deviations for Orders of Presentation of Teachers	126
O.	Summary of One-Way Analysis of Variance for Ability in Classroom Control	127
P.	Consent Form	128
Q.	Instructions to Experimental Confederates	129

LIST OF TABLES IN THE APPENDICES

Table

A.	Intercorrelations of Variables Examined in the Stepwise Multiple Regression Analysis	114
B.	Means and Standard Deviations for Orders of Presentation of Teachers	126
C.	Summary of One-way Analysis of Variance for Ability in Classroom Control	127

SCORING MANUAL
FOR NONVERBAL BEHAVIORS

Behavior

Smiles

Self-adaptors

Gestures

Time Looking

Arm position

Dress

Time Walking

Smiles:

Definition: Ostensive. The investigator will show scorers examples of smiles, and examples of facial expressions not to be scored as smiles. Continuous smiles will be scored every 5 seconds.

Score = Total number of smiles.

Self-adaptors:

Definition: Motion of a part of the body in contact with another part, either directly or mediated by an instrument. Examples are scratching, rubbing or tapping an arm or leg with finger or pen. Continuous movements are scored once every 5 seconds. Cyclical movements (e.g. up-and-down, back-and-forth) are scored once each. Single brief movements in one direction are scored once.

Score = Total number of self-adaptors.

Gestures:

Definition: Movements of hands or fingers, excluding self-adaptor movements. Includes side-to-side, front-to-back, and up-and-down movements. Continuous

movements are scored once every 5 seconds. Cyclical movements (e.g. raising and lowering a finger) are scored once each. Single brief movements (less than 5 seconds) are scored once each.

Score = Total number of gestures.

Time Looking:

Definition: Ostensive. The investigator will show scorers examples of looking behavior to be scored, and examples which are not to be scored.

Score = Total time spent looking at the class, in seconds.

Arm position:

Definition: Anchor sketches and descriptions are provided for scorers. (See attached sheets.) Scores will be on a scale from 0-2: (0 = least relaxed, arms symmetrical; 1 = somewhat relaxed, arms slightly asymmetrical; 2 = moderately to very relaxed, arms moderately to very asymmetrical).

Scores will be assigned for the most characteristic position seen during each of the two 30-second periods of each teacher's tape.

Score = Sum of the two 30-second scores.

Appendix A. Scoring Manual

Scoring for Arm Position Asymmetry:

0 = least relaxed, arms symmetrical (examples):

Hands clasped
at midsection.

Arms folded
symmetrically.

Both hands
straight down.

Both arms
akimbo.

1 = somewhat relaxed, arms slightly asymmetrical:

Slight deviations from the symmetry of positions
described above under 0. Symmetry off by 2 -5 inches.

2 = moderately to very relaxed, arms moderately to very
asymmetrical (examples):

One hand holds an
elbow or upper arm,
while other hand
is free.

One hand stuck in
a pocket, and the
other hanging
loosely.

Only one arm
akimbo.

One hand hooked behind
neck, and the other hanging
loosely.

Dress:

Definitions:

Category 1, Casual: Sweat shirt; T-shirt; plaid shirt.

Category 2, Somewhat casual: Plain blouse; shirt (no tie); plain sweater; sporty sweater.

Category 3, Somewhat dressed up: Shirt and tie (no jacket); shirt and jacket (no tie); blouse with tie or bow or ruffles; sweater with dress-like details; turtleneck sweater with jacket; shirtwaist dress.

Category 4, Dressed up: Shirt, tie, jacket (suit); shirt, tie, sport jacket; blouse or sweater with jacket; dress (not shirtwaist).

Note: Categories 3 and 4 were merged because scorers suggested after some practice that there were really negligible practical differences in the impressions created by the people who fell into these two categories, while there were clear differences between them and the people in the first two categories.

Time Walking:

Definition. Ostensive. The investigator will show scorers examples of behavior to be scored as walking, and behaviors not to be scored.

Score = Total time spent walking, in seconds.

NUMBER OF SMILES

Scorer's name _____

Date _____ Time _____

Directions: Use your counter. Count the number of times each teacher smiles. At the end of each teacher's segment, write the number of smiles in the blank in the blank beside the teacher's code number. Reset the counter to zero.

<u>Teacher Number</u>	<u>Number of Smiles</u>
447	____
448	____
464	____
344	____
483	____
484	____
312	____
317	____
322	____
327	____
334	____
318	____
333	____
337	____
338	____
346	____
478	____
482	____

486	
343	
487	
488	
426	
432	
436	
442	
428	
314	
316	
326	
336	
348	
427	
438	
446	
466	
467	
468	
472	
474	
324	
328	
342	
332	

Appendix C. Scoring Sheet for Gestures

GESTURES

Scorer's Name _____

Date _____ Time _____

Definition: Movements of hands or fingers, excluding self-adaptor movements. Includes side-to-side, front-to-back, and up-and-down movements.

Directions: Use your counter. Count the number of gestures by each teacher. At the end of each teacher's segment, write the number of gestures in the blank, then reset the counter to zero.

<u>Teacher Number</u>	<u>Number of Gestures</u>
447	<u> </u>
448	<u> </u>
464	<u> </u>
344	<u> </u>
483	<u> </u>
484	<u> </u>
312	<u> </u>
317	<u> </u>
322	<u> </u>
327	<u> </u>
334	<u> </u>
318	<u> </u>
333	<u> </u>
337	<u> </u>
338	<u> </u>
346	<u> </u>
478	<u> </u>
482	<u> </u>

Appendix C. Scoring Sheet for Gestures

486	<u> </u>
343	<u> </u>
487	<u> </u>
488	<u> </u>
426	<u> </u>
432	<u> </u>
436	<u> </u>
442	<u> </u>
428	<u> </u>
314	<u> </u>
316	<u> </u>
326	<u> </u>
336	<u> </u>
348	<u> </u>
427	<u> </u>
438	<u> </u>
446	<u> </u>
466	<u> </u>
467	<u> </u>
468	<u> </u>
472	<u> </u>
474	<u> </u>
324	<u> </u>
328	<u> </u>
342	<u> </u>
332	<u> </u>

TIME LOOKING AT CLASS Scorer's name _____

Date _____ Time _____

Directions: Use your stop watch. Measure the total time each teacher looks at the class. Record the time in the space provided below.

Teacher
Number

Time Looking at Class

447   min.   sec.
          ┌───┐ ┌───┐
          | | | |
          └───┘ └───┘
          tenths
          .┌──┐
          | |

448   min.   sec.
          ┌───┐ ┌───┐
          | | | |
          └───┘ └───┘
          tenths
          .┌──┐
          | |

464   min.   sec.
          ┌───┐ ┌───┐
          | | | |
          └───┘ └───┘
          tenths
          .┌──┐
          | |

344   min.   sec.
          ┌───┐ ┌───┐
          | | | |
          └───┘ └───┘
          tenths
          .┌──┐
          | |

483   min.   sec.
          ┌───┐ ┌───┐
          | | | |
          └───┘ └───┘
          tenths
          .┌──┐
          | |

484   min.   sec.
          ┌───┐ ┌───┐
          | | | |
          └───┘ └───┘
          tenths
          .┌──┐
          | |

312   min.   sec.
          ┌───┐ ┌───┐
          | | | |
          └───┘ └───┘
          tenths
          .┌──┐
          | |

317   min.   sec.

                 tenths
                 .

322   min.   sec.

                 tenths
                 .

327   min.   sec.

                 tenths
                 .

334   min.   sec.

                 tenths
                 .

318   min.   sec.

                 tenths
                 .

333   min.   sec.

                 tenths
                 .

337   min.   sec.

                 tenths
                 .

338   min.   sec.

                 tenths
                 .

346   min.   sec.

                 tenths
                 .

478   min.   sec.

         tenths
         .

482   min.   sec.

         tenths
         .

486   min.   sec.

         tenths
         .

343   min.   sec.

         tenths
         .

487   min.   sec.

         tenths
         .

488   min.   sec.

         tenths
         .

426   min.   sec.

         tenths
         .

432   min.   sec.

         tenths
         .

436   min.   sec.

         tenths
         .

442   min.   sec.

         tenths
         .

428   min.   sec.

         tenths
         .

314   min.   sec.

         tenths
         .

316   min.   sec.

         tenths
         .

326   min.   sec.

         tenths
         .

336   min.   sec.

         tenths
         .

348   min.   sec.

         tenths
         .

427   min.   sec.

         tenths
         .

438   min.   sec.

         tenths
         .

446   min.   sec.

                 tenths
                 .

466   min.   sec.

                 tenths
                 .

467   min.   sec.

                 tenths
                 .

468   min.   sec.

                 tenths
                 .

472   min.   sec.

                 tenths
                 .

474   min.   sec.

                 tenths
                 .

324   min.   sec.

                 tenths
                 .

328   min.   sec.

                 tenths
                 .

342   min.   sec.

                 tenths
                 .

332

min.	sec.
<u> </u>	<u> </u>
	tenths
	<u> </u>

TIME WALKING AROUND

Scorer's name _____

Date _____ Time _____

Directions: Use your stop watch. Measure the total time each teacher walks around. Record the time in the space provided below.

Teacher
Number

Time Walking Around

447   min.   sec.

         tenths
         .

448   min.   sec.

         tenths
         .

464   min.   sec.

         tenths
         .

344   min.   sec.

         tenths
         .

483   min.   sec.

         tenths
         .

484   min.   sec.

         tenths
         .

312   min.   sec.

         tenths
         .

317   min.   sec.

                 tenths
                 .

322   min.   sec.

                 tenths
                 .

327   min.   sec.

                 tenths
                 .

334   min.   sec.

                 tenths
                 .

318   min.   sec.

                 tenths
                 .

333   min.   sec.

                 tenths
                 .

337   min.   sec.

                 tenths
                 .

338   min.   sec.

                 tenths
                 .

346   min.   sec.

                 tenths
                 .

478   min.   sec.

         tenths

482   min.   sec.

         tenths

486   min.   sec.

         tenths

343   min.   sec.

         tenths

487   min.   sec.

         tenths

488   min.   sec.

         tenths

426   min.   sec.

         tenths

432   min.   sec.

         tenths

436   min.   sec.

         tenths

442   min.   sec.

                 tenths
                 .

428   min.   sec.

                 tenths
                 .

314   min.   sec.

                 tenths
                 .

316   min.   sec.

                 tenths
                 .

326   min.   sec.

                 tenths
                 .

336   min.   sec.

                 tenths
                 .

348   min.   sec.

                 tenths
                 .

427   min.   sec.

                 tenths
                 .

438   min.   sec.

                 tenths
                 .

446   min.   sec.

                 tenths
              .

466   min.   sec.

                 tenths
              .

467   min.   sec.

                 tenths
              .

468   min.   sec.

                 tenths
              .

472   min.   sec.

                 tenths
              .

474   min.   sec.

                 tenths
              .

324   min.   sec.

                 tenths
              .

328   min.   sec.

                 tenths
              .

342   min.   sec.

                 tenths
              .

332

min.	sec.
<u> </u>	<u> </u>
	tenths
	<u> </u>

Appendix F. Scoring Sheet for Self-Adaptors

SELF-ADAPTORS:

Scorer's Name _____

Date _____ Time _____

Definition: Self-adaptors occur when a teacher moves a hand to contact another part of the body, either directly or mediated by an instrument. Examples are scratching, rubbing or tapping an arm or leg with a finger or a pen.

Directions: Use your counter. Count the number of self-adaptors by each teacher. At the end of each teacher's segment, write the number of self-adaptors in the blank provided, then reset the counter to zero.

<u>Teacher Number</u>	<u>Number of Self-Adaptors</u>
447	<u> </u>
443	<u> </u>
464	<u> </u>
344	<u> </u>
493	<u> </u>
484	<u> </u>
312	<u> </u>
317	<u> </u>
322	<u> </u>
327	<u> </u>
334	<u> </u>
319	<u> </u>
333	<u> </u>
337	<u> </u>
339	<u> </u>
346	<u> </u>
473	<u> </u>
432	<u> </u>

Appendix F. Scoring Sheet for Self-Adaptors

486	<u> </u>
343	<u> </u>
487	<u> </u>
483	<u> </u>
426	<u> </u>
432	<u> </u>
436	<u> </u>
442	<u> </u>
428	<u> </u>
314	<u> </u>
316	<u> </u>
326	<u> </u>
336	<u> </u>
348	<u> </u>
427	<u> </u>
438	<u> </u>
446	<u> </u>
466	<u> </u>
467	<u> </u>
463	<u> </u>
472	<u> </u>
474	<u> </u>
324	<u> </u>
328	<u> </u>
342	<u> </u>
332	<u> </u>

Appendix G. Scoring Sheet for Dress

DRESS

Scorer's Name _____

Date _____ Time _____

Directions: Make an "X" below the term that best describes each teacher's dress.

Teacher
Number

Description of Dress

447	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
448	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
464	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
344	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
483	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
484	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
312	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
317	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up

Appendix G. Scoring Sheet for Dress

322	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
327	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
334	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
318	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
333	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
337	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
338	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
346	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
478	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
482	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
486	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up

Appendix G. Scoring Sheet for Dress

343	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
487	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
488	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
426	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
432	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
436	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
442	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
428	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
314	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
316	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
326	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up

Appendix G. Scoring Sheet for Dress

336	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
348	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
427	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
438	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
446	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
466	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
467	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
468	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
472	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
474	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
324	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up

Appendix G. Scoring Sheet for Dress

328	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
342	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up
332	Casual 	Somewhat Casual 	Somewhat Dressed Up 	Dressed Up

Appendix H. Scoring Sheet for Position of Arms

POSITION OF ARMS

Scorer's Name _____

Date _____ Time _____

Directions: Look at the sample sketches showing position of arms, and listen to the instructions. Then watch each teacher's segment, and put an "X" in the space below the phrase which best describes the position of that teacher's arms during the greater part of the segment.

Teacher
NumberPOSITION OF ARMS

	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
447	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
448	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
464	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
344	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
483	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
484	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
312	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
317	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
322	☐	☐	☐
	Symmetrical	Slightly Asymmetrical	Moderately Asymmetrical
327	☐	☐	☐

Appendix H. Scoring Sheet for Position of Arms

334	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
318	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
333	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
337	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
338	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
346	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
478	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
482	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
486	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
343	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
487	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
488	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
426	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical

Appendix H. Scoring Sheet for Position of Arms

432	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
436	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
442	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
428	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
314	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
316	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
326	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
336	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
348	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
427	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
438	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
446	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
466	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical

Appendix H. Scoring Sheet for Position of Arms

467	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
468	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
472	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
474	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
324	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
328	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
342	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical
332	Symmetrical 	Slightly Asymmetrical 	Moderately Asymmetrical

Name _____

Check: ___ Male ___ Female

Check: Grade ___ 9 ___ 10 ___ 11 ___ 12

Check: Phase of English ___ 1

___ 2

___ 3

___ 4

___ 5

___ Alternate

Date _____ Time _____

cc/02/19/82

CLASSROOM CONTROL

Directions: How good would the teacher in the film be at classroom control? Put an "X" in the space that shows your best guess.

Teacher
Number

ABILITY AT CLASSROOM CONTROL

447	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
448	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
464	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
344	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
483	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
484	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
312	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
317	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
322	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
327	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

334	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
318	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
333	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
337	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
338	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
346	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
478	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
482	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
486	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
343	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
487	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
488	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
426	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

432	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
436	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
442	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
428	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
314	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
316	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
326	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
336	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
348	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
427	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
438	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
446	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
466	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

467	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
468	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
472	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
474	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
324	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
328	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
342	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
332	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

Name _____

Check: ☐ Male ☐ Female

Check: Grade ☐ 9 ☐ 10 ☐ 11 ☐ 12

Check: Phase of English ☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ Alternate

Date _____ Time _____

attr02/20/82

ATTRACTIVENESS

Directions: How attractive-looking is the teacher in the film?
Circle the number that shows your opinion.

<u>Teacher Number</u>	<u>UN</u> attractive									Attractive
447	1	2	3	4	5	6	7	8	9	
448	1	2	3	4	5	6	7	8	9	
464	1	2	3	4	5	6	7	8	9	
344	1	2	3	4	5	6	7	8	9	
483	1	2	3	4	5	6	7	8	9	
484	1	2	3	4	5	6	7	8	9	
312	1	2	3	4	5	6	7	8	9	
317	1	2	3	4	5	6	7	8	9	
322	1	2	3	4	5	6	7	8	9	
327	1	2	3	4	5	6	7	8	9	
334	1	2	3	4	5	6	7	8	9	
318	1	2	3	4	5	6	7	8	9	
333	1	2	3	4	5	6	7	8	9	

337	1	2	3	4	5	6	7	8	9
338	1	2	3	4	5	6	7	8	9
346	1	2	3	4	5	6	7	8	9
478	1	2	3	4	5	6	7	8	9
482	1	2	3	4	5	6	7	8	9
486	1	2	3	4	5	6	7	8	9
343	1	2	3	4	5	6	7	8	9
487	1	2	3	4	5	6	7	8	9
488	1	2	3	4	5	6	7	8	9
426	1	2	3	4	5	6	7	8	9
432	1	2	3	4	5	6	7	8	9
436	1	2	3	4	5	6	7	8	9
442	1	2	3	4	5	6	7	8	9
428	1	2	3	4	5	6	7	8	9
314	1	2	3	4	5	6	7	8	9
316	1	2	3	4	5	6	7	8	9
326	1	2	3	4	5	6	7	8	9
336	1	2	3	4	5	6	7	8	9

348	1	2	3	4	5	6	7	8	9
427	1	2	3	4	5	6	7	8	9
438	1	2	3	4	5	6	7	8	9
446	1	2	3	4	5	6	7	8	9
466	1	2	3	4	5	6	7	8	9
467	1	2	3	4	5	6	7	8	9
468	1	2	3	4	5	6	7	8	9
472	1	2	3	4	5	6	7	8	9
474	1	2	3	4	5	6	7	8	9
324	1	2	3	4	5	6	7	8	9
328	1	2	3	4	5	6	7	8	9
342	1	2	3	4	5	6	7	8	9
332	1	2	3	4	5	6	7	8	9

Name _____

Check: ___ Male ___ Female

Check: Grade ___ 9 ___ 10 ___ 11 ___ 12

Check: Phase of English ___ 1

___ 2

___ 3

___ 4

___ 5

___ Alternate

Date _____ Time _____

age/02/19/82

AGE

Directions: Make an "X" in the space below the age range in which you think each teacher belongs.

Teacher
Number

Age ranges in years

	Under 25	25-39	40-54	Over 54
447	<u> </u>	<u> </u>	<u> </u>	<u> </u>
448	<u> </u>	<u> </u>	<u> </u>	<u> </u>
464	<u> </u>	<u> </u>	<u> </u>	<u> </u>
344	<u> </u>	<u> </u>	<u> </u>	<u> </u>
483	<u> </u>	<u> </u>	<u> </u>	<u> </u>
484	<u> </u>	<u> </u>	<u> </u>	<u> </u>
312	<u> </u>	<u> </u>	<u> </u>	<u> </u>
317	<u> </u>	<u> </u>	<u> </u>	<u> </u>
322	<u> </u>	<u> </u>	<u> </u>	<u> </u>

327	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
334	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
318	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
333	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
337	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
338	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
346	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
478	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
482	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
486	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
343	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
487	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>
488	Under 25 <u> </u>	25-39 <u> </u>	40-54 <u> </u>	Over 54 <u> </u>

426	Under 25 	25-39 	40-54 	Over 54
432	Under 25 	25-39 	40-54 	Over 54
436	Under 25 	25-39 	40-54 	Over 54
442	Under 25 	25-39 	40-54 	Over 54
428	Under 25 	25-39 	40-54 	Over 54
314	Under 25 	25-39 	40-54 	Over 54
316	Under 25 	25-39 	40-54 	Over 54
326	Under 25 	25-39 	40-54 	Over 54
336	Under 25 	25-39 	40-54 	Over 54
348	Under 25 	25-39 	40-54 	Over 54
427	Under 25 	25-39 	40-54 	Over 54
438	Under 25 	25-39 	40-54 	Over 54
446	Under 25 	25-39 	40-54 	Over 54
466	Under 25 	25-39 	40-54 	Over 54

467	Under 25 	25-39 	40-54 	Over 54
468	Under 25 	25-39 	40-54 	Over 54
472	Under 25 	25-39 	40-54 	Over 54
474	Under 25 	25-39 	40-54 	Over 54
324	Under 25 	25-39 	40-54 	Over 54
328	Under 25 	25-39 	40-54 	Over 54
342	Under 25 	25-39 	40-54 	Over 54
332	Under 25 	25-39 	40-54 	Over 54

Appendix L. Intercorrelations of Variables Examined in the Stepwise Multiple Regression Analysis. Table A.

	CLCNTRL	ATTRACT	PEARSON AGE	CORRELATION GESTURES	SEX	RACE	EDUC	CAMERA	SELFADAP	TIMELKG
CLCNTRL	1.0000 (.44) P=0.0000	0.2860 (.44) P=0.0300	0.0996 (.44) P=0.2600	0.2007 (.44) P=0.0960	-0.3376 (.44) P=0.0120	0.1738 (.44) P=0.1300	0.3082 (.44) P=0.0210	0.2446 (.44) P=0.0550	0.1944 (.44) P=0.1030	0.2054 (.44) P=0.0910
ATTRACT	0.2860 (.44) P=0.0300	1.0000 (.44) P=0.0000	-0.0252 (.44) P=0.4360	0.2006 (.44) P=0.0960	-0.1274 (.44) P=0.2050	0.2309 (.44) P=0.0660	0.2292 (.44) P=0.0670	0.0415 (.44) P=0.3950	0.0686 (.44) P=0.3290	0.0934 (.44) P=0.2730
AGE	0.0996 (.44) P=0.2600	-0.0252 (.44) P=0.4360	1.0000 (.44) P=0.0000	0.1733 (.44) P=0.1300	-0.2492 (.44) P=0.0510	0.1794 (.44) P=0.1220	0.3077 (.44) P=0.4800	0.1300 (.44) P=0.2000	0.1767 (.44) P=0.1260	0.2116 (.44) P=0.0840
GESTURES	0.2007 (.44) P=0.0960	0.2006 (.44) P=0.0960	0.1733 (.44) P=0.1300	1.0000 (.44) P=0.0000	0.0273 (.44) P=0.4300	0.2174 (.44) P=0.0780	0.1679 (.44) P=0.1380	0.3865 (.44) P=0.0050	0.0889 (.44) P=0.2830	0.0813 (.44) P=0.3000
SEX	-0.3376 (.44) P=0.0120	-0.1274 (.44) P=0.2050	-0.2492 (.44) P=0.0510	0.0273 (.44) P=0.4300	1.0000 (.44) P=0.0000	-0.2831 (.44) P=0.0310	0.1365 (.44) P=0.1880	0.2398 (.44) P=0.0580	-0.0778 (.44) P=0.3080	0.1336 (.44) P=0.1940
RACE	0.1738 (.44) P=0.1300	0.2309 (.44) P=0.0660	0.1794 (.44) P=0.1220	0.2174 (.44) P=0.0780	-0.2831 (.44) P=0.0310	1.0000 (.44) P=0.0000	-0.0902 (.44) P=0.2800	-0.0417 (.44) P=0.3940	0.0897 (.44) P=0.2810	0.0665 (.44) P=0.3340
EDUC	0.3082 (.44) P=0.0210	0.2292 (.44) P=0.0670	0.0077 (.44) P=0.4800	0.1679 (.44) P=0.1380	0.1365 (.44) P=0.1880	-0.0902 (.44) P=0.2800	1.0000 (.44) P=0.0000	0.7396 (.44) P=0.0000	-0.0475 (.44) P=0.3800	0.1831 (.44) P=0.1170
CAMERA	0.2446 (.44) P=0.0550	0.0415 (.44) P=0.3950	0.1300 (.44) P=0.2000	0.3865 (.44) P=0.0050	0.2398 (.44) P=0.0580	0.7396 (.44) P=0.0000	0.7396 (.44) P=0.0000	1.0000 (.44) P=0.0000	-0.0113 (.44) P=0.4710	0.0120 (.44) P=0.4690
SELFADAP	0.1944 (.44) P=0.1030	0.0686 (.44) P=0.3290	0.1767 (.44) P=0.1260	0.2007 (.44) P=0.0960	-0.0778 (.44) P=0.3080	0.0897 (.44) P=0.2810	-0.0475 (.44) P=0.3800	-0.0113 (.44) P=0.4710	1.0000 (.44) P=0.0000	0.0169 (.44) P=0.4570
TIMELKG	0.2054 (.44) P=0.0910	0.0934 (.44) P=0.2730	0.2116 (.44) P=0.0840	0.0813 (.44) P=0.3000	0.1336 (.44) P=0.1940	0.0665 (.44) P=0.3340	0.1831 (.44) P=0.1170	0.0120 (.44) P=0.4690	0.0169 (.44) P=0.4570	1.0000 (.44) P=0.0000
SMILES	-0.2209 (.44) P=0.0750	0.0842 (.44) P=0.2930	-0.2011 (.44) P=0.0950	0.0844 (.44) P=0.2930	0.3343 (.44) P=0.0130	-0.0499 (.44) P=0.3740	0.1492 (.44) P=0.1670	0.2572 (.44) P=0.0460	-0.1679 (.44) P=0.1380	-0.2175 (.44) P=0.0780

C O E F F I C I E N T S									
	CLCNTRL	PEARSON	CORRELATION	SEX	RACE	EDUC	CAMERA	SELFADAP	TIMELKG
ARMPOS	0.0421	-0.1160	0.3100	-0.3046	-0.1275	0.0471	-0.0567	-0.0917	0.0839
	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)
	P=0.393	P=0.227	P=0.020	P=0.022	P=0.205	P=0.381	P=0.357	P=0.277	P=0.294
DRESS	-0.0876	0.2454	0.3600	0.0748	-0.1523	-0.2314	-0.1391	-0.0157	0.1864
	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)
	P=0.286	P=0.054	P=0.008	P=0.315	P=0.162	P=0.065	P=0.184	P=0.460	P=0.113
TIMEWALK	0.1094	0.3702	-0.0741	0.2540	-0.0870	0.3215	0.1934	0.0679	0.1625
	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)	(.44)
	P=0.240	P=0.007	P=0.316	P=0.048	P=0.287	P=0.017	P=0.104	P=0.331	P=0.146

(COEFFICIENT / (CASES) / SIGNIFICANCE) (A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

P E A R S O N C O R R E L A T I O N C O E F F I C I E N T S				
	SMILES	ARMPOS	DRESS	TIMEWALK
CLCNTRL	-0.2209 (.44) P=0.075	0.0421 (.44) P=0.393	-0.0876 (.44) P=0.286	0.1094 (.44) P=0.240
ATTRACT	0.0842 (.44) P=0.293	-0.1160 (.44) P=0.227	0.2454 (.44) P=0.054	0.3702 (.44) P=0.007
AGE	-0.2011 (.44) P=0.095	0.3100 (.44) P=0.020	0.3600 (.44) P=0.008	-0.0741 (.44) P=0.316
GESTURES	0.0844 (.44) P=0.293	0.0436 (.44) P=0.389	0.0659 (.44) P=0.336	0.3242 (.44) P=0.016
SEX	0.3343 (.44) P=0.013	-0.3046 (.44) P=0.022	0.0748 (.44) P=0.315	0.2540 (.44) P=0.048
RACE	-0.0499 (.44) P=0.374	-0.1275 (.44) P=0.205	-0.1523 (.44) P=0.162	-0.0870 (.44) P=0.287
EDUC	0.1492 (.44) P=0.167	0.0471 (.44) P=0.381	-0.2314 (.44) P=0.065	0.3215 (.44) P=0.017
CAMERA	0.2572 (.44) P=0.046	-0.0567 (.44) P=0.357	-0.1391 (.44) P=0.184	0.1934 (.44) P=0.104
SELFADAP	-0.1679 (.44) P=0.138	-0.0917 (.44) P=0.277	-0.0157 (.44) P=0.460	0.0679 (.44) P=0.331
TIME1KG	-0.2175 (.44) P=0.078	0.0839 (.44) P=0.294	0.1864 (.44) P=0.113	0.1625 (.44) P=0.146
SMILES	1.0000 (.44) P=****	-0.1142 (.44) P=0.230	0.0169 (.44) P=0.457	0.1022 (.44) P=0.255

P E A R S O N C O R R E L A T I O N C O E F F I C I E N T S			
	SMILES	ARMPOS	DRESS
ARMPOS	-0.1142 (.44) P=0.230	1.0000 (.44) P=*****	0.0786 (.44) P=0.306
DRESS	0.0169 (.44) P=0.457	0.0786 (.44) P=0.306	1.0000 (.44) P=*****
TIMEWALK	0.1022 (.44) P=0.255	0.0440 (.44) P=0.388	0.0633 (.44) P=0.342

(COEFFICIENT / (CASES) / SIGNIFICANCE) (A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

Name _____

Check: ___ Male ___ Female

Check: Grade ___ 9 ___ 10 ___ 11 ___ 12

Check: Phase of English ___ 1

___ 2

___ 3

___ 4

___ 5

___ Alternate

Date _____ Time _____

cc1/03/02/82

Directions: How good would the teacher in the film be at classroom control? Put an "X" in the space that shows your best guess.

Teacher
Number

ABILITY AT CLASSROOM CONTROL

333	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
428	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
446	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
338	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
314	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
472	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
486	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
478	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
483	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
316	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
328	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
332	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

Name _____

Check: ___ Male ___ Female

Check: Grade ___ 9 ___ 10 ___ 11 ___ 12

Check: Phase of English ___ 1

___ 2

___ 3

___ 4

___ 5

___ Alternate

Date _____ Time _____

cc2/03/02/82

Directions: How good would the teacher in the film be at classroom control? Put an "X" in the space that shows your best guess.

Teacher
Number

ABILITY AT CLASSROOM CONTROL

428	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
333	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
332	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
328	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
316	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
483	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
478	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
486	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
472	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
314	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
338	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
446	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

Name _____

Check: ___ Male ___ Female

Check: Grade ___ 9 ___ 10 ___ 11 ___ 12

Check: Phase of English ___ 1

___ 2

___ 3

___ 4

___ 5

___ Alternate

Date _____ Time _____

cc3/03/02/82

Directions: How good would the teacher in the film be at classroom control? Put an "X" in the space that shows your best guess.

Teacher
Number

ABILITY AT CLASSROOM CONTROL

333	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
428	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
478	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
483	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
316	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
328	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
332	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
446	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
338	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
314	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
472	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
486	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

Name _____

Check: ___ Male ___ Female

Check: Grade ___ 9 ___ 10 ___ 11 ___ 12

Check: Phase of English ___ 1

___ 2

___ 3

___ 4

___ 5

___ Alternate

Date _____ Time _____

cc4/03/02/82

Directions: How good would the teacher in the film be at classroom control? Put an "X" in the space that shows your best guess.

Teacher
Number

ABILITY AT CLASSROOM CONTROL

428	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
333	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
486	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
472	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
314	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
338	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
446	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
332	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
328	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
316	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
483	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent
478	Very Poor 	Poor 	Fair minus 	Fair plus 	Good 	Excellent

Appendix N.

Table B

Means and Standard Deviations for Orders of

Presentation of Teachers (N=36)

	Orders			
	I	II	III	IV
<u>Means</u>	3.87	3.86	3.50	4.01
<u>S.D.</u>	1.32	1.47	1.38	1.34

Appendix O.

Table C

Summary of One-Way Analysis of Variance
for Ability in Classroom Control (N=36)

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between groups	50.97	3	16.99	8.97*
Within groups (Error)	2720.79	1436	1.89	
Total	2771.76	1439		

*p < .01

Subject's code number _____

VOLUNTARY CONSENT FORM

Printed name of subject _____

Address _____

Phone _____

College or university _____

Name of Instructor _____

Name of experimenter: Mary C. Weyhing

Topic of study: Reactions of high school students
to initial few minutes of first
class with an unknown teacher.

Participation time: About one half-hour total.

I understand that I will be videotaped for about 2 minutes, simulating an initial encounter with a new class, and that after the filming of all subjects is completed, I will be given a full explanation of the hypotheses of the study and the ways in which the films will be used to test these hypotheses.

I understand that high school students (not in schools used by my university for practice teaching sites) will be shown the films and asked to fill out questionnaires on their reactions to each film.

I will be identified in the films by a code number, and will use a pseudonym to introduce myself, rather than my actual name.

I understand that should the experimenter ever wish to use the films for educational or research purposes beyond the present research project, my individual permission would be required.

I understand that I may withdraw from the study at any time.

I freely consent to participate in the study indicated above. I am at least eighteen (18) years of age. To the best of my knowledge I have no physical or mental difficulties which would affect my participation in this study.

Signed _____

Date _____

Appendix Q. Instructions to Experimental Confederates.

WHAT SUBJECTS ARE ASKED TO DO:

1. MAKE A VIDEOTAPE IN AN EMPTY CLASSROOM HERE.

VIDEOTAPE WILL BE 2-3 MINUTES LONG.

(CAMERAPERSON AND THE RESEARCHER WILL BE IN THE ROOM.

2. PRETEND YOU ARE COMING INTO A HIGH SCHOOL CLASSROOM ON THE FIRST DAY OF A NEW SCHOOL YEAR. YOU ARE A NEW TEACHER IN THE SCHOOL. YOU DON'T KNOW ANY OF THE STUDENTS, AND NONE OF THEM KNOWS ANYTHING ABOUT YOU.

3. DRESS AS YOU REALLY WOULD FOR TEACHING.

A TEXTBOOK AND ROLLBOOK WITH STUDENT NAMES WILL BE PROVIDED FOR YOU TO USE.

---

4. WALK IN

CALL CLASS TO ORDER

INTRODUCE YOURSELF (EVERYONE WILL USE "MARTIN" AS LAST NAME.)

INTRODUCE THE SUBJECT (AMERICAN HISTORY)

OUTLINE COURSE REQUIREMENTS (WHATEVER YOU DECIDE IS FINE.)

START CALLING THE ROLL OF STUDENTS

QUESTIONS: CALL MARY WEYHING AT