THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE EFFECTS OF NON-INSTRUCTIONAL STUDENT PREFERENCES UPON RATINGS OF INSTRUCTIONAL COMPETENCE

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

BY

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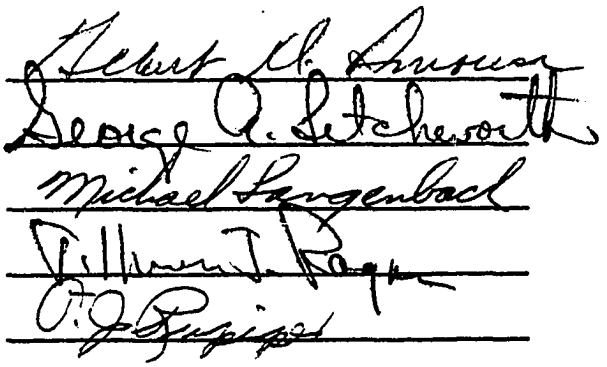
Norman, Oklahoma

1975

THE EFFECTS OF NON-INSTRUCTIONAL STUDENT PREFERENCES

UPON RATINGS OF INSTRUCTIONAL COMPETENCE

APPROVED BY



ACKNOWLEDGEMENTS

I am deeply grateful to my major professor, Dr. Albert D. Smouse, for his guidance and encouragement throughout my graduate study and the preparation of this dissertation. Appreciation is also extended to my committee members, Dr. Michael Langenbach, Dr. George Letchworth, Dr. Tillman Ragan, and Dr. Omer J. Rupiper, for their helpful suggestions and advice.

I am indebted to several individuals whose assistance was invaluable in the preparation of this study. The willing assistance given me by Dr. Roger Babich, Millie Thompson, and Art McNeese from the University of Oklahoma Department of Speech is greatly appreciated. For helping me in various ways, I would like to thank Dr. Norman Frame, Dr. William Graves, and Dr. Chipman Stuart. I also want to thank the members of the 4-5 teaching team and the principal, Judi Ford, of Eisenhower School, for their cooperation during the past year.

A special kind of appreciation goes to my children, Bill, Lisa, and Spencer, and to my mother whose love and faith in me have inspired and encouraged me.

This dissertation is lovingly dedicated to my husband, Weldon, whose devotion, assistance, and support made this study possible.

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THE EFFECTS OF NON-INSTRUCTIONAL STUDENT PREFERENCE UPON RATINGS OF INSTRUCTIONAL COMPETENCE

INTRODUCTION

During the last decade, the use of student ratings of college instructors as a means to evaluate teaching effectiveness has increased dramatically. Since the reliability and validity of student evaluations are still questioned by many educators and researchers, the practice is especially disturbing to faculty members when the evaluations are used as a basis for personnel decisions.

One of the objections to the use of ratings as evaluation instruments is that they are subject to many sources of error. One of these sources is that of the rater. Such rater errors include those resulting from response sets, attitudes, or biases. This study was concerned with a particular type of rater error that is dependent on the prior experience of the rater and which influences perception of effective teachers. The basic assumption underlying this study is that the student will be influenced by these perceptions and the resulting

preferences when rating an instructor. The effects of two preferences, instructor sex and instructor dress, upon student ratings of actual instructional performance were investigated.

Person perception theory refers to the process by which a person comes to know and think about other people. Most often the term is used to describe the observations and inferences that are made about the intentions, attitudes, emotions, abilities, and traits of the object person (Tagiuri & Petrullo, 1958). Heider (1958) states that an individual strives to attain a state of "balance" in his observations, while "implicit" personality theorists assume that preconceptions of how a person should behave is based on experience (Schneider, 1973). Kelley (1973) proposes that when information about an object person is limited, the observer combines the available information with his past observations to make inferences about the observed behavior.

Bruner (1957) contends that perception is influenced by a categorization process which limits the range and kind of behavior expected. In this process, cues available to the perceiver are used to place the object person into categories associated with certain inferential attributes. Some of the most obvious categories are those involving cultural stereotypes, such as age, race, and sex. Thus, an individual belonging to the category of "older" is seen to be more responsible, more patient and less energetic. Research

supports the notion that inferences about intentions, attitudes, and abilities are drawn from such cues as appearance, clothing, gestures, and sex (Sherif & Sherif, 1969).

Not only may the perception of individuals be influenced by relatively unique beliefs concerning persons with various categorical characteristics, it is further assumed that the categorization process itself is also influenced by attributes of the perceiver. These individual differences in the interpretation of cues may result in the use of different categories and inferences, even when the stimulus cues are identical.

The variables most often used in investigations of the effects of student attributes on teacher ratings are those of student sex and ability. Some studies have found significant relationships between student sex and instructor ratings (Quereshi & Widlak, 1973; Bendig, 1952), while others have reported no differences (Remmers & Elliott, 1949; Rayder, 1968).

The results of the investigations of the relationship between student ability and teacher ratings have also been contradictory. Some have found no relationship (Blum, 1936; Doyle & Whitely, 1974), and others have found significant relationships (Elliott, 1950; Rayder, 1968; Quereshi & Widlak, 1973). Holmes (1972) found that differences in grades do not affect evaluation, but if grades disconfirm

expectancies, students will tend to deprecate the instructor's teaching performance.

Several studies have investigated the relationship between other student variables and teacher evaluation. Gulo (1966), using the semantic differential to evaluate the effective professor, found a factor named "teaching dynamism" to account for most of the variance. Yonge and Sassenrath (1968) investigated personality correlates of teacher ratings, and Permut (1973) researched the cue patterns used by students in faculty evaluations. Both studies supported the notion that students' individual differences affected their ratings of instructors. Rezler (1965) reported that the perception of the instructor was also influenced by students' psychological needs.

Some research has supported the idea that students' preconceptions of how an instructor should behave affect their ratings. Whitely and Doyle (1974) found that students sorted rating items into categories similar to those actually used by students when rating instructors and concluded that "implicit" theories were operating in the instructor evaluation. Feldhusen and Starks (1970) found that impressions during the first week of a course did, to an extent, predict the evaluation of the instructor.

A great deal of research about teaching has been concerned with the identification of the characteristics

of the effective teacher (Ryans, 1960) and with the development of techniques and criteria for the evaluation of teacher effectiveness (Remmers, 1963). Fewer studies have investigated the relationships of specific instructor variables and student evaluations. Solomon (1966) found a relationship between instructor communication style and student evaluation, and Carney and McKeachie (1966) found that the orientation of the subject matter influenced course ratings. Isaacson, McKeachie, and Milholland (1963), investigating the relationship of teacher personality variables and student ratings, found that the teacher variable most consistently correlated with good ratings by students was that of "general cultural attainment."

Traditionally, the sex of the instructor has not been considered an important variable in the research on the evaluation of college teaching. However, McKeachie and Lin (1971) examined student response to instructor sex differences and found that the instructor's sex did influence the student's concept of teaching effectiveness. McKee and Sheriffs (1957) found that college men and women regard males, in general, more highly than females, although they denied having partiality for either sex. Other studies (Goldberg, 1968; Pheterson, Kiesler, & Goldberg, 1971) also support the finding that accomplishments of women are rated less favorably than those of men. Sex differences when

rating male and female performance have been found to be present even when the evaluators were experts (Haan & Livson, 1973). The influence of descriptive cues upon the evaluation of male and female ability was shown in a study by Deaux and Taynor (1973). Highly competent males were rated more positively than highly competent females; however, males of low competence were rated lower than similar females.

The manner in which students evaluate teachers has also been found to be affected by the teachers' and the students' value systems. Using the Conceptual Systems Test (Harvey & Hoffmeister, 1971) to determine student belief systems, Prather, Harvey and Coates (Note 1) investigated the influence of student beliefs upon student performance and perception of their teachers. They found that very concrete and very abstract children rated abstract teachers most favorably. In an investigation of the effects of students' belief systems and sex upon their rating of teachers and their class achievement (Harvey, Wells, Schmidt, & Grimm, Note 2), the belief systems of students were found to affect teacher ratings and interact with the sex of the teacher. The female teachers were rated highest by very concrete students. Although no differences were found on instructor ratings, Byrne (1973) found an interaction between college student and teacher belief systems on measures of higher thought processes.

Although little investigation has been conducted on the relationship between teacher appearance and teaching effectiveness, the majority of teacher rating forms contain an item on dress or appearance (Ingls, 1970). Early studies (Ruediger, 1910; Boyce, 1912) found low correlations between teacher appearance and teacher efficiency. Englehart and Tucker (1936) found that "neatness in appearance and dress" correlated .46 with good teachers, as rated by high school students, but other studies (Haggard, 1943; Miller & Miller, 1971) have found appearance ranked as one of the least important teacher traits.

In a recent investigation of the influence of teacher appearance, Menard (1973) found no differences in student achievement or student rating of teacher performance, regardless of the manner of the dress of the instructor. However, the influence of type of attire in impression formation is supported in social psychological research. Both Keasy (1973) and Suedfeld, Bochner, and Malas (1971) found that the attire of petitioners affected the number of signatures they obtained. Gibbons (1969) found that style of dress led to inferences about the personal characteristics of the wearer.

Summarizing this brief overview of the literature, then, evaluation necessarily involves perception. The perception of any given object is determined partly by the

characteristics of the object and partly by the characteristics of the perceiver. Person perception theory proposes that categories or groupings common to the culture are used by the perceiver, but that, because of individual experience, individual perceptions also enter into the judgment of others. Thus, the perceiver will classify persons into categories which have significance for him. Because of past experiences perceivers may also give different meanings to similar cues and, as a result, categorize the same object person differently. This study identified two instructor cues, sex and type of dress, and then assessed the manner in which these cues influenced students' preferences and subsequent evaluation of instructors, similar and dissimilar to the preferences.

Based on the assumptions that the factors of sex and dress provide opportunities for categorization by the student rater and that this categorization would affect the evaluation of instructors differing in these factors, it was hypothesized that: (1) There would be a significant difference in the ratings of instructional competence given to male and female instructors; (2) there would be a significant difference in the ratings given to instructors having different types of attire, and (3) the ratings would be related to the initial preference of the student.

Method

Subjects

Subjects were selected from a subject pool which consisted of undergraduate students enrolled in the College of Education at the University of Oklahoma. The students had volunteered to participate and were given credit for participation. The initial sample consisted of 161 subjects. Based on the results of Phase I, 80 subjects were selected for Phase II. This sample size provided power of .99 against a 1.0 standard deviation difference at the .05 level for the main effect with 2 levels in a 3-way analysis of variance (Kirk, 1968).

Procedure

Phase I. Development of Initial Videotape. Six females and six males were photographed standing in front of a classroom in a lecturing posture. Three of the females were dressed in conservative dresses; three were dressed in jeans and "mod" blouses. Three of the males wore coats and ties; three were dressed in jeans and either workshirts or peasant shirts. All models were between 30 and 40 years of age. All had hair of medium length, and none of the males had beards or mustaches.

From the pictures of the "instructors" a videotape was developed which paired each instructor with all instructors of other types (male or female; conventionally or

casually dressed). Based on the number of models used, 54 pairs were presented. Each picture, in a given pair, was flashed for one second. Between each pair four seconds were allowed to provide opportunity for subjects to indicate their instructor preference.

In order to establish the reliability of this procedure, the videotape was shown to a class of 23 undergraduate education students enrolled at East Central State University, Ada, Oklahoma. One week later they again responded to the instrument. Using the Pearson product-moment correlation coefficient, test-retest reliability of the number of first-place choices given the instructor type most preferred was .60, t (21) = 3.17, $p < .01$.

The purpose of this phase was to select subjects who expressed a preference for one of the following four instructor types: (1) conventionally dressed female, (2) casually dressed female, (3) conventionally dressed male, and (4) casually dressed male. The videotape was shown to 161 subjects. In order to be classified as preferring a particular instructor type, a subject (1) chose a particular sex-dress combination at least 20 times and (2) endorsed the sub-components of the preferred combination more times than their respective counterparts, i.e., a subject who chose the casual female type 20 times and also chose females more times than males and casual attire more times than

conventional attire would be classified as preferring the female casual type. Twenty subjects were randomly selected from each preference group to participate in the study.

Phase II. Development of Treatment Videotape. One lecture was prepared for all treatments. Two graduate students from the Department of Speech, University of Oklahoma, served as instructors. They were approximately the same age and considered by their academic advisor to be well matched in speaking ability. They were coached in the presentation of the lecture so that the style of their presentation (voice inflections, movements, gestures, etc.) was as similar as possible.

Four treatment videotapes were made in a studio-classroom. In order to present a realistic-appearing situation, several students acted as members of the class. In two of the videotapes the instructors were dressed in clothes considered conventional for a teacher. The male wore a suit and tie; the female a conservative dress. The same lecture was also presented by each of the instructors dressed in casual clothes. The male wore jeans and an embroidered workshirt; the female wore jeans and a "mod" blouse. Thus, the treatments consisted of the same lecture given by (1) a conventionally dressed female instructor, (2) a casually dressed female instructor, (3) a conventionally dressed male instructor, and (4) a casually dressed male instructor.

The twenty subjects that had been selected from each preference group were randomly assigned to one of the four treatment groups. Five subjects from each preference group viewed one of the four treatment videotapes. Subjects were then asked to rate the instructor on twelve 10-point scales which assessed instructional performance. Four of the scales were those which had been found to be highly loaded on the factor termed "instructional competence" in the Purdue Rating Scale for Instruction (Bendig, 1954). The eight other scales were constructed to elaborate upon the original scales. The ratings were summed to give a total instructional evaluation score.

Subjects also rated the instructor on personal appearance and personal peculiarities, using items from the Purdue Scale (Remmers & Elliott, 1950), and rated their interest in the subject matter of the lecture.

After the ratings were made, each subject was given the Conceptual Systems Test (CST). This test was used to place respondents into one of four belief systems. System 1 is characterized by the lowest level of abstractness and a positive orientation toward authority. System 2 is slightly more abstract, but negatively oriented toward social objects. System 3 is the next to the highest in abstractness and oriented toward friendly, dependent relationships. System 4 is the most abstract and more oriented

toward information seeking, problem solving, and independent behavior than the other systems.

Results

Initially a 2 (Preferred Sex) X 2 (Preferred Dress) X 2 (Instructor Sex) X 2 (Instructor Dress) fixed effects analysis of variance was performed on the rating scores given the instructors (see Appendix B). This method of analysis was based on the assumption that the preference for a particular instructor type also indicated independent preferences for the two sub-components of that type. However, after further consideration, it was decided that a more conservative, conceptually sound, and meaningful method of analyzing the data would be to consider Student Preference (SP) as one variable having the following four levels: SP_1 (conventionally dressed female), SP_2 (casually dressed female), SP_3 (conventionally dressed male), and SP_4 (casually dressed male).

A 4 (Student Preference) X 2 (Instructor Sex) X 2 (Instructor Dress) fixed effects analysis of variance was performed on the summed rating scores of instructional performance (Table 1). The analysis of variance test was used to analyze the results even though the variance among cells appeared to be heterogenous (see Table 2) since methodological literature (Lindquist, 1953; Box, 1954) indicates the equal N fixed effects model is robust to the violation of the equal variances assumption.

TABLE 1

ANALYSIS OF VARIANCE OF THE EFFECTS OF STUDENT PREFERENCE, INSTRUCTOR SEX AND INSTRUCTOR DRESS UPON RATINGS OF INSTRUCTIONAL COMPETENCE

SOURCE	df	MS	F
Student Preference (SP)	3	394.24	1.54
Instructor Sex (IS)	1	1073.11	4.18*
Instructor Dress (ID)	1	382.81	1.49
SP X IS	3	690.41	2.69
SP X ID	3	480.31	1.88
IS X ID	1	644.11	2.51
SP X IS X ID	3	722.45	2.82*
Within	64	256.53	

* $p < .05$

TABLE 2

MEANS AND STANDARD DEVIATIONS OF INSTRUCTIONAL COMPETENCE RATINGS FOR STUDENT PREFERENCES AND INSTRUCTOR TYPES

	Female Instructor		Male Instructor	
Student Preference	Conventional	Casual	Conventional	Casual
Conventional Female				
M	54.39	44.00	62.60	57.80
SD	6.80	13.47	19.27	9.96
Casual Female				
M	68.00	59.80	49.80	59.40
SD	23.37	15.07	9.71	20.74
Conventional Male				
M	48.60	71.80	66.80	72.20
SD	11.08	19.51	23.40	15.02
Casual Male				
M	52.20	42.40	50.60	80.60
SD	8.04	8.67	14.48	21.95

The main effect on the variable of instructor sex was significant, F (1, 64) = 4.18, $p < .05$. The male instructor was given higher ratings than the female instructor (see Table 3).

The second order interaction, Student Preference (SP) X Instructor Sex (IS) X Instructor Dress (ID), was also significant, F (3, 64) = 2.82, $p < .05$. Tests of simple interaction effects (Winer, 1962; Kirk, 1968) revealed a significant interaction between SP and IS at the ID-Conventional level, F (3,64) = 7.03, $p < .001$ (see Table 4). Tests of simple, simple main effects showed significant differences in both levels of IS and in the SP_2 and SP_3 conditions (Table 5). Those who preferred the conventionally dressed male rated the female instructor lower than the male; those who preferred the casually dressed female gave the male instructor lower ratings (see Figure 1).

The SP X IS interaction at the ID-Casual level was also significant, F (e, 64) = 9.49, $p < .001$). Tests of simple, simple main effects showed significant differences existed at both levels of IS and in the SP_4 condition (Table 5). Those who preferred the casually dressed male rated the male instructor significantly higher than the female (see Figure 2).

TABLE 3

MEANS AND STANDARD DEVIATIONS FOR STUDENT PREFERENCE GROUPS ON RATINGS OF INSTRUCTIONAL COMPETENCE

	INSTRUCTORS		
STUDENT PREFERENCE	MALE	FEMALE	TOTAL
Conventional female			
M	60.19	49.19	54.70
SD	14.68	11.46	14.00
Casual female			
M	54.59	63.89	59.24
SD	16.08	19.03	17.80
Conventional male			
M	69.50	51.88	64.84
SD	18.70	25.00	19.14
Casual male			
M	65.60	47.29	56.44
SD	23.60	9.42	19.86
Total			
M	62.47	55.15	58.81
SD	18.75	16.48	17.68

TABLE 4

SIMPLE INTERACTION EFFECTS OF THE STUDENT PREFERENCE (SP) X INSTRUCTOR SEX (IS) X INSTRUCTOR DRESS (ID) INTERACTION

SOURCE	df	MS	F
SP X IS for ID_1 (Conventional)	3	1803.47	7.03*
SP X IS for ID_2 (Casual)	3	2435.00	9.49*
SP X ID for IS_1 (Female)	3	2007.30	7.82*
SP X ID for IS_2 (Male)	3	1600.87	6.24*
ID X IS for SP_1 (Conventional Female)	3	39.20	.15
ID X IS for SP_2 (Casual Female)	3	396.05	1.54
ID X IS for SP_3 (Conventional Male)	3	396.05	1.54
ID X IS for SP_4 (Casual Male)	3	1980.05	7.71*
Within	64	256.53	

* $p < .001$

TABLE 5

SIMPLE, SIMPLE MAIN EFFECTS OF THE STUDENT PREFERENCE (SP) X INSTRUCTOR SEX (IS) X INSTRUCTOR DRESS (ID) INTERACTION

SOURCE	df	MS	F
SP for ID_1 (Conventional) X IS_1 (Female)	3	1078.00	4.20***
SP for ID_1 X IS_2 (Male)	3	1096.95	4.27***
SP for ID_2 (Casual) X IS_1	3	2920.20	11.38***
SP for ID_2 X IS_2	3	1767.00	6.88***
IS for ID_1 X SP_1 (Conventional Female)	3	168.10	.65
IS for ID_1 X SP_2 (Casual Female)	3	828.10	3.22*
IS for ID_1 X SP_3 (Conventional Male)	3	828.10	3.22*
IS for ID_1 X SP_4 (Casual Male)	3	6.40	.02
IS for ID_2 X SP_1	3	476.10	1.86
IS for ID_2 X SP_2	3	.40	.00
IS for ID_2 X SP_3	3	.40	.00
IS for ID_2 X SP_4	3	3648.10	14.22***
ID for IS_1 X SP_1	3	270.40	1.05
ID for IS_1 X SP_2	3	168.10	.65
ID for IS_1 X SP_3	3	1345.60	5.24**
ID for IS_1 X SP_4	3	420.10	.93
ID for IS_2 X SP_1	3	57.60	.22
ID for IS_2 X SP_2	3	230.40	.90
ID for IS_2 X SP_3	3	72.90	.28
ID for IS_2 X SP_4	3	2250.00	8.77***
Within	64	256.53	

* $p < .05$
** $p < .01$
*** $p < .001$

Figure 1

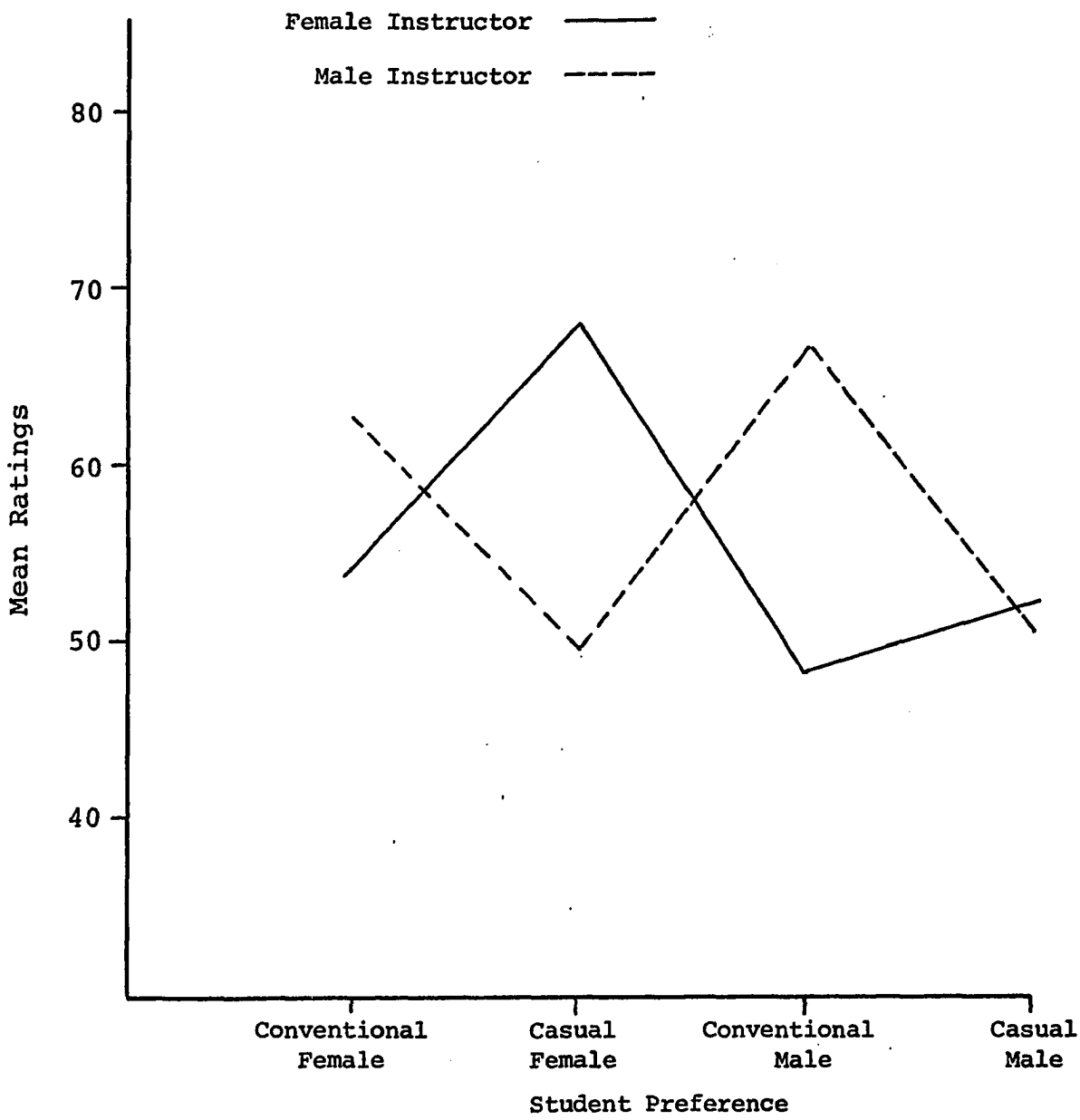

Figure 1. The interaction of Student Preference and Instructor Sex at the level of Instructor Dress-Conventional.

Figure 2

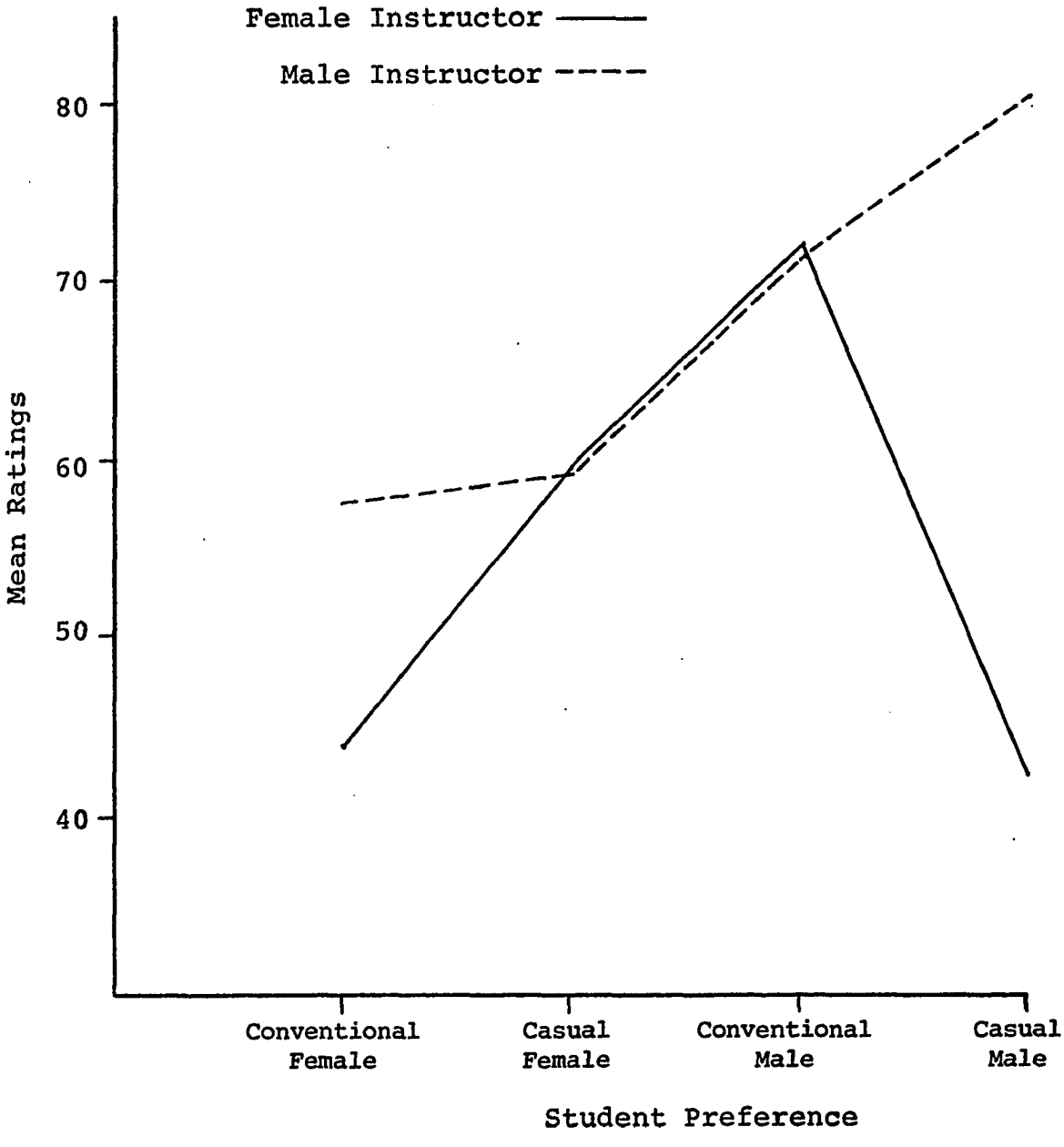

Figure 2. The interaction of Student Preference and Instructor Sex at the level of Instructor Dress-Casual.

A significant simple interaction effect was also found between SP and ID in the IS-Female condition, F (3, 64) = 7.82, $p < .001$. Significant differences were found in both levels of ID and in the SP_3 condition. Highest ratings were given the casually dressed female by those who preferred the casual male (see Figure 3).

The SP X ID interaction in the IS-Male condition was also significant, F (3, 64) = 6.24, $p < .001$. Tests indicated significant differences in both levels of ID and also in the SP_4 level (Table 5). The casually dressed male instructor was rated significantly higher than the conventionally dressed male by those who had preferred the casual male type (see Figure 4).

There was also a significant interaction between IS and ID in the SP_4 condition, F (3, 64) = 7.71, $p < .001$. The male instructor, casually dressed, was rated significantly higher than the conventionally dressed male (see Figure 5).

Planned comparisons, using Dunn's procedure (Kirk, 1968), were made between the instructional ratings of the following cells:

1. Instructor similar to preferences and instructor dissimilar to preferences.

2. Instructor similar to preferences and all other cells.

Figure 3

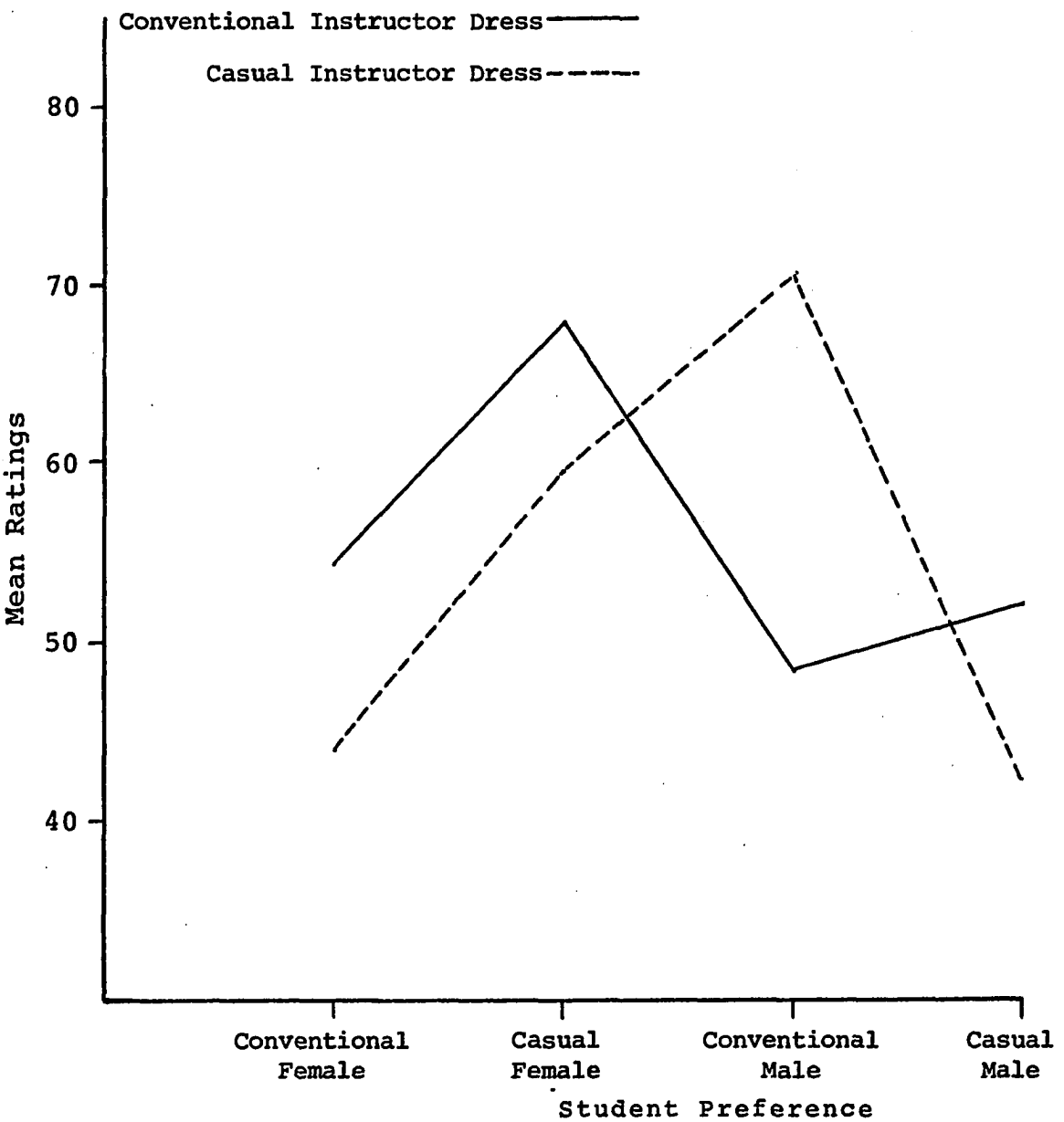

Figure 3. The interaction of Student Preference and Instructor Dress at the level of Instructor Sex-Female

Figure 4

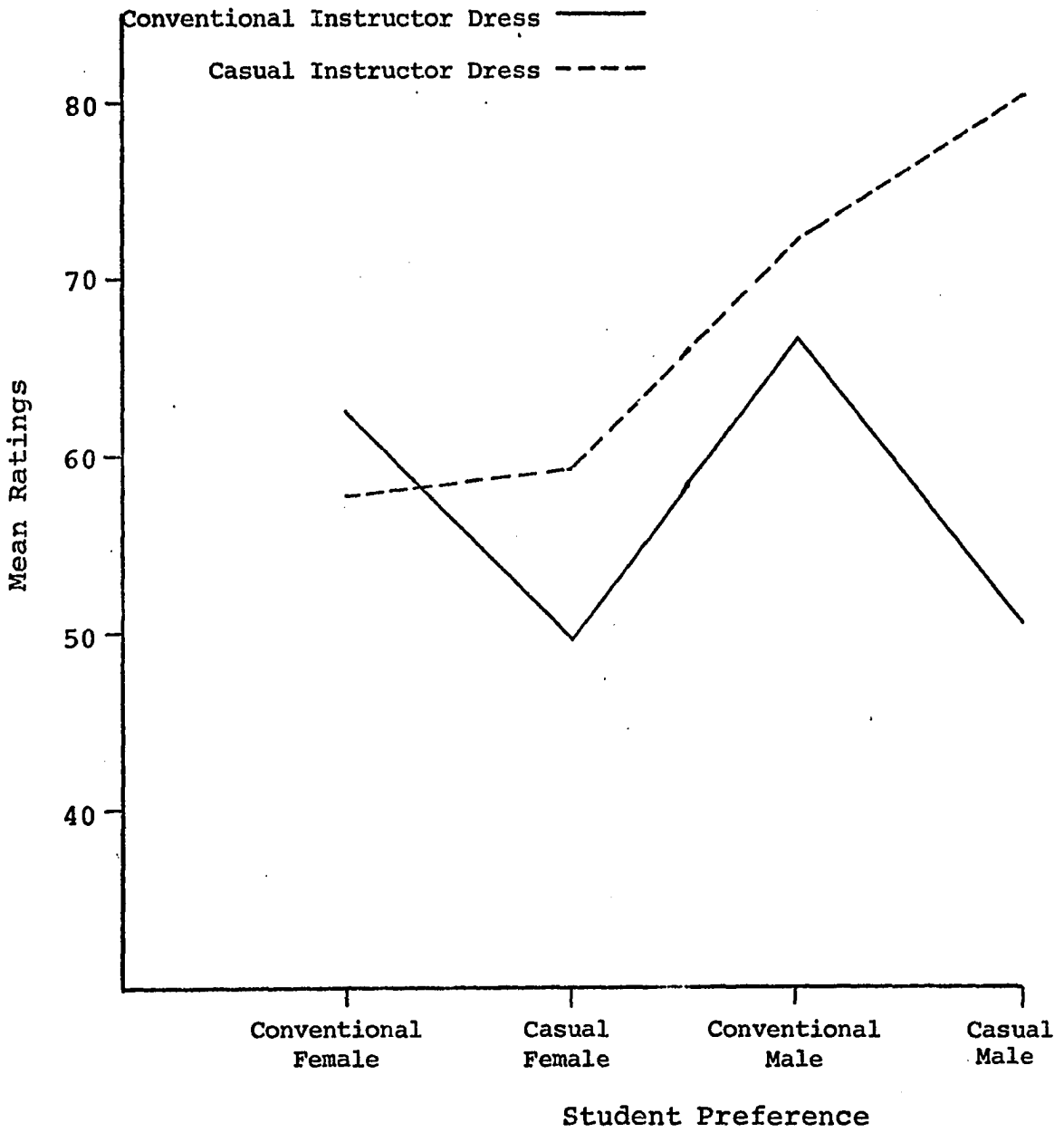

Figure 4. The interaction of Student Preference and Instructor Dress at the level of Instructor Sex-Male.

Figure 5

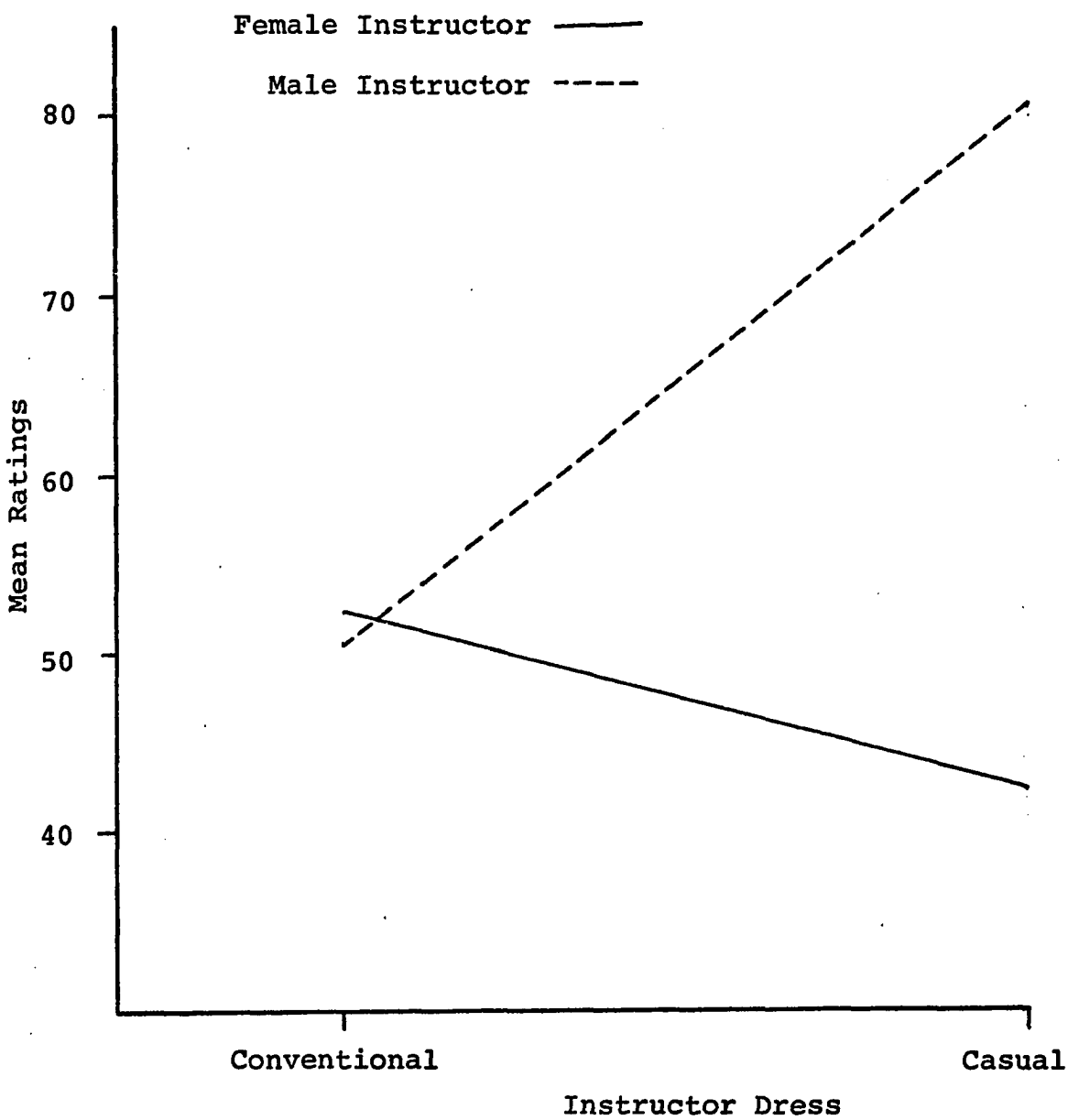

Figure 5. The interaction between Instructor Dress and Instructor Sex at the level of Student Preference-Casually dressed male.

3. Instructor dissimilar to preferences and all other cells.

None of the comparisons were significant, $p > .05$.

Statistically significant correlations were obtained among the student ratings of instructional competence, personal appearance, and personal peculiarities. The correlations between interest in the subject matter of the lecture and the other ratings were insignificant (see Table 6).

On the basis of the CST scores, subjects were classified as belonging to System 1 (78%), System 3 (6%), or System 4 (14%). There were no subjects who belonged to System 2 and 2% for whom no classification was made. The small number of subjects in Systems 3 and 4 made meaningful analysis of this data questionable. A X^2 test of the distribution of these systems and the classification into the four instructor preference groups was not significant. An analysis of variance test on the rating scores given by the subjects in the three systems was also not significant. Means and standard deviations for subjects of the three belief systems are shown in Table 7.

Discussion

The study was designed to investigate how the non-instructional perceptions of the student rater influence the precision of judgments about effective teaching.

TABLE 6

CORRELATIONS AMONG INSTRUCTIONAL COMPETENCE, PERSONAL APPEARANCE, PERSONAL PECULIARITIES, AND INTEREST IN SUBJECT RATINGS

RATING	IC	PA	PP	IS
Instructional Competence		.24*	.42**	.09
Personal Appearance			.34**	.05
Personal Peculiarities				.18
Interest in Subject				

* $p < .05$

** $p < .01$

TABLE 7

MEANS AND STANDARD DEVIATIONS FOR SUBJECTS OF THREE BELIEF SYSTEMS ON RATINGS OF INSTRUCTIONAL COMPETENCE

	INSTRUCTORS		
BELIEF SYSTEMS	MALE	FEMALE	TOTAL
System 1			
M	65.56	56.25	60.75
SD	19.00	16.60	18.30
System 3			
M	42.00	54.66	49.60
SD	12.72	19.60	16.75
System 4			
M	57.14	50.50	54.70
SD	15.60	17.50	15.81

Although significant interaction effects were not hypothesized, the results indicated that it was the interaction of student preferences with instructor type which actually affected a student's evaluation of a given teacher. The hypothesis that significant differences would exist in the ratings given male and female instructors was supported; however, the significant interaction of the sex variables with the others in this study indicated that these differences cannot be interpreted as being the result of instructor sex alone. The hypothesis that instructors who dressed differently would receive different ratings was supported in this study only when interacting with particular student preferences and instructor sex.

The evaluations of both male and female instructors were affected by their attire. When dressed conventionally, the female instructor received highest ratings from those who preferred a casual female and lowest from those who preferred a conventionally dressed male. However, when she dressed casually, she received her highest ratings from those who preferred a conventional male. The conventionally attired male instructor was rated highest by those who preferred his type and lowest by those who preferred a female casual type. The casual male was most favorably evaluated by those who preferred his type.

Several preference groups seemed especially influenced by their preferences when rating the instructors. Those subjects who had preferred a male casual type ranked the instructor of that type significantly high. Those who preferred casual female instructors were more generous when rating females. The subjects who preferred conventional females gave the overall lowest ratings; subjects who preferred conventional males the highest.

The belief that some students express their biases more than others in their evaluations was supported by the results of this study. This seems to indicate that certain categories hold particular significance for some students and than, when this is true, these preferences are reflected in the ratings given the instructor. One might interpret these tendencies as indicative of other subject preferences and attitudes, such as support of the feminist movement, prejudice against professional females, and attitude toward authority.

The notion that there is a tendency for some instructor types to receive more favorable evaluation by students was also supported by this study. The highest overall rating was received by the casually dressed male, while the lowest was received by the casually dressed female. One might speculate that the college student, in general, is not generous when rating female instructors, particularly

when they dress non-conventionally. However, this general tendency can be counteracted when the rater is influenced by other perceptions which hold significance for him. The high ratings given the casually dressed male might indicate that this type of instructor has a particular appeal in the college classroom, especially to those students inclined to prefer his type.

Most of the limitations of this study were the results of the synthetic nature of the experimental situation. When allowed to interact with an instructor over a period of time, initial impressions and judgments of the raters would possibly change. Since subjects have also been found to be more severe when rating instructors for research purposes (Sharon, 1970), it is possible that students would not reflect their biases so greatly when rating their own instructors.

The study was further limited by the use of only one teacher of each sex. Although an attempt was made to control the quality of the presentation, actual differences in instructor ability might have influenced ratings.

Another limitation was the use of videotaped instruction. Not only is an instructor's forcefulness diminished by its use (McMenamin, 1974), this medium, while providing control, eliminated actual student-teacher interaction and further suppressed student involvement.

The lack of differences in ratings by students of different belief systems was probably the result of the laboratory setting of the study and the consequent lack of ego-involvement of the subjects. In a realistic classroom setting, as students would become ego-involved with the course and the instructor, more influence of belief systems on ratings of instruction might be expected.

The variables chosen for this study were only some of many that could have been investigated. In order to provide more information on how instructor ratings are influenced by perceptions of students, their attitudes, beliefs, and preferences should be assessed and the resulting effects upon the evaluation of different instructor types investigated. Further investigation on students' initial impressions of instructors and exactly when these impressions become crystallized enough to predict instructor evaluation also seems warranted.

The differences found in this study support the belief that factors other than actual ability can influence evaluation of that ability. More specifically, preference for a particular instructor type, based on perceptions of the attributes of an effective teacher, may influence the way students rate teaching ability. The study points out the danger of placing too much confidence in the validity of student ratings of instruction. Such data should be

gathered and interpreted judiciously before they are used to make administrative decisions.

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APPENDIX A

PROSPECTUS

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INTRODUCTION

During the last decade, colleges and universities have increased their efforts to make meaningful evaluations of teacher effectiveness. Since comparable measures of student learning are usually impossible to obtain, the primary indicator of teaching effectiveness has defaulted to student opinion. Although the reliability and validity of rating instructors by their students is questioned by many educators and researchers, the technique is in widespread use throughout the United States.

The questionnaire is the tool most commonly used to accomplish the teacher evaluation. Typically, students are required to report how an instructor rates in a variety of areas which are presumably relevant to teaching effectiveness, such as communication of ideas, ability to clarify ideas, ability to relate the subject to others, and personality.

One objection to the use of such ratings is that the precision of such scales is affected by several sources of error, including computational errors, those resulting

from environmental or social circumstances, and rater errors (Doyle, 1975). Rater errors can take any of the following forms: halo error, leniency error, the tendency to rate toward the midpoint of a scale, the tendency to rate adjacent items similarly, and the inclination to rate items similarly because they logically go together. Other rater errors result from the rater's previous experiences which influenced the expectations of, attitude toward, and perception of the instructor. If these errors are constant for a given person or group, they are considered to be systematic and can affect instructor evaluation.

Evaluation of another person necessarily involves perceiving and judging that person. Person perception theory refers to the process by which a person comes to know and think about other people. Most often the term is used to describe the observations and inferences that are made about the intentions, attitudes, emotions, abilities, and traits of the object person (Tagiuri & Petrullo, 1958).

The process of judging people and objects has been considered extensively by several theorists. Heider (1958) has approached the relationship between cognitive processes and social attraction from the consideration of a state of "balance." The implications of Heider's theory include the ideas that the balanced state is one in which both partners feel mutually attracted or unattracted to each other and

that persons who are similar to each other will be more attracted to each other. "Implicit" personality theorists, proposing that preconceptions of how a person should behave are based on experience, have investigated the role of bias in judgments of others and individual differences in person perception (Schneider, 1973). Kelley (1973) proposes that when information is limited, the observer combines that information with past observations to make attributional inferences about the observed behavior and has developed an "analysis of variance" model to explain causal inferences.

Bruner (1957) has based his theoretical position upon the idea that perception always involves an act of categorization and that the inferences of perception are influenced by both the category used by the perceiver and the way the category differs from others. He proposes that in the process of categorization, organisms move inferentially from cues to categorical identity. The inference is often "unconscious", and the results of the categorization are representational in nature. That is, perceptual categorization permits one to go beyond the perceived object to predict other properties of the object not yet tested. Thus, the categorization immediately limits the range and kind of behavior expected of another person.

For the categorization process to occur, a category must be accessible to the perceiver. There appear to be two general determinants of category accessibility. One is the likelihood of events learned by a person, and the other is that the need states of the individual must require a search for cues. The greater the accessibility of a given category, the less stimulus input is required for categorization to occur and the wider the range of input that will be accepted as fitting that category.

There appears to be a sequence of decisions involved in the categorization of an object or event. First, an object with certain characteristics must be perceptually isolated. Then the environment is skanned in a "cue search" which permits placement of the object in a category. When tentative categorization has occurred, the cue search is narrowed for confirmatory cues to check the placement. The last state is the termination of cue searching, during which incongruent cues are "gated out."

Thus, in the process of categorization, cues available to the perceiver are used to place the object person into accessible categories. Associated with these categories are certain personality attributes. Some of the most obvious associations are those involving cultural stereotypes, such as age, race, and sex. Thus, an individual belonging to the category of "older person" has certain

associated characteristics, such as "more responsible," "more patient," and "less energetic." With further exposure to the object person, other associated categories, such as occupation, roles, and status, become operative and further inferences are made. The available literature suggests that the categories used depend upon the age and sex of the judge, the personality of the judge, the relationship between the judge and the object person, and the cues about the object person available (Tagiuri, 1969).

Since individuals may have relatively unique beliefs concerning persons with various categorical characteristics, the attributes of the perceiver also influence the categorization process. These individual differences in the interpretation of cues may result in the utilization of different categories, even when identical stimuli are viewed. There is evidence that individuals differ consistently in the traits they use as cues and in the weight they give these traits in their perceptions (Tagiuri, 1969).

Thus, the evaluation of another person involves many variables, such as the attributes of the judge, the cues available to the judge, the cognitive processes of the judge, and the perception of the available cues by the judge. The basic assumption underlying the proposed study is that each student, because of prior experiences which have influenced category accessibility, will perceive certain

cues from an instructor which result in categorization and inferences about that instructor's characteristics.

The student variables most often used in investigations of the effect of student attributes on instructor ratings are those of sex and ability. Studies of the relationship between student sex and teacher evaluations have yielded contradictory results. Quereshi and Widlak (1973) investigated the effect of student gender and achievement upon student ratings of a college teacher. They found significant differences between the ratings given by male and female students. Davenport (1944) found that girls rated all teachers higher than boys, while Bryan (1937) reported that boys rated male teachers higher and girls rated female teachers higher. Bendig (1952) found that female students tended to rate all instructors lower than male students. Other studies (Remmers & Elliott, 1949; Rayder, 1968) found no relationship between the sex of the student and the rating of the instructor.

The results of the investigations of the relationship between student ability and teacher ratings have also been contradictory. Some have found no relationship (Blum, 1936; Doyle & Whitely, 1974), and others have found significant relationships (Rayder, 1968; Elliott, 1950; Quereshi & Widlak, 1973). Holmes (1972) found that instructor evaluations were lower if the students were given a lower grade

than expected. He concluded that the differences in student ability do not affect instructor ratings, but if grades disconfirm expectancies, students will tend to deprecate the instructor's teaching performance.

Several other studies have investigated the relationship between other student variables and teacher evaluation. Gulo (1966), using the semantic differential to evaluate the effective professor, found a factor named "teaching dynamism" to account for most of the variance. Yonge and Sassenrath (1968) investigated the student personality correlates of teacher ratings. They found that student personality correlates of teacher ratings vary markedly from one instructor to another. Investigating student cue utilization patterns in faculty evaluation, Permut (1973) found different patterns for all subjects. Rezler (1965) investigated the influence of students' needs upon the perception of the instructor. Differences were found between male and female students. The need for nurturance influenced perception positively in males; the need for succorance influenced perception negatively in females. For both sexes the need for dominance was higher for those who perceived the instructor as liking them.

Some research has supported the idea that students have preconceptions of how an instructor should behave which influences evaluation. Whitely and Doyle (1974)

asked one group of students to sort rating items into categories based on similarity of content. Another group of students rated their instructors using the same items. The resulting structures of the two sets of items were very similar. The authors concluded that "implicit" theories were operating when students rated instructors. Bejar and Doyle (1974), when investigating the effects of student expectations on student evaluations, found less than 1% of the variability in evaluation was predictable from expectation ratings. However, when Feldhusen and Starks (1970) asked students to rate their impressions of their courses and instructors during the first week of a course and again during the last week, they found that general impressions did predict, to an extent, evaluation of instructors, accounting for about 10% of the variance.

A great deal of the research in the evaluation of teacher effectiveness has been concerned with the identification of the characteristics of the effective teacher (Ryans, 1960) and with the development of techniques and criteria for teacher evaluation (Remmers, 1963). Fewer studies have investigated the relationship of specific instructor variables and student evaluations. Solomon (1966) investigated the relationship of teacher behavior and student evaluations. Significant relationships were found between ratings and two instructor factors,

encouragement of broad student participation and facility of communication. Carney and McKeachie (1966) found that life-oriented subject matter produced higher ratings of courses than science-oriented subject matter. Isaacson, McKeachie, and Milholland (1963) found that the teacher variable most consistently correlated with good ratings by students was peer group evaluation of "general cultural attainment."

Traditionally, the sex of the instructor has not been looked upon as an important variable in the research on the evaluation of college teaching. Recently, however, McKeachie and Lin (1971) examined student response to instructor sex differences and found that the teacher's sex does influence the student's concept of the teacher's effectiveness. A warm teaching style was effective for female teachers, but for male teachers, it was effective only for female students.

McKee and Sheriffs (1957) used three methods to investigate the "double standard" which permits and encourages different behavior for men and women. They found that college men and women regard males, in general, more highly than females. Other results of the study were that most subjects denied partiality for either sex in judging and that partiality in favor of males was more marked on the part of women than of men. Goldberg (1968) found that

young college women rated articles attributed to male authors higher than the identical articles attributed to female authors. Another study (Pheterson, Kiesler, & Goldberg, 1971) also supports the finding that women tend to evaluate accomplishments of women less favorably than those of men. Sex differences when rating males and females have been found to be present even when the evaluators were experts (Haan & Livson, 1973). Women were found to be more favorable to women; men were unfavorable to both males and females. Rosen and Jerdee (1973), investigating evaluation of supervisory behavior, found that sex-role stereotypes influenced evaluations of appropriate behavior by both students and professionals.

The influence of cues upon the evaluation of male and female ability was shown in a study by Deaux and Taynor (1973). Male or female stimulus persons were rated on competence and intelligence by college students. Highly competent males were rated more positively than highly competent females. However, males of low competence were rated lower than similar females.

Recently, the focus of research on belief systems has turned toward the schools (Harvey, 1970). One of the results of some of this research is the finding that the manner in which teachers are evaluated by students has been found to be affected by the teachers' and the students'

value systems. Prather, Harvey and Coates (Note 1), investigating belief systems and perceptions of elementary students, found that the belief systems of the students significantly influenced ratings of their teachers. The children who most nearly fit descriptions of Systems 1 and 3 rated their teachers favorably, while children of Systems 2 and 4, and especially System 2, rated their teachers unfavorably. The belief systems of the students and teachers also interacted. Students of Systems 1 and 4 tended to rate System 4 teachers most favorably. System 2 children tended to rate teachers of all systems negatively, while children of System 3 tended to perceive teachers of all systems equally favorably.

In an investigation of the effects of students' belief systems and sex upon their ratings of teachers and their class achievement (Harvey, Wells, Schmidt, & Grimm, Note 2), the belief systems of junior high students were found to affect teacher ratings and also interact with the sex of the teacher. Students representing System 2 tended to rate all teachers of all systems more unfavorably than did representatives of the other three systems. The lowest ratings were made of female teachers by System 2 students, while the highest ratings were made of female teachers by System 1 students, with the ratings of System 3 students almost as high as those of System 1. Systems 1 and 3 males

tended to perceive female and System 3 teachers positively, while System 2 students perceived them negatively.

Byrne (1972) conducted an investigation of the effects of college student and instructor belief systems upon instructor evaluation and achievement. Although no differences were found on instructor ratings, an interaction was found between the belief systems of the teacher and the belief systems of the students on the measurement of higher thought processes. System 2 subjects showed higher analysis and synthesis under more abstract, non-evaluative instructors. System 1 students, particularly males, performed best under teachers high in abstractness and high in evaluativeness. System 3 students tended to perform best under teachers of intermediate abstractness and low evaluativeness. System 4 students tended to perform almost equally well under all instructors.

Although little investigation has been conducted on the relationship between teacher appearance and teaching effectiveness, the majority of teacher rating forms contain an item on dress or appearance. In a survey of 70 teacher rating forms, Ingls (1970) found that terms such as "personal appearance" appeared on less than 6%, but terms such as "grooming" or "dress" appeared on 65%.

Early studies reported minimal relationships between teacher appearance and teacher effectiveness. Ruediger

(1910) analyzed 14 teacher traits rated by administrators and found a correlation of .20 between general merit and teacher appearance. Boyce (1912) found a correlation of .36 between teacher general appearance and teacher efficiency.

Engelhart and Tucker (1936) had 225 high school students list the traits of their best and worst teachers. "Neatness in appearance and dress" correlated .46 with good teachers, although "personally attractive" was not significantly correlated. Haggard (1934) compared college freshmen and senior rankings of important teacher traits. Both groups ranked appearance last. Miller and Miller (1971) asked school administrators to rank items of teaching effectiveness as to importance. The superintendents rated personal appearance last, and the secondary principals rated it next to last.

In a recent investigation of the influence of teacher appearance, Menard (1973) taught two consecutive sections of the same college course, varying only his manner of dress. He found no differences in achievement or in student ratings of teacher performance, with the exception of the item referring to appearance.

However, the importance of the relationship of attire and the perception of a person has been shown by social psychological research. Both Keasy (1973) and

Suedfeld, Bochner, and Malas (1971) found that a particular type of attire could produce more signatures on a petition. Gibbons (1969) found that style of dress led to inferences about other characteristics. Shyness, occupation, number of boyfriends, and smoking habits were among the characteristics differentially attributed to wearers of a particular style of clothing.

Evaluation necessarily involves the act of perceiving. The perception of any given object is determined partly by the characteristics of the object and partly by characteristics of the perceiver. Person perception theory proposes that both cultural factors and the attributes of the perceiver contribute to the impressions formed and the inferences made by the perceiver. Categories or groupings common to the culture are employed, but also, because of individual experiences, the perceiver may perceive others in deviant ways. This application of autistic perception may cause the perceiver to classify persons in categories which have personal significance for him, although not for others.

This study will identify two instructor cues, sex and dress, and then assess the manner in which these cues influence students' preferences and subsequent evaluation of instructors, similar and dissimilar to the preferences.

Based on the assumptions that the factors of sex and dress provide an opportunity for categorization, the

inference of personality attributes, and the determination of status in the social scheme, the following hypotheses were formed:

1. There will be a significant difference in the mean ratings of instructional competence given instructors dressed in different types of attire.

2. There will be a significant difference in the mean ratings of instructional competence given male and female instructors.

Since individual perceptions influence the categorization and the conclusions drawn about the object person, the following hypotheses were formed:

3. The instructors of a particular sex will be rated higher in instructional competence than the other sex by students who prefer that sex.

4. Instructors exhibiting a particular dress style will be rated higher in instructional competence than instructors having a different dress style by those students who prefer that style.

5. Instructors having both the sex and dress style preferred by subjects will receive higher ratings in instructional competence than those instructors not preferred.

Method

Undergraduate students enrolled in the College of Education, University of Oklahoma, will view a videotape of

an instructor presenting a fifteeen minute "mini-lecture." Two instructors, one male and one female, will be used. They will present identical lectures, but each will dress in two styles. Each instructor will wear conventional clothes for one presentation. The other presentation will be given with each instructor dressed in an unconventional manner. After viewing the videotape, each subject will evaluate the instructional performance of the teacher.

Subjects

There will be 16 groups of 5 subjects each (.99 power against a 1 standard deviation difference at the .05 level for a main effect with two levels). Subjects will be randomly selected from a student subject pool and classified into one of four preference groups. Within each preference group, subjects will be randomly assigned to one of the four treatment groups.

Procedure

Phase I. Subjects who have been randomly selected from the subject pool will view a videotape containing pictures of the four types of instructors to be considered, males and females, dressed either conventionally or unconventionally. Each instructor type will be represented by 3 different persons. Each person will be paired with each person of the three other instructor types and presented to the subjects for 1/2 second each. After each pairing, the

subjects will indicate which of the two instructors would be preferred. Those subjects who show a preference for a particular type of instructor (male-conventionally dressed, male-unconventionally dressed, female-conventionally dressed, or female-unconventionally dressed) will be used as subjects for the study.

Phase II. One lecture will be prepared for all treatments. Two graduate students from the department of speech will serve as the instructors and will be coached in the presentation of the material so that all lectures are identical in style.

Four videotapes will be made. In two the instructors will be dressed in clothes considered conventional for a teacher. The male will wear a coat and tie; the female a conservative dress. The same lecture will then be presented by each of the instructors dressed in unconventional clothes. The male will wear jeans and a workshirt; the female will wear jeans and a "mod" sweater.

Measures

The dependent measure will consist of those items which have been found (Bendig, 1954) to be loaded on the factor termed "instructional competence" in the Purdue Rating Scale for Instruction (Remmers & Elliott, 1950). These include the following items: 1. Interest in subject, 5. Presentation of subject matter, 7. Self-reliance and 10. Stimulating intellectual curiosity.

Subjects will also be asked to indicate on a 7 point scale their interest in the content of the lecture.

The Conceptual Systems Test (Harvey & Hoffmeister, 1971) will also be administered to all subjects participating in Phase II. This test classifies subjects as belonging to one of four belief systems. System 1 is characterized by such things as high concreteness of beliefs, high absolutism toward rules and roles, a tendency to view the world in an overly simplistic way, a strong belief in the supernatural, a positive attitude toward authority, and rigidity in problem-solving. Representatives of System 2 are slightly less dogmatic and inflexible than System 1 individuals, tend to have negative attitudes toward authority, are low in self-esteem, and are fearful of being deceived or exploited. A System 3 belief system is less concrete and less evaluative than Systems 1 and 2, and is reflected in a strong outward emphasis upon friendship, interpersonal harmony, and mutual aide. Representatives of System 4, the most abstract and open-minded of the four belief systems, are the most differentiated and integrated in their cognitive structures and thought processes, the most creative, the most tolerant, and most often characterized by a problem-solving orientation.

The items in the Conceptual Systems Test consist of statements made by subjects representative of the four belief systems. Factor analysis has yielded six highly

consistent clusters. They are Divine Fate Control, Need for Structure and Order, Need to Help People, Need for People, Interpersonal Aggression, and General Distrust. A combination of cut-off scores and profile analyses is used to classify subjects into one of the belief systems.

Analysis

The data will be analyzed with a 2 (Instructor Sex) X 2 (Instructor Dress) X 4 (Student Preference) analysis of variance design. In view of the theoretical nature of the study and the desirability of committing a Type I error, rather than a Type II, the alpha level will be set at .05.

Analysis will also include a correlation between the student ratings of their interest in the subject content and their evaluation of the instructor. If the correlation between interest in subject matter and instructor rating exceeds .6 (Feldt, 1958), the interest score will be used as a covariate, and an analysis of covariance design will be used.

Planned comparisons, using Dunn's procedure (Kirk, 1968), will be made between the ratings given by the subjects of the following groups:

1. Preferred instructor sex and dress; all other groups.

2. Non-preferred instructor sex and dress; all other groups.

3. Preferred instructor sex and dress; non-preferred instructor sex and dress.

If the second-order interaction of the three-way analysis of variance is significant, tests of simple, simple main effects and simple interaction effects will be made. If a first-order interaction is significant, appropriate tests of simple main effects will be made.

APPENDIX B

RESULTS OF 2 (PREFERRED SEX) X 2 (PREFERRED DRESS) X 2 (INSTRUCTOR SEX) X 2 (INSTRUCTOR DRESS) ANALYSIS

Results

A 2 (Preferred Sex) X 2 (Preferred Dress) X 2 (Instructor Sex) X 2 (Instructor Dress) analysis of variance was performed on the rating scores of instructional competence given the instructors (see Table 8). It revealed a significant main effect on Instructor Sex, F (1, 64) = 4.18, $p < .05$. The mean rating given the male was 62.47 and the female was 55.15.

A significant interaction was found between Preferred Sex and Instructor Dress, F (1, 64) = 4.77 $p < .05$. Those who preferred male instructors ranked casually dressed instructors higher than those conventionally dressed (see Figure 6).

Two second order interactions were also significant (see Table 8). Analysis of simple interaction effects in the significant interaction between Preferred Sex (PS), Preferred Dress (PD), and Instructor Sex (IS), F (1, 64) = 4.18, $p < .05$, revealed a significant effect between PS and IS in the PD-Casual condition, F (1, 64) = 11.53, $p < .01$. Tests of simple, simple main effects revealed significant differences in the ratings given both levels by each group in this condition (see Table 9). Those subjects who preferred females ranked the female instructor higher than the male, while those who preferred males ranked the male instructor higher than the female (see Figure 7).

TABLE 8

ANALYSIS OF VARIANCE OF THE EFFECTS OF PREFERRED SEX, PREFERRED DRESS, INSTRUCTOR SEX AND INSTRUCTOR DRESS ON RATINGS OF INSTRUCTIONAL COMPETENCE

SOURCE	df	MS	F
Preferred Sex (PS)	1	270.11	1.05
Preferred Dress (PD)	1	74.11	.29
Instructor Sex (IS)	1	1073.11	4.18*
Instructor Dress (ID)	1	382.81	1.49
PS X PD	1	838.51	3.27
PS X IS	1	838.51	3.27
PS X ID	1	1224.61	4.77*
PD X IS	1	159.61	.62
PD X ID	1	21.01	.08
IS X ID	1	644.11	2.51
PS X PD X IS	1	1073.11	4.18*
PS X PD X ID	1	195.31	.76
PS X IS X ID	1	.61	.00
PD X IS X ID	1	1522.51	5.93*
PS X PD X IS X ID	1	644.21	2.51
Within	64	256.53	

* $p < .05$

Figure 6

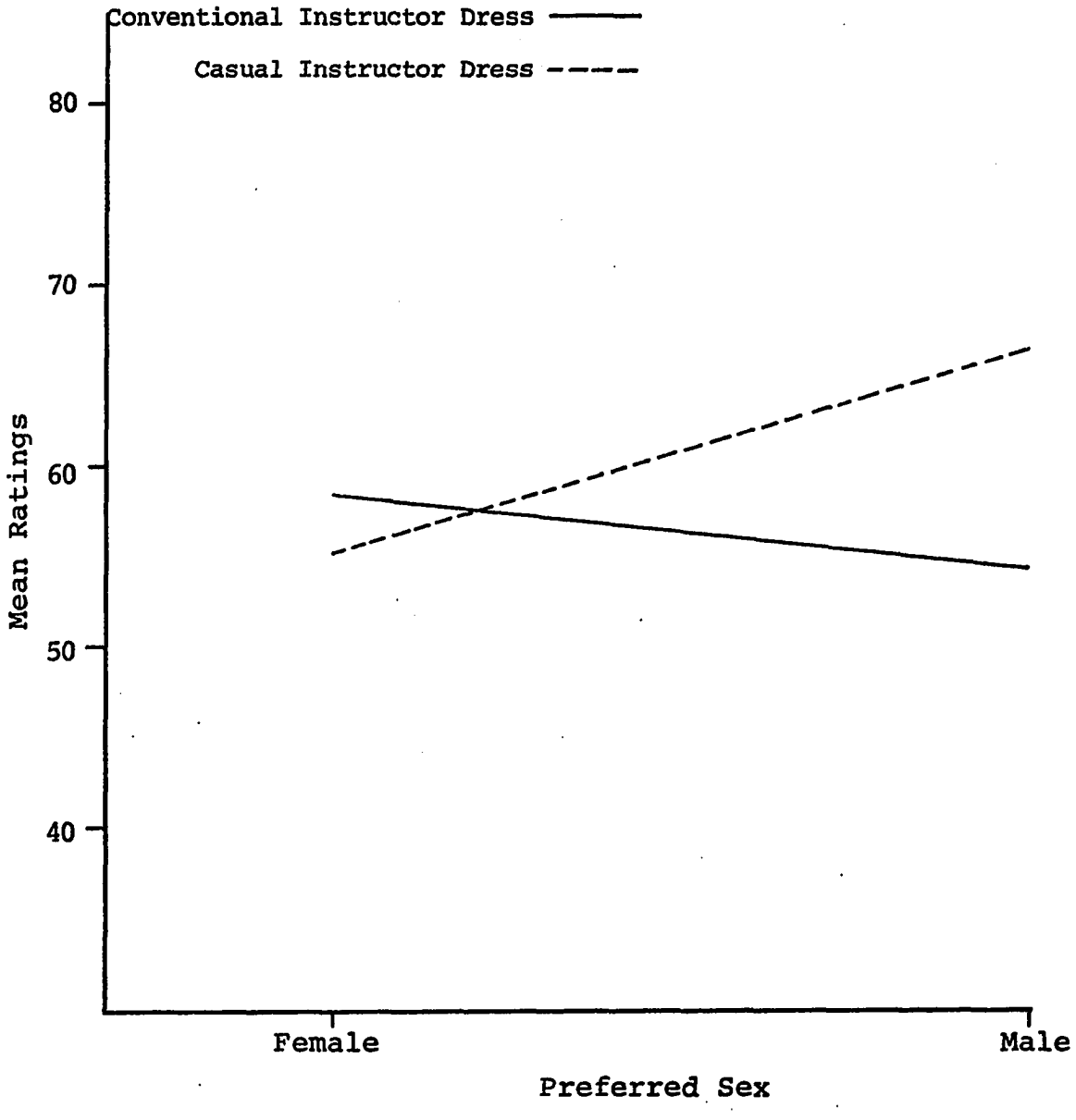

Figure 6. The interaction between Preferred Sex and Instructor Dress.

TABLE 9

SIMPLE INTERACTION EFFECTS AND SIMPLE, SIMPLE MAIN EFFECTS OF PREFERRED SEX (PS) X INSTRUCTOR SEX (IS) X PREFERRED DRESS (PD) INTERACTION

SOURCE	df	MS	F
Simple interaction effects			
PD X IS for PS_1 (Female)	1	1575.02	6.14*
PD X IS for PS_2 (Male)	1	202.50	.79
PS X PD for IS_1 (Female)	1	1904.40	7.42**
PS X PD for IS_2 (Male)	1	105.62	.41
PS X IS for PD_1 (Conventional)	1	7.26	.03
PS X IS for PD_2 (Casual)	1	2958.53	11.53**
Simple, simple main effects			
PS for IS_1 X PD_2	1	1710.95	6.66*
PS for IS_2 X PD_2	1	1248.20	4.86*
PS for IS_1 X PD_1	1	605.00	2.36
PS for IS_1 X PD_2	1	1377.80	5.37*
PD for IS_1 X PS_1	1	1080.45	4.21*
PD for IS_1 X PS_2	1	830.70	3.23
PD for IS_2 X PS_1	1	540.80	2.10
IS for PD_2 X PS_1	1	994.05	3.87
IS for PD_2 x PS_2	1	1674.45	6.53*
Within	64	256.53	

* $p < .05$

** $p < .01$

Figure 7

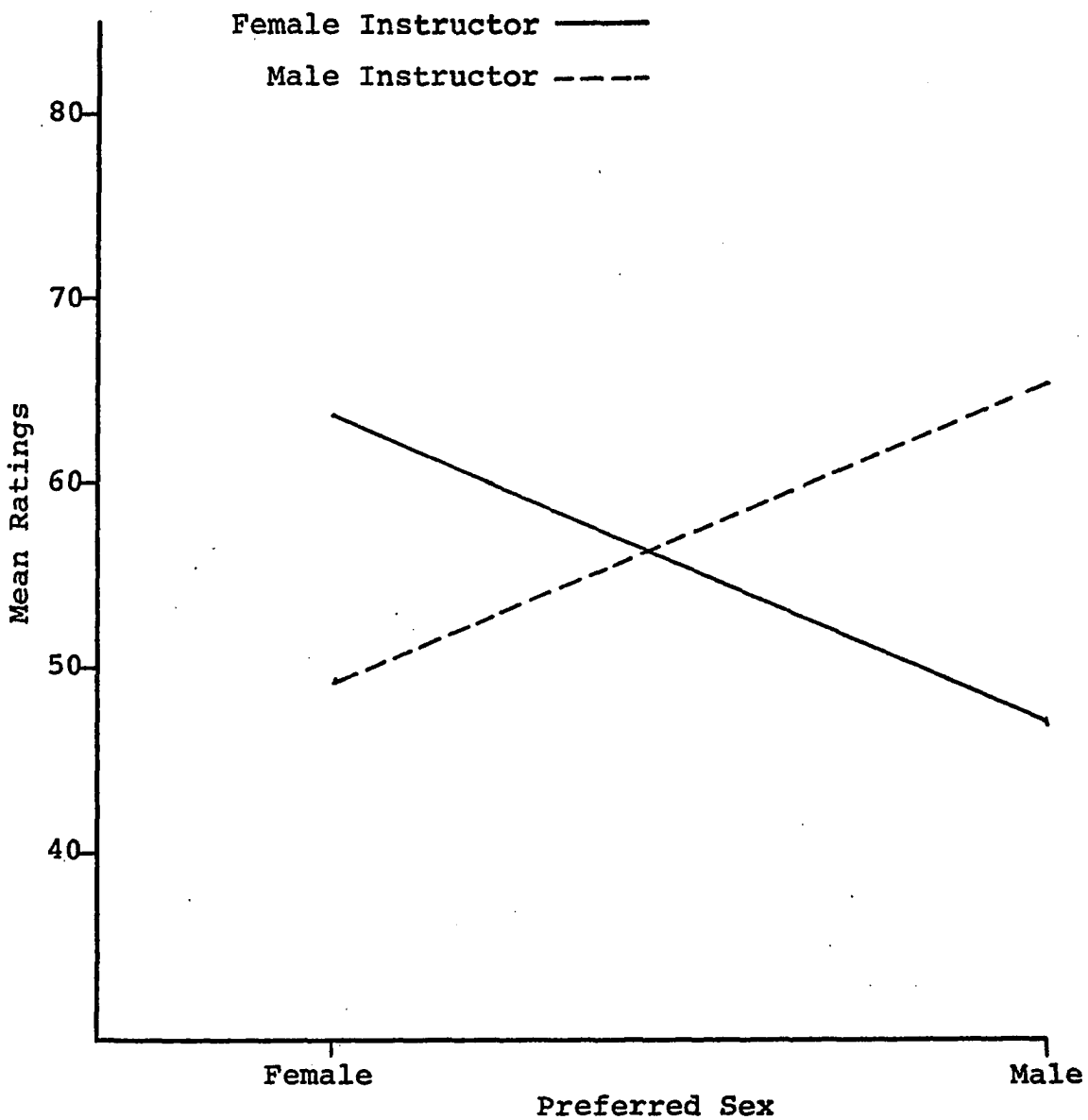

Figure 7. The interaction between Preferred Sex and Instructor Sex at the level of Preferred Dress-Casual.

Another significant simple interaction effect was found between the variables of PS and PD in the IS-Female condition, F (1, 64) = 7.42, p <.01. Tests of simple, simple main effects revealed significant differences in the PD-Casual condition between levels of PS and in the PS-Female condition between levels of PD. Those subjects who preferred casual female instructors rated the female instructor higher than those who preferred a conventional female; however, those who preferred a casual male instructor rated the female instructor lower than those who preferred a conventionally dressed male (see Figure 8).

Another significant simple interaction effect was found between PD and IS in the PS-Female condition, F (1, 64) = 6.14, p <.05. Further analysis of this effect showed differences in the ratings given males and females by those in the PD-Casual level (see Table 9). Those subjects who preferred casual dress and female instructors rated the female instructor higher than the male (see Figure 9).

The second order interaction between Preferred Dress (PD), Instructor Sex (IS), and Instructor Dress (ID) was also significant, F (1, 64) = 5.93, p <.05. Simple interaction tests revealed a significant interaction effect between IS and ID in the PD-Casual condition, F (1, 64) = 8.08, p <.01. Tests of simple, simple main effects showed differences in levels of PD for IS-Male and ID-Casual conditions (Table 10).

Figure 8

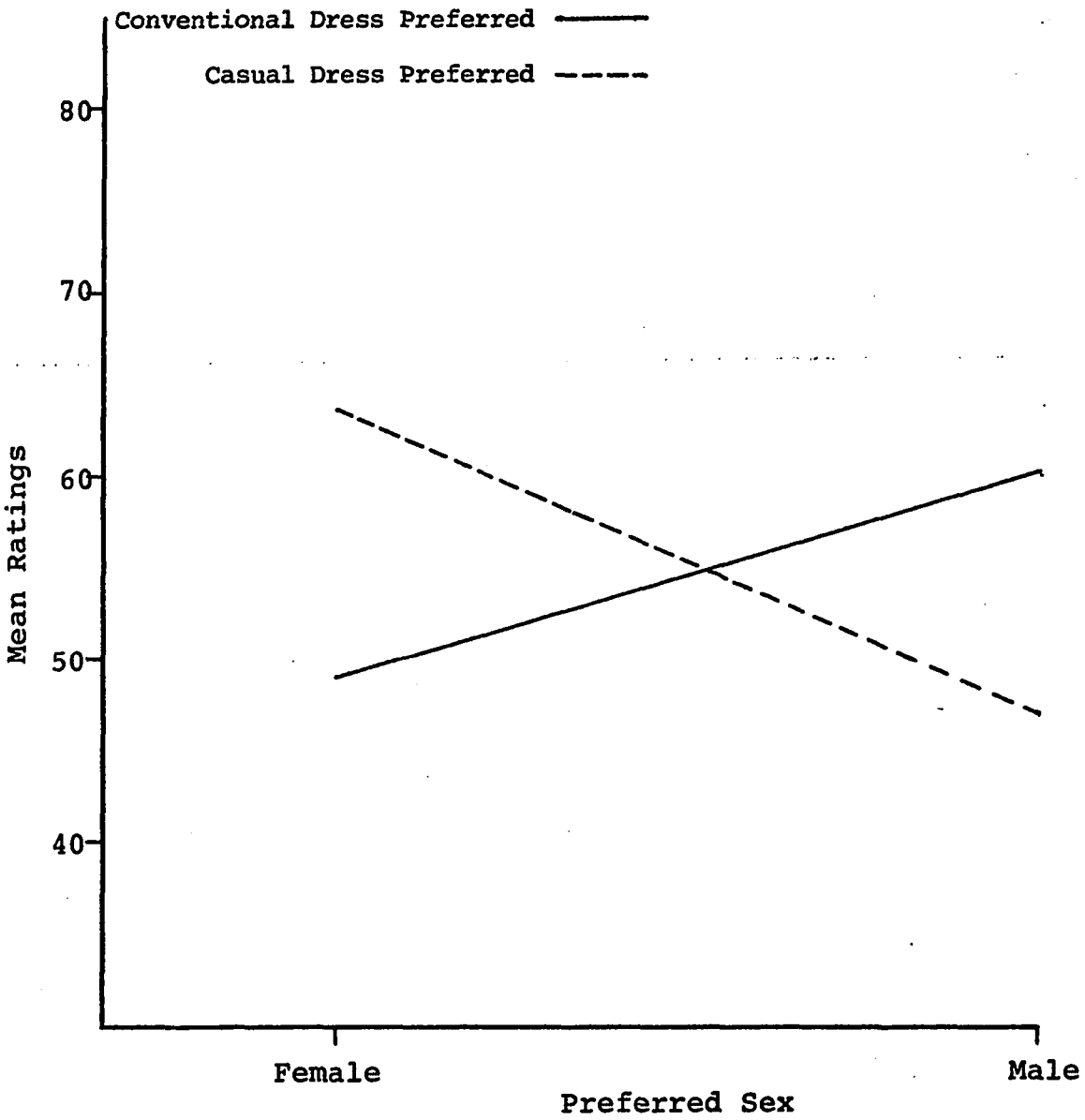

Figure 8. The interaction between Preferred Dress and Preferred Sex at the level of Instructor Sex-Female.

Figure 9

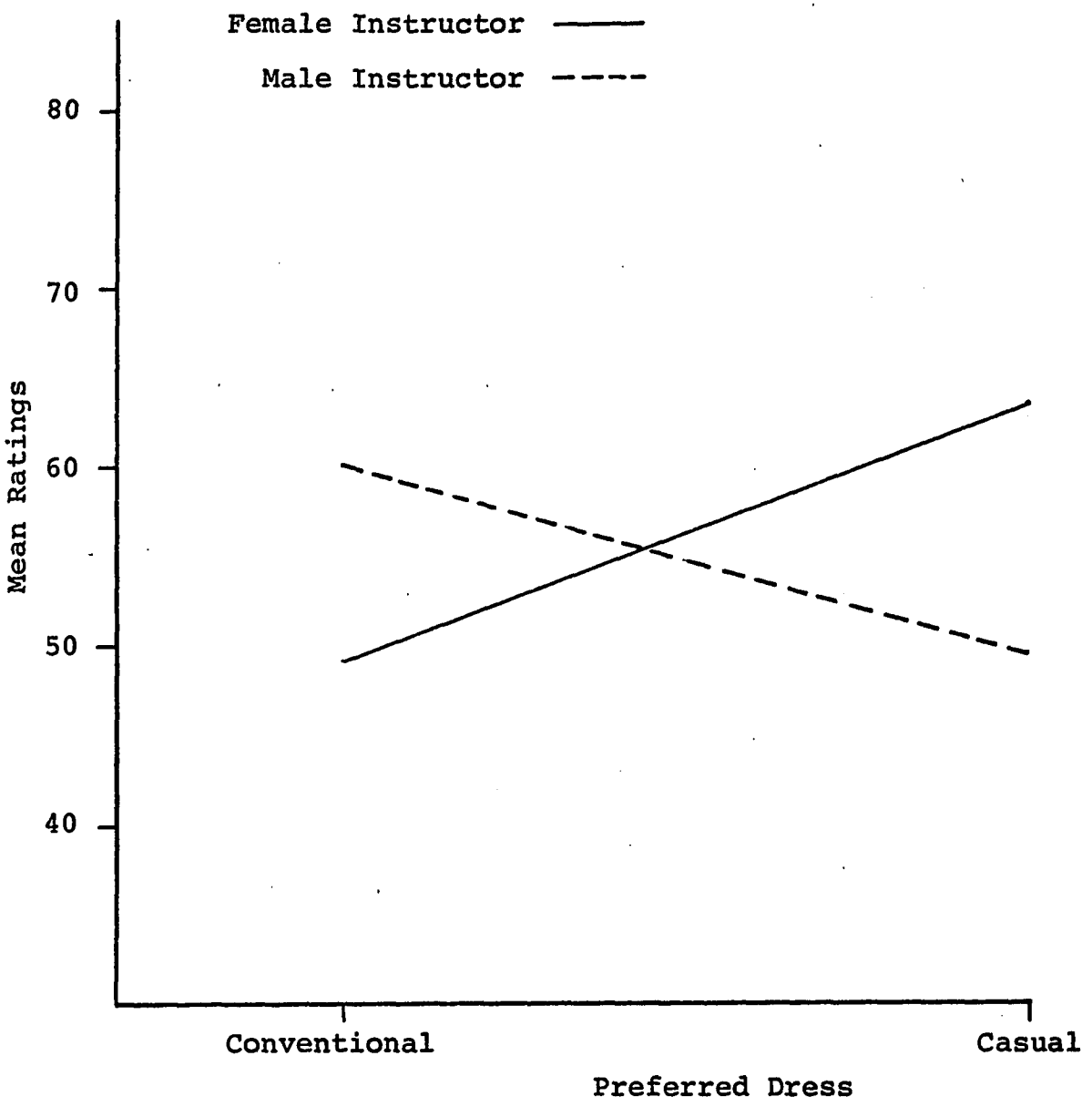

Figure 9. The interaction between Instructor Sex and Preferred Dress at the level of Preferred Sex-Female.

TABLE 10

SIMPLE INTERACTION EFFECTS AND SIMPLE, SIMPLE MAIN EFFECTS OF PREFERRED DRESS (PD) X INSTRUCTOR SEX (IS) X INSTRUCTOR DRESS (ID) INTERACTION

SOURCE	df	MS	F
Simple interaction effects			
PD X IS for ID_1 (Conventional)	1	1334.02	5.20*
PD X IS for ID_2 (Casual)	1	348.10	1.35
PD X ID for IS_1 (Female)	1	592.90	2.31
PD X ID for IS_2 (Male)	1	950.42	3.70
IS X ID for PD_1 (Conventional)	1	93.02	.36
IS X ID for PD_2 (Casual)	1	2073.60	8.08**
Simple, simple main effects			
IS for ID_1 X PD_2	1	490.05	1.91
IS for ID_2 X PD_2	1	1786.05	6.96*
IS for ID_1 X PD_1	1	871.20	3.39
ID for IS_1 X PD_2	1	405.00	1.91
ID for IS_2 X PD_2	1	1960.20	7.64**
PD for IS_1 X ID_1	1	369.80	1.44
PD for IS_2 X ID_1	1	1051.25	4.09*
Within	64	256.53	

* $p < .05$

** $p < .01$

When they were casually dressed the male instructor was ranked higher than the female by those who preferred casual attire (see Figure 10).

Another significant interaction was found between PD and IS in the ID-Conventional condition, F (1, 64) = 5.20, p <.05. Differences were found between levels of PD for the IS-Male and ID-Conventional conditions. Conventionally dressed male instructors were rated higher by those who preferred conventional attire than they were by those who preferred casual attire (see Figure 11).

Discussion

The hypothesis that the sex of the instructor does make a difference in student evaluation was supported. That is, the male instructor received higher ratings than the female. However, the instructor sex variable also interacted with others to influence ratings and must be interpreted with regard to these interactions.

The dress of the instructor alone did not affect ratings, but when interacting with instructor sex and the type of dress preferred, type of instructor attire did influence evaluations.

The interaction of student preferences and instructor types produced complex results. Although the female instructor received, generally, less favorable evaluation than the male, from those students who preferred female

Figure 10

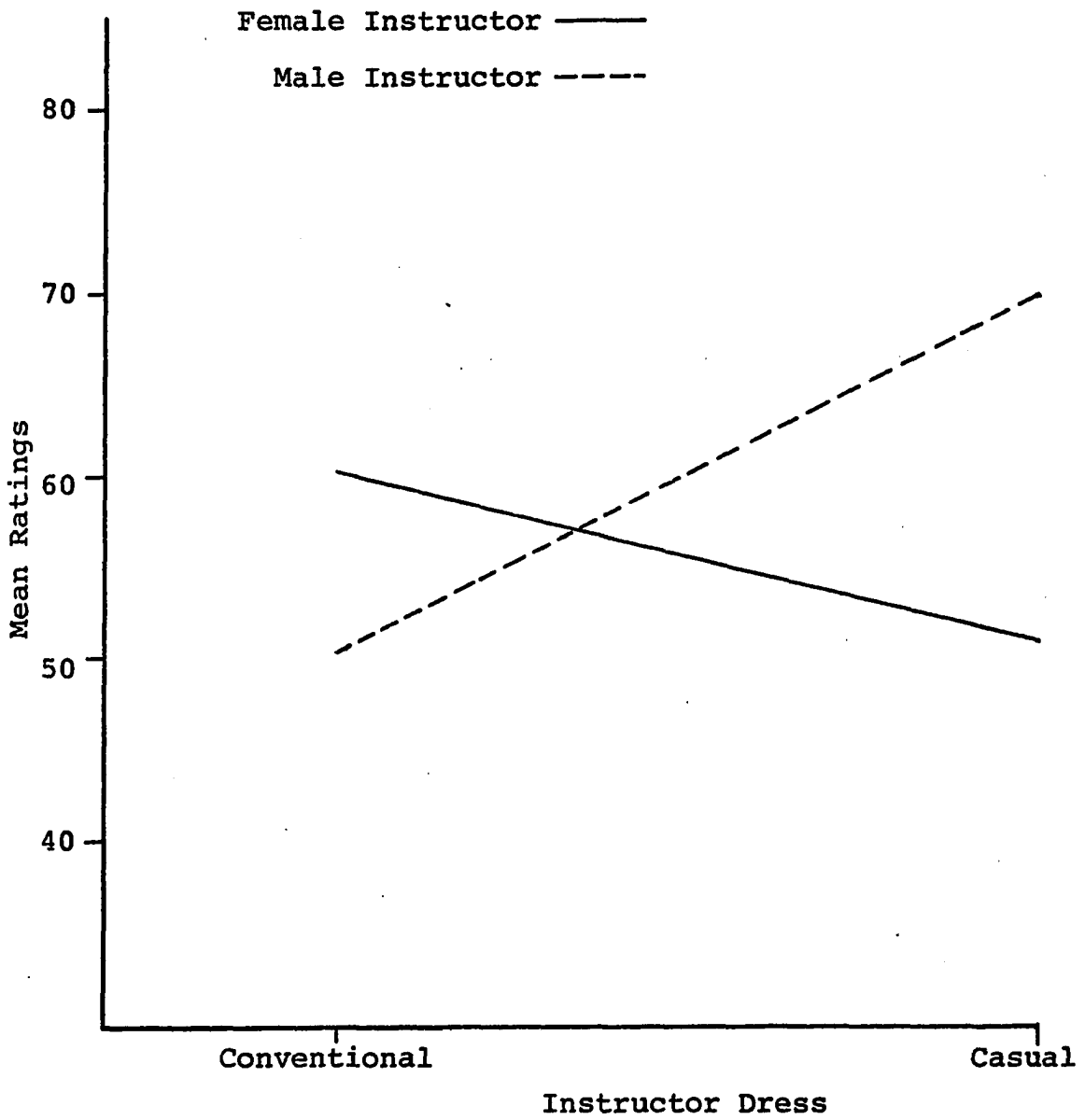

Figure 10. The interaction between Instructor Sex and Instructor Dress at the level of Preferred Dress-Casual.

Figure 11

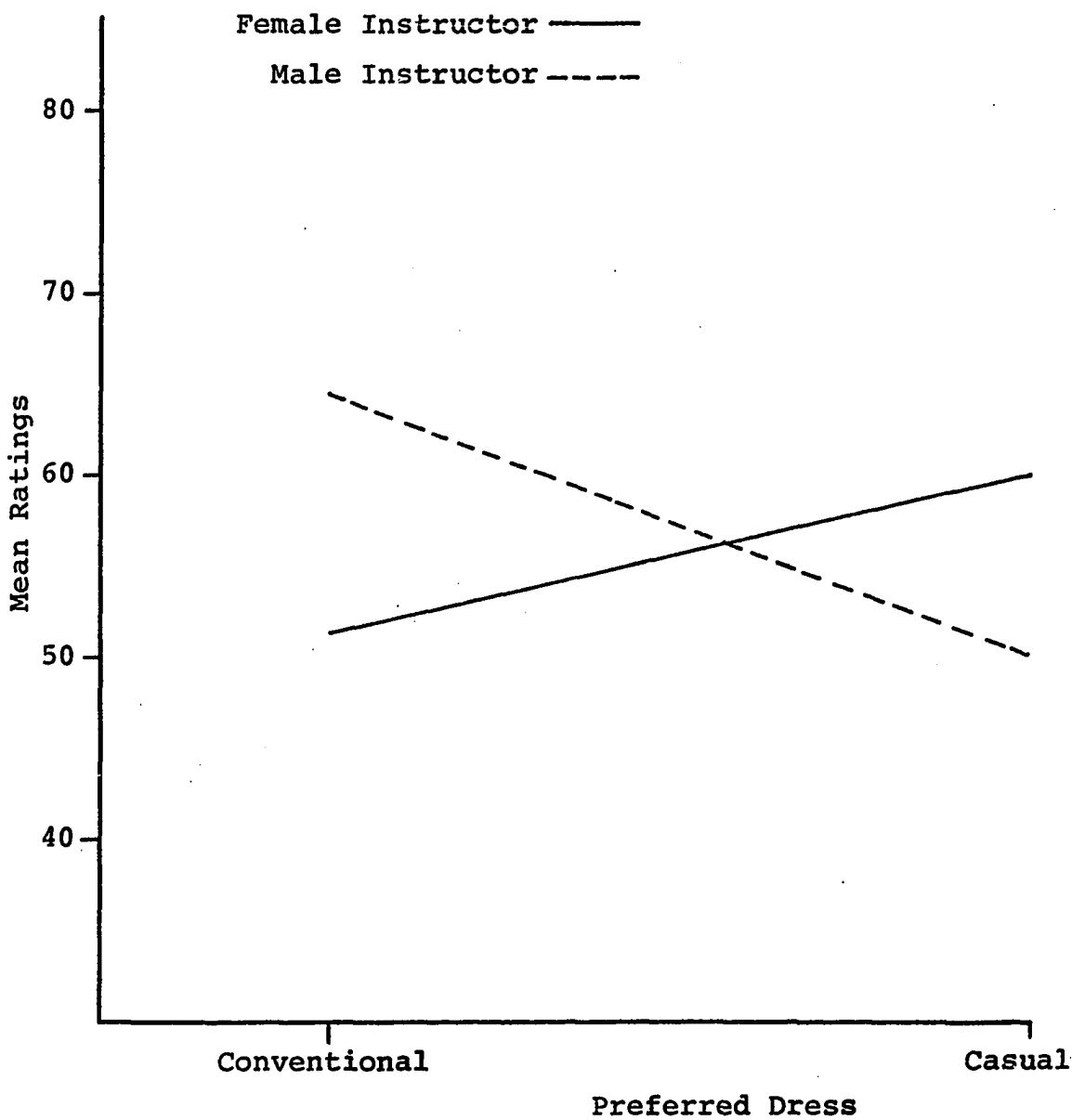

Figure 11. The interaction between Instructor Sex and Preferred Dress at the level of Instructor Dress-Conventional.

instructors she received somewhat higher ratings. From those who, additionally, preferred casually dressed instructors she received significantly higher ratings than the male. Her evaluation seemed to depend not so much on the way she was dressed, but on student preferences.

The male instructor, on the other hand, influenced the ratings more by his dress style. Especially those students who preferred a casual dress style penalized him when he dressed conventionally. Those who preferred both male and casual types were generous in their ratings of the male instructor.

The notion that some students express their biases more than others in their evaluations was supported by the results of this study. Those students who expressed an initial preference for casual attire seemed to be especially influenced by their preferences when rating the male instructor in different modes of dress. This would seem to indicate that certain categories have particular significance for some students and supports the belief that individual differences might be reflected in teacher ratings.

APPENDIX C

RESPONSE FORMS FOR INITIAL VIDEOTAPE

Name_____ ID#_____

	1st	2nd		1st	2nd
1.			28.		
2.			29.		
3.			30.		
4.			31.		
5.			32.		
6.			33.		
7.			34.		
8.			35.		
9.			36.		
10.			37.		
11.			38.		
12.			39.		
13.			40.		
14.			41.		
15.			42.		
16.			43.		
17.			44.		
18.			45.		
19.			46.		
20.			47.		
21.			48.		
22.			49.		
23.			50.		
24.			51.		
25.			52.		
26.			53.		
27.			54.		

1. What instructor characteristics did you use to determine the choices that you made?

2. What do you think was the purpose of the instrument?

3. What do you think is the purpose of the research study?

4. Please made any other comments about either the instrument or the study that you would like to.

APPENDIX D

RESPONSE FORMS FOR TREATMENT VIDEOTAPE

Name_____ ID#_____

Please rate the instructor on the indicated qualities by circling the letter which most nearly describes the instructor with reference to the quality you are considering.

- -

1. Interest in subject

A	B	C	D	E	F	G	H	I	J
Appears full of subject				Seems mildly interested				Subject seems irksome	

- -

2. Organization of lecture

A	B	C	D	E	F	G	H	I	J
Well organized and prepared				Fairly well organized				No organization	

- -

3. Style of presentation

A	B	C	D	E	F	G	H	I	J
Audible, clear and fluent speaking style				Sometimes hesitant and unclear				Difficult to understand	

- -

4. Presentation of subject matter

A	B	C	D	E	F	G	H	I	J
Clear, definite and forceful				Sometimes mechanical and monotonous				Indefinite, involved and monotonous	

- -

5. Use of illustrations and examples

A	B	C	D	E	F	G	H	I	J
Used interesting, meaningful illustrations				Illustrations somewhat helpful				No examples or illustrations used	

- -

6. Treatment of subject

A	B	C	D	E	F	G	H	I	J
Stimulated independent thinking about subject				Created mild curiosity in subject				Stimulated no interest in subject	

- -

7. Speaking ability

A	B	C	D	E	F	G	H	I	J
Expressive, effective use of voice				Voice sometimes lacking in expressiveness				Monotonous, expressionless voice	

- -

8. Self-reliance and confidence

A	B	C	D	E	F	G	H	I	J
Sure of himself, meets difficulty with poise				Fairly self-confident; occasionally disconcerted				Hesitant, timid, and uncertain	

- -

9. Enthusiasm for teaching

A	B	C	D	E	F	G	H	I	J
Seems eager and involved; enthusiastic				Seems somewhat in teaching				Seems bored	

- -

10. Stimulating intellectual curiosity

A	B	C	D	E	F	G	H	I	J
Inspires student to independent effort; creates desire for investigation				Occasionally inspiring; creates mild interest				Destroys interest in subject; makes work repulsive	

- -

11. Demonstration of significance of subject

A	B	C	D	E	F	G	H	I	J
Relevance and significance of subject clearly explained				Attempted to show relevance of subject				Never showed relevance of subject	

12. General qulity of presentation as a whole

A	B	C	D	E	F	G	H	I	J
Excellent				Fair				Poor	

13. Personal peculiarities

A	B	C	D	E	F	G	H	I	J
Wholly free from annoying mannerisms				Moderately free from annoying mannerisms				Constantly exhibits irritating mannerisms	

14. Personal appearance

A	B	C	D	E	F	G	H	I	J
Well-groomed; clothes neat and clean				Somewhat untidy; gives little attention to appearance				Slovenly clothed; untidy and ill-kept	

Indicate your interest in the subject matter of the lecture. Do not consider either the instructor or the quality of the presentation.

A	B	C	D	E	F	G	H	I	J
Very interested				Somewhat interested				Uninterested	

CONCEPTUAL SYSTEMS TEST

The following questions are designed to provide information on how you feel about a number of important social and personal issues. You may find yourself agreeing with some, disagreeing with others, and being uncertain about still others. Whatever your response, you can be sure that many people feel the same as you do.

There are no right or wrong answers to these items. Rather, your response simply indicates how you feel about each question. Your response to any question should indicate how you usually feel--not just an occasional type of thing. Mark only <u>one</u> response for each question.

Answer choices are:

1 = I agree completely
2 = I agree mostly
3 = I agree and disagree about equally
4 = I disagree mostly
5 = I disagree completely

---

1. I think I have more friends than most people I know.	1	2	3	4	5
2. Contributing to human welfare is the most satisfying human endeavor.	1	2	3	4	5
3. I like to meet new people.	1	2	3	4	5
4. No man can be fully successful in life without belief or faith in divine guidance.	1	2	3	4	5
5. I feel like telling other people off when I disagree with them.	1	2	3	4	5
6. I like to help my friends when they are in trouble.	1	2	3	4	5
7. I like to give lots of parties.	1	2	3	4	5
8. I like to criticize people who are in a position of authority.	1	2	3	4	5
9. I am a very sociable person who gets along easily with nearly everyone.	1	2	3	4	5

10.	In the final analysis events in the world will ultimately be in line with the master plan of God.	1	2	3	4	5
11.	I like to start conversation.	1	2	3	4	5
12.	Most people can still be depended upon to come through in a pinch.	1	2	3	4	5
13.	I like to join clubs or social groups.	1	2	3	4	5
14.	Any written work that I do I like to have precise, neat and well organized.	1	2	3	4	5
15.	It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	1	2	3	4	5
16.	The dictates of one's religion should be followed with trusting faith.	1	2	3	4	5
17.	I like to have my meals organized and a definite time set aside for eating.	1	2	3	4	5
18.	I like to do things with my friends rather than by myself.	1	2	3	4	5
19.	I like to have a place for everything and everything in its place.	1	2	3	4	5
20.	I enjoy very much being a part of a group.	1	2	3	4	5
21.	I like to help other people who are less fortunate than I am.	1	2	3	4	5
22.	Marriage is a divine institution for the glorification of God.	1	2	3	4	5
23.	I like to have my life so arranged that it runs smoothly and without much change in my plans.	1	2	3	4	5
24.	I like my friends to confide in me and to tell me their troubles.	1	2	3	4	5

25.	I like to have my work organized and planned before beginning it.	1	2	3	4	5
26.	I enjoy making sacrifices for the sake of the happiness of others.	1	2	3	4	5
27.	I feel like making fun of people who do things that I regard as stupid.	1	2	3	4	5
28.	Sin is but a cultural concept built by man.	1	2	3	4	5
29.	I like to keep my things neat and orderly, on my desk or workspace.	1	2	3	4	5
30.	I prefer to do things alone, rather than with my friends.	1	2	3	4	5
31.	I believe that to attain my goals it is necessary for me to live as God would have me live.	1	2	3	4	5
32.	I like to treat other people with kindness and sympathy.	1	2	3	4	5
33.	I find that a well-order mode of life with regular hours is suitable to my personality.	1	2	3	4	5
34.	These days a person doesn't really know whom he can count on.	1	2	3	4	5
35.	Guilt results from violation of God's law.	1	2	3	4	5
36.	Politicians have to bribe people.	1	2	3	4	5
37.	I like to keep my letters, bills, and other papers neatly arranged and filed according to some system.	1	2	3	4	5
38.	I feel like getting revenge when someone has insulted me.	1	2	3	4	5
39.	I feel at home with almost everyone and like to participate in what they are doing.	1	2	3	4	5
40.	I like to form new friendships.	1	2	3	4	5

41.	I like to sympathize with my friends when they are hurt or sick.	1	2	3	4	5
42.	I don't like for things to be uncertain and unpredictable.	1	2	3	4	5
43.	You sometimes can't help wondering whether anything's worthwhile anymore.	1	2	3	4	5
44.	I like to plan and organize the details of any work I undertake.	1	2	3	4	5
45.	The way to peace in the world is through religion.	1	2	3	4	5
46.	Anyone who completely trusts anyone else is asking for trouble.	1	2	3	4	5
47.	I always like for other people to tell me their problems.	1	2	3	4	5
48.	I like to make as many friends as I can.	1	2	3	4	5

APPENDIX E

SAMPLE CHARACTERISTICS

CHARACTERISTICS OF PILOT STUDY SAMPLE

	Student Sex		
Student Preference	Male	Female	Total
Conventional Female	4	5	9
Casual Female	3	2	5
Conventional Male	2	1	3
Casual Male	1	2	3
None	1	2	3
Total	11	12	23

CHARACTERISTICS OF TOTAL SAMPLE

	Student Sex		
Student Preference	Male	Female	Total
Conventional Female	7	33	40
Casual Female	8	20	28
Conventional Male	9	18	27
Casual Male	11	18	29
None	9	29	37
Total	43	118	161

DISTRIBUTION OF BELIEF SYSTEM AND STUDENT PREFERENCE GROUPS

Student Preference Groups	Belief System		
	System 1	System 3	System 4
Conventional Female	17	1	2
Casual Female	14	2	3
Conventional Male	17	1	2
Casual Male	14	1	4
Total	62	5	11

APPENDIX F

SUMMARY STATISTICS

TUKEY"S HSD TEST OF DIFFERENCES BETWEEN ORDERED MEANS OF STUDENT PREFERENCE GROUPS FOR CONVENTIONALLY DRESSED FEMALES

Student Preference	ConM	CasM	ConF	CasF
Conventional Male	-	3.6	5.8**	19.4
M = 48.6				
Casual Male		-	2.2	15.8
M = 52.2				
Conventional Female			-	13.6*
M = 54.4				
Casual Female				-
M = 68.0				

*$p < .05$

**$p < .005$

TUKEY'S HSD TEST OF DIFFERENCES BETWEEN ORDERED MEANS OF STUDENT PREFERENCE GROUPS FOR CASUALLY DRESSED FEMALES

Student Preference	CasM	ConF	CasF	ConM
Casual Male	-	1.6	17.4	29.4
M = 42.4				
Conventional Female		-	15.8	27.8
M = 44.0				
Casual Female			-	12.0*
M = 59.8				
Conventional Male				
M = 71.8				

*$p < .05$

TUKEY'S HSD TEST OF DIFFERENCES BETWEEN ORDERED MEANS OF STUDENT PREFERENCE GROUPS FOR CONVENTIONALLY DRESSED MALES

Student Preference	FCas	MCas	FCon	MCon
Casual Female	-	.8	12.8*	17.0
M = 49.8				
Casual Male		-	12.0	16.2
M = 50.6				
Conventional Female			-	4.2
M = 62.6				
Conventional Male				-
M = 66.8				

*$p < .005$

TUKEY'S HSD TEST OF DIFFERENCES BETWEEN ORDERED MEANS OF STUDENT PREFERENCE GROUPS FOR CASUALLY DRESSED MALES

Student Preference	ConF	CasF	ConM	CasM
Conventional Female M = 57.8	-	1.6	14.4	22.8
Casual Female M = 59.4		-	12.8	21.2
Conventional Male M = 72.2			-	8.4
Casual Male M = 80.6				-

ANALYSIS OF VARIANCE OF PLANNED COMPARISON BETWEEN RATINGS OF INSTRUCTIONAL COMPETENCE OF GROUPS VIEWING INSTRUCTOR SIMILAR TO PREFERENCES AND ALL OTHER GROUPS

Source	df	MS	F
Between Groups	1	1157.21	3.73
Within Groups	78	310.55	

ANALYSIS OF VARIANCE OF PLANNED COMPARISON BETWEEN RATINGS OF INSTRUCTIONAL COMPETENCE OF GROUPS VIEWING INSTRUCTOR DISSIMILAR TO PREFERENCES AND ALL OTHER GROUPS

Source	df	MS	F
Between Groups	1	22.20	.06
Within Groups	78	325.10	

ANALYSIS OF VARIANCE OF PLANNED COMPARISON BETWEEN RATINGS OF INSTRUCTIONAL COMPETENCE OF GROUPS VIEWING INSTRUCTORS SIMILAR AND DISSIMILAR TO PREFERENCE

Source	df	MS	F
Between Groups	1	562.50	1.91
Within Groups	38	293.44	

ANALYSIS OF VARIANCE UPON RATINGS OF INSTRUCTIONAL COMPETENCE OF BELIEF SYSTEMS 1, 3, and 4

Source	df	MS	F
Between Groups	2	415.68	1.29
Within Groups	75	320.88	