Trainee competence and the status relationship between the trainee and trainers as determinants of trainers' evaluation of the trainee's performance.

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Trainee Competence and the Status Relationship between the Trainee and Trainers as Determinants of Trainers' Evaluation of the Trainee's Performance

A Thesis Presented
By
Manfred Kurt Rotermund

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

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Trainee Competence and the Status Relationship between the Trainee and Trainers as Determinants of Trainers' Evaluation of the Trainee's Performance

A Thesis

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February 1972
(month) (Year)
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INTRODUCTION

Several investigations (Rosenthal and Jacobsen, 1968; Lanzetta and Hannah, 1969; Ring and Farina, 1969) have shown that manipulating the information given to a trainer concerning a trainee whom he is to teach results in changes in the trainer's evaluation of the trainee's performance. Thus, Rosenthal and Jacobson (1968) told teachers in a public school that certain of their students would show marked improvement during the following year. At the end of the year, those students did show an improvement on standardized measures of achievement and intelligence greater than that found for the general student population.

The aim of this study is to see the effects of two kinds of information concerning a trainee on the trainer's evaluation of the trainee's performance. The information varied in the study is the task competence of the trainee and his status relative to the trainer. Past research relevant to the variables to be investigated will be reviewed in two sections: the first, that dealing with competence of the trainee, and second, that bearing on the status relationship between the trainer and the trainee.

Lanzetta and Hannah (1969), by manipulating trainee competence, found that the reinforcement given a trainee by a trainer was strongly affected by the prior information given the trainer by the experimenter concerning the trainee's task competence. The competent trainee was given more negative reinforcement than the noncompetent trainee. The
performance of the trainee in both conditions was identical. The authors manipulated not only the prior task competence of the trainee but also the nature of the task. The task was described to subjects as being either easy or difficult. Subjects were allowed to perform on the task to insure that they would perceive the task as being either easy or difficult. Prior task competence was manipulated by telling the subjects the trainee had participated in an earlier part of the experiment and that the data already collected indicated that their trainee would do either well (i.e., that he was competent) or poorly (i.e., that he was noncompetent).

The results of this study indicated that trainers differed on the amount of punishment they administered for an incorrect response as a function of the task and competence manipulations, but that they did not differ in their responses to correct responses made by the trainee. That is, trainers generally gave the highest level of positive reinforcement for a correct response regardless of whether the task was easy or difficult and whether the trainee was competent or noncompetent. However, if the task was difficult trainers tended to give less severe negative reinforcement for incorrect responses than if the task was easy. Furthermore, competent trainees received more negative reinforcement for incorrect responses than did noncompetent trainees.

Lanzetta and Hannah (1969) argue that their findings support the theoretical position offered by Jones and Davis (1965). The essential argument is that an incorrect response by the trainee is seen by the trainer as having either an internal or external cause depending on whether the task is easy or difficult and whether the trainee is competent or noncompetent. An incorrect response given on the difficult task or
by a noncompetent trainee, it is suggested by the authors, was seen by
the trainer as having an external cause; that is, the trainee was not
responsible for his poor performance. However, if the trainee is
competent or the task is easy, then the trainee was seen to be respon-
sible for his poor performance and given the more severe negative rein-
forcement.

In summarizing their results, Lanzetta and Hannah (1969) point out
that the net effect of the reinforcing behavior of the trainers was to
give more differentiated rewards and punishments to the competent trainee
than to the noncompetent trainee. While all trainees had generally re-
ceived the maximum reward for a correct response, the competent trainee
received more pronounced punishment for an incorrect response than did
the noncompetent.

There is no research available on the effect of status differences
between trainers and trainees on trainers' evaluation of the performance
of the trainees. However, a study by Ring and Farina (1969), suggests
that other factors beyond situational factors and personal character-
istics of the trainee may affect the evaluation of the performance of
the trainee. These authors argue that certain relationships between
the trainer and trainee may constitute an important aspect of the eval-
uation of the trainee's performance.

Ring and Farina (1969) manipulated the "psychological similarity"
between the trainer and the trainee. Subjects, who were assigned the
role of the trainer, were led to believe that they fell into one of
three categories: emotionally stable, intermediate or unstable. All
subjects were given a limited form of the Rorschach test during the
first of two experimental sessions. At the beginning of the second they
received bogus feedback which indicated that they fell into one of the three categories. Subjects in the emotionally unstable conditions were informed that there was a high probability that they would need psychiatric help in the near future. Those in the emotionally intermediate condition were told that there was some probability that at some point in the future they would require psychiatric counseling. Subjects in the emotionally stable condition were told that they were "normal." The trainee in the Ring and Farina (1969) study was described as a former mental patient. Thus, it was expected that the trainers in the emotionally unstable condition would perceive themselves as being most similar to the trainee and the trainers in the emotionally stable condition least similar. The authors predicted that as psychological similarity between trainer and trainee increased that the reinforcing behavior of the trainer would become less punitive.

As predicted, the authors found that punitiveness did decrease as a function of their increasing psychological similarity manipulation. However, as the authors further point out, the operating factor in this experiment may not have been manipulation of psychological similarity but subjects' differential reactions to the psychological evaluation that they had received.

Ring and Farina (1969) speculate that similar results could have been obtained, irrespective of the characteristics of the trainee, if the actual effect of their manipulation had been to reduce the self-esteem and confidence of the subjects who received the emotionally unstable and intermediate feedback. They argue that if the self-esteem of those subjects had been lowered by the manipulation, it would have been reasonable to expect them to be less punitive regardless of whom
the trainee was.

Some tangential evidence exists to support the alternative explanation that trainers who had just received feedback which lowered their self-esteem would not punish anyone, regardless of the characteristics of the trainee. Darley and Aronson (1966) told subjects that they were to participate in an experiment in which they would receive shock. As the experiment was not quite ready to be run, subjects were told, they would have to wait. It was manipulated that they would choose to wait with either an accomplice who was slightly more afraid or another who was slightly less afraid than themselves. Darley and Aronson predicted that if the motivation of subjects in that situation was to reduce as much of the felt fear as possible that they would choose to wait with the accomplice who had indicated less fear. If subjects chose to wait with the less afraid accomplice it was expected that they would do so out of the desire to get information from the other person who was less afraid. This result was taken by Darley and Aronson to indicate that the primary motivation of the subjects about to undergo a stressful experience was one of affiliation not fear reduction.

The emotionally unstable and to a lesser degree the emotionally intermediate conditions of the Ring and Farina (1969) study may easily be interpreted as representing stressful experiences for the subjects. The subjects had just received information which would certainly have a great negative impact on their lives. Thus, to expect them to choose an affiliative response toward the only available person is not unreasonable. Subjects' motivation to affiliate would account for the decrease in punishment administered by subjects in the emotionally unstable condition; the result obtained by Ring and Farina.
Ring and Farina (1969) attempted to vary the psychological similarity between trainer and trainee. However, the alternative explanation that their manipulations may not have manipulated psychological similarity but resulted in a systematic change in subjects' self-esteem and thereby produced the obtained results may not be discarded as yet. Despite this lack of a convincing explanation for the results obtained by Ring and Farina (1969), their study does suggest that certain relationships between a trainer and a trainee do have an effect on the trainer's evaluation of the trainee's performance.

While the exact nature of the relationship between the trainer and the trainee in the Ring and Farina (1969) study remains unclear, the present author wishes to suggest a possible relationship, namely, status difference between trainer and trainee, which may have existed in their experiment. The predictions generated by this reinterpretation of the psychological similarity manipulation are identical to the ones they predict. However, it is suggested that a status difference reinterpretation of their phenomenon might bridge the Lanzetta and Hannah (1969) and Ring and Farina (1969) studies.

Within the context of the work of Goffman (1963) it may be said that Ring and Farina (1969) manipulated the social status of their trainer relative to that of the trainee. Goffman's observations indicate that the members of our society tend to devalue persons with a history of mental illness and to place them on a lower rung of social status than they would ordinarily occupy. In this sense the trainee in Ring and Farina's experiment should have been seen by the subjects as being of a low social status. The emotionally stable manipulation in their experiment may be seen to have reinforced the societal tendency within
subjects that they were of higher social status than the trainee. Or at least, telling subjects that they are normal but that the person with whom they are to interact has a history of mental illness should make salient the differences which exist between the trainer and the trainee. These differences, Goffman (1963) points out, are that a person with a history of mental illness is of lower worth and lower status.

The emotionally intermediate manipulation used by Ring and Farina may have left the subjects in doubt as to how they should react toward the trainee. Their standing within society was made questionable by the psychological evaluations they had received. They were normal as of the present but there was a chance that in the future they would have psychological difficulties requiring treatment. To the degree that the subjects felt that this was true they would have to adjust to an eventual lowering of their status within society.

The impact of the emotionally unstable manipulation would be much more immediate. In this condition subjects were told that they should avail themselves as soon as possible of the counseling facilities offered by the university as they were in immediate psychological danger. Ring and Farina's checks of their manipulations indicate that the subjects in this condition were upset by the evaluation they had received. Although no measures from the study are addressed to the question, it is not implausible to assume that part of what had upset them was the realization that if the results of the test proved valid that the stigma of mental illness would become attached to them. Thus, they were in immediate danger of losing status within the society.

Ring and Farina (1969) predicted that as psychological similarity between the trainer and trainee decreased, trainers would employ
more punishment against the trainee if he responded incorrectly. The prediction generated by the reinterpretation is that as the difference in status between the trainer and a lower status trainee increases, the trainer will employ greater punishment against the trainee for an incorrect response. Lerner and Simmons' (1966) finding that individuals will devalue those less fortunate than themselves supports this prediction.

It is suggested here that the Lanzetta and Hannah (1969) finding (greater negative reinforcement administered to the competent than the noncompetent trainee) will not be replicated when the trainee is of lower status than the trainer. In fact, it is predicted that a lower status-noncompetent trainee will be evaluated more negatively than a lower status-competent trainee. The present investigation attempts to create a situation in which the relationship between the status and competence variables may be tested. Specifically, this study is an attempt to show that limits exist to the pattern of trainer behavior found by Lanzetta and Hannah (1969).

The experimental situation in this study is one in which the trainee (i.e., the subject) evaluates the performance of the trainee. The study employs a 2 X 2 design in which two levels of trainee prior task competence (competence vs. noncompetent) and two levels of trainee status (higher vs. lower status relative to the trainer) are manipulated.

In order to manipulate status in the present investigation, the trainee is described to trainers as either a graduate student (higher status than the undergraduate trainer) or as a high school student (lower status than the trainer). This manipulation is employed here on the assumption that freshmen are aware of the academic hierarchy.
Furthermore, this particular manipulation was chosen because it reflects variation along one dimension, academic seniority. The task competence of the trainee is manipulated by telling subjects that the trainee's prior performance on similar tasks indicated that he should do well (competent) or poorly (incompetent).

The first prediction made here is that the lower status trainee will receive a more negative evaluation than will the higher status trainee. This prediction is consonant with the findings of Ring and Farina (1969), (i.e., that trainers administered greater punishment as a function of greater psychological dissimilarity) as reinterpreted here within the framework of Goffman's (1963) observations. Goffman observed the tendency within our culture for lower status individuals to be devalued. The tendency to devalue the lower status trainee will be seen in subjects' negative biasing of their evaluation. No such biasing is present in relation to the higher status trainee. Therefore, a higher evaluation is expected.

If in addition to being of lower status, the trainee is also non-competent the expectation is that his performance will be evaluated more negatively than if he were of lower status and competent. The underlying assumption for this prediction is that in the case of the noncompetent lower status trainee both the noncompetence and the lower status favors the trainee's bias to devaluate. This prediction is in direct contradiction with the prediction made by Lanzetta and Hannah (1969) that the competent trainee should be given more negative reinforcement than the noncompetent trainee.

The present author also expects trainers to attempt to explain the behavior of the trainee. However, the sufficient explanation (Jones and
Davis, 1965) for the trainee's incorrect responses is expected to be very different in the present situation from that postulated by Lanzetta and Hannah (1969). Where the trainee is of lower status the expectation is that subjects will see the noncompetence of the trainee as added justification for the cultural tendency to devalue him. In a sense, the noncompetent lower status trainee has no redeeming attributes.

It will be recalled that in the Lanzetta and Hannah (1969) study that the trainer and trainee were both students at the same college, indicating that they were of fairly similar status. As a result trainers, in giving reinforcement to the noncompetent trainee, could have reasoned that his status at the college indicated a general level of competence. His noncompetence on the task, then, would be seen as a minor point, not carrying much weight in the overall evaluation of the trainee.

It is expected that the trainee will be evaluated most positively when the trainee is of higher status and competence. In this condition the bias to favorably evaluate the higher status trainee will be supported by the information about his competence. The higher status, noncompetent trainee should be given an evaluation between that of the higher status, competent trainee and the lower status, competent trainee. In this condition the bias to favorably evaluate a higher status trainee will be opposed by the information that the trainee is noncompetent. However, the information that the trainee is noncompetent is not expected to be weighted as heavily as the information that the trainee is of higher status.

In summary, main effects of status and competence are expected on the measure of trainers' evaluation of the trainee's performance.
METHOD

Subjects

Eighty Ss, 48 females and 32 males, were drawn from the introductory psychology course at the University of Massachusetts at Amherst. Participation in the experiment resulted in extra credit toward Ss' grade. Ss were assigned to a particular condition in the order in which they signed up for the experiment. The four conditions were run sequentially. A check was made to insure that the sequential rotation of the conditions did not result in the same condition being run at the same time of each day or the same day of the week. The trainee did not exist. E provided S with the trainee's estimates.

Design

The design used in this experiment was also a two factor design with two levels of trainee status (higher vs. lower than the trainer in status) and two levels of trainee competence (competent vs. noncompetent). The characteristics of the trainee were manipulated through E's description of the trainee to the trainers.

Dependent Measures

The primary dependent measure used in this study was trainers' mean trial-by-trial evaluation of the trainee's performance. Trainers were told to provide feedback to the trainee on how well he had done on that trial. They did this by pressing one of 11 switches purportedly
connected to a series of 11 lights on the trainee's panel. The row of 11 switches was anchored at the ends by the labels "very good" and "very bad".

In order to determine how subjects had perceived the trainee, his performance and their own behavior toward the trainee, a questionnaire (Appendix 1) was administered at the end of the experimental session. This questionnaire also served as a check on the manipulations.

Apparatus

The apparatus utilized in the study consisted of two interconnected panels, one for E and the other for the Ss. The panels were in adjoining rooms. E's panel had two rows of 7 switches, 1 labeled "standard" and the other "pupil's response." In addition, the panel had a row of 11 lights from which E could read off trainers' response to the trainee's performance.

Ss' panel consisted of two columns of 7 lights and a row of 11 switches. The two columns were labeled respectively "standard" and "pupil's response." The row of switches was anchored at each end by the labels "very good" and "very bad."

E's room also had a tape recorder which E used in presenting the series of clicks which the trainee was to estimate. Ss heard the clicks through a speaker on their panel.

The Task

The task used in the present investigation is a modified version of the dot estimation task used in the conformity literature. The characteristics sought in choosing a task were as follows. The primary conditions which a task had to meet to be considered was that it could
be plausibly used in a teaching situation. Furthermore, it was considered desirable that the task be objectively vague enough to allow for manipulation of what a correct response was, yet appear subjectively realistic to subjects. This flexibility was desired so as to allow manipulations of not only trainee competence but also, in future studies, manipulations of trainers' perceptions of how they would do if they were the trainee.

The task chosen requires the trainee to estimate the number of clicks he hears. The sound is approximately equivalent to the sound of a light switch being turned on and off in a rapid but random pattern. This task is amenable to a convincing cover story; that is, subjects may be told that the purpose of the experiment is to determine how certain kinds of auditory discriminations are learned. In addition, the clicks may be recorded in such a manner that they appear to be countable and yet, because of the rapidity and highly variable rate in which they are presented, actually allow the experimenter a wide latitude in accepting an estimate as being either correct or incorrect. This is necessary if the experimenter is to be able to control the subjects' perception of the trainee's performance.

The task involving estimation of the number of clicks heard was also chosen because it allowed variation in the degree of incorrectness of the trainee's estimate. The results obtained by Lanzetta and Hannah (1969) indicated that trainers differed principally in their evaluations of the incorrect responses made by the trainee. The response of trainers toward a correct answer from the trainee was typically to give the trainee the highest amount of reward possible. In other words, trainers' responses to a correct answer of the trainee did not differ
as a function of the manipulations of task difficulty or the prior task competence of the trainee.

In order to maximize the probability that trainers would react differentially to the trainee's behavior as a function of the status and competence manipulations used in the preliminary study, it was decided to program the estimates of the trainee in such a manner that none of his estimates would be correct. If no correct estimates were to be included in the schedule of trainee's estimates, it became necessary to be able to vary the incorrect responses. If this was not done, the likelihood was that subjects would not accept the behavior of the trainee as realistic.

Procedure

On entering the laboratory Ss were told that they were participating in an on-going series of experiments on how certain kinds of discriminations were learned. The current experiment was described as an experiment intended to investigate how people learned to make auditory discriminations. Their role in the experiment was explained to be analogous to that of a teacher. They were to help the trainee learn the task as well as possible by providing him with feedback on his performance.

The apparatus and task were then described. Included in the description of the apparatus were statements indicating that in order to maintain the same procedure throughout the experiments Ss would not have an opportunity to meet him. It was explained S's panel, E's panel and the panel of the trainee were interconnected.

Following the description of the task the trainee was described to
Ss. Depending on which condition was being run at the time, the trainee was described as being: a competent graduate student, a noncompetent graduate student, a competent high school student or a noncompetent high school student.

Any questions Ss asked were answered by paraphrasing the relevant portions of the instructions. E then asked S to wait while E went across the hall, ostensibly to ask the trainee if he had any additional questions. The experiment was begun immediately after the return of E.

Ss heard 18 different 30-second recordings of clicks. Before each recorded segment of clicks was played, E turned on one of the lights in the column labeled "standard" on S's panel. This was to indicate that a new trial was about to begin and so S would know the correct answer. After the completion of each tape segment E briefly turned on one of the lights in the column labeled "pupil's response" on S's panel to indicate the trainee's estimate. The standard light remained on throughout the trial to provide S with a comparison for evaluating the performance of the trainee. S then pressed one of the switches on his panel to indicate to the trainee how well the trainee had done on that trial.

The tape recording of the clicks was recorded so that each segment of clicks was followed by a 15 second period of silence. This time period was sufficient for E to indicate the trainee's response, S to respond to the trainee and for E to establish the standard light for the next trial.

After completion of the 18 trials Ss were asked to fill out the postexperimental questionnaire. After handing them the questionnaire E excused himself to see to the trainee across the hall. E returned about three minutes later.
All Ss were then given a verbal debriefing which included a complete description of the deceptions and the purposes of the study. This information was also included in a written statement which each S received.

Instructions

The following is the text of the instructions memorized by E for presentation to Ss. Variations of the instructions due to different conditions are given in parentheses.

"Hi. Please come in and have a seat there in front of the panel."

After S was seated, E continued: "The experiment in which you are participating is one of a series of experiments in which we are attempting to find out how various classes of people learn to make certain kinds of discriminations. In this particular experiment we are attempting to see how graduate students (high school students) learn to make auditory discriminations."

S's role. "Your role in this experiment will be to act as the teacher in this learning situation. Your job, which will become clear when I explain this panel to you, will be to provide the graduate student (high school student) with feedback on how well he is learning the discrimination." To forestall questions from S why E did not provide the feedback himself, the following was added here. "The graduate students (high school students) who are participating in this experiment have all participated in the earlier experiments. Your participation in the experiment is necessary because if I were to provide the feedback all the time a pattern might become detectable to the graduate (high school) student across the various experiments. Since this is
undesirable we are using different teachers for each experiment."

The task. "The discrimination we are concerned with in this experiment is an auditory one. The graduate (high school) student will be asked to listen to a series of 18 short recordings of clicks and to estimate the number of clicks they have heard. Through the speaker you can see there on your panel you will also be able to hear the recordings. However, you will not have to count the clicks. I will provide you with the correct answer."

The apparatus. "Now, please look at the panel in front of you. Note the two columns of lights and the labels over each of them. At the beginning of each trial I will turn on one of these lights." E points at column labeled standard. "When the light comes on you will know two things; one, the next trial is about to begin, and two, the light indicates the correct answer for that trial. After the sound of the clicks stops you will see the graduate (high school) student's estimate in this column. By comparing which lights have come on in each of the columns you will be able to tell how well he has done. If the lights that come on are both on the same level, you should consider his response correct. However, if the lights are on different levels, his estimate is incorrect. How incorrect his estimate is is reflected by the difference in the levels of the two lights." E improvised a further explanation of which estimates were correct or incorrect to insure that each S understood. "You will then let the graduate (high school) student know how well he did by pressing one of these switches like this. As you can see one end of the row is labeled "very good" and the other "very bad". Your job will be to decide on the basis of your comparison of which lights have come on in the two columns which one of these
switches to push. You should press the switch firmly and for about 3 seconds to be sure that he does not miss the light on his panel. No, we are not using shock. He has a row of lights on his panel marked the same way your row of switches is marked."

The trainee. "I'd like to repeat that you will not meet the graduate (high school) student with whom you will be working. As I said, they have been told that they would participate in this experiment anonymously. Furthermore, the procedure used in this experiment must be the same as that used in all the experiments in the series. Since it is essential in some of the other experiments that the teacher and pupil not meet, we have decided to arrange the procedure so that they don't meet in any of the studies.

Your panel, my panel in the room on the other side of this wall and the pupil's panel across the hall are all interconnected. After I am finished explaining your job, I will go across the hall to make sure that everything is set. I'm sorry but this is the way the experiments have been set up and we cannot change the procedure."

Competence manipulation. "However, I can tell you what I know about him. As I said, he has participated in the earlier experiments in this series. As a result I have data on how he has done so far. This data indicates that he should do fairly well (poorly) on this discrimination. Unfortunately, I can't tell you more about him. I know him only as a number associated with some data."

"Are there any questions?"

If there were no questions or after any questions were answered with paraphrases of the appropriate sections of the instructions, E continued.
"O.K. Please wait quietly while I make sure that everything is all set across the hall." E then went across the hall, leaving the door to S's room ajar. S could hear E ask the (fictional) trainee if he was ready. E then returned, asked S "O.K?" and went into his room.

The experiment was begun immediately thereafter.
RESULTS

The results are reported as a function of three factors: competence and status of the trainee and sex of the trainer. While the data were being prepared for analysis it seemed likely that sex of the trainer had been a factor operating in the experiment. The results reported below bear out the supposition that sex of the trainer was a determinant of the trainer's behavior in the experiment.

Check on the manipulations

Two scores from the post-experimental questionnaire were taken as an indication of the success of the manipulations.

Ss were asked how capable they thought the trainee to be (Appendix 1, Item 1). This question was intended to see if Ss perceived the trainee as being capable or noncapable as a function of the competence manipulation. Ss' perceptions of the capability of the trainee did not vary as a function of the competence manipulation ($F = 0.34, df = 1/72$). The Ss's mean perceptions of the trainee's capability are presented in Table 1. The analysis of variance upon which this analysis is based is presented in Table 2.

A second score was used to determine whether Ss' perception of the status relationship between themselves and the trainee varied as a function of the status manipulation. For the status manipulation to have been considered successful the obtained results should have indicated that Ss perceived themselves as falling in an intermediate position be-
<table>
<thead>
<tr>
<th>Trainee</th>
<th>Higher Status</th>
<th>Lower Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Competent</td>
<td>Noncompetent</td>
</tr>
<tr>
<td>Male Trainer</td>
<td>5.00</td>
<td>5.50</td>
</tr>
<tr>
<td>Female Trainer</td>
<td>4.91</td>
<td>5.83</td>
</tr>
</tbody>
</table>

Note: 1=very capable
       9=not very capable
### TABLE 2

Summary of the Analysis of Variance of Trainers' Ratings of Trainee's Capability

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
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<tbody>
<tr>
<td>Status</td>
<td>(A) 1</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>(B) 1</td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>(C) 1</td>
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<td></td>
</tr>
<tr>
<td>A x B</td>
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<td>4.07</td>
<td>2.08</td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>1.96</td>
<td></td>
</tr>
</tbody>
</table>
tween the graduate student and the high school student on this measure. The score used was derived from the difference between where Ss placed themselves and where they placed the trainee on a scale of social status (Appendix 1, Items 6a,6b). The result of the analysis of variance for this derived score confirmed that Ss perceived themselves of intermediate status between the graduate student and the high school student. \( F = 8.56, \text{df} = 1/72, p < .01 \). The means for these scores are presented in Table 3. The status manipulation did not interact with either the competence manipulation or sex of the trainer (see Table 4).

The scores of Ss perceptions of their own status and that of the trainee were also analysed separately. Individually, these scores did not differ as a function of the manipulations. As expected, Ss did not differentially perceive their own status as a function of the manipulations \( F = 2.27, \text{df} = 1/72 \). Ss' differential perceptions of the status of the trainee as a function of the status manipulation almost achieved significance \( F = 3.74, \text{df} = 1/72, p < .07 \). The means for these two measures are contained in Table 5. Table 6 summarizes the analysis of variance results obtained on these two measures.

An inspection of the data on these two measures makes it apparent that while most Ss perceived the desired status relationship between themselves and the trainee, they varied considerably in where they placed themselves and the trainee on the two 9-point scales. By taking the difference of the scores Ss attributed to themselves and to the trainee on the status scales this variability was removed. Thus, two Ss may have placed themselves toward opposite ends of the scale (high vs. low status). If they each placed the trainee one point higher on the scale than where they placed themselves they were both assigned the same
TABLE 3

Mean Differences Between Trainers' Ratings of Own Status and Trainee Status

<table>
<thead>
<tr>
<th>Trainee</th>
<th>Higher Status</th>
<th>Lower Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Competent</td>
<td>Noncompetent</td>
</tr>
<tr>
<td>Male Trainer</td>
<td>-0.13</td>
<td>-0.37</td>
</tr>
<tr>
<td>Female Trainer</td>
<td>-0.18</td>
<td>-0.17</td>
</tr>
</tbody>
</table>

Note: -9.00 = Trainee is of lowest relative status
      0.00 = Trainee is of equal status
      9.00 = Trainee is of highest relative status
### TABLE 4

Summary of Analysis of Variance of Trainers' Ratings of Status Difference

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>12.68</td>
<td>8.56 **</td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>.30</td>
<td></td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>2.70</td>
<td>1.82</td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>1.48</td>
<td></td>
</tr>
</tbody>
</table>

** \( p < .01 \)
TABLE 5

Trainers' Mean Ratings of Own and Trainee's Status

<table>
<thead>
<tr>
<th></th>
<th>Higher Status</th>
<th>Lower Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Competent</td>
<td>Noncompetent</td>
</tr>
<tr>
<td><strong>Male Trainer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own</td>
<td>4.38</td>
<td>4.88</td>
</tr>
<tr>
<td>Trainee</td>
<td>4.25</td>
<td>4.50</td>
</tr>
<tr>
<td><strong>Female Trainer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own</td>
<td>4.45</td>
<td>4.83</td>
</tr>
<tr>
<td>Trainee</td>
<td>4.27</td>
<td>4.67</td>
</tr>
</tbody>
</table>

Note: 1 = high status
6 = low status
TABLE 6

Summary of Analyses of Variance of Trainers' Ratings of Own and Trainee's Status

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Own Status</th>
<th></th>
<th></th>
<th>Trainee's Status</th>
<th></th>
<th></th>
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</thead>
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<td></td>
<td></td>
<td>MS</td>
<td>F</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>2.27</td>
<td>1.98</td>
<td></td>
<td>4.29</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>.60</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>.47</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>1.75</td>
<td>1.52</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>.92</td>
<td>.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>.10</td>
<td>1.80</td>
<td>1.57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>.05</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>1.15</td>
<td>1.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
difference score.

**Primary dependent measure**

It was predicted that Ss would differentially evaluate the trainee on the basis of the competence and status manipulations. Ss' mean feedback to the trainee on each trial, was taken to reflect Ss' evaluation of the trainee's performance. The possible range of this measure was from 1 (very good) to 11 (very bad). No main effects were obtained in the analysis of variance for this measure. The analysis yielded only one significant result: competence of the trainee interacted with the sex of the trainer ($F = 6.52, df = 1/72, p < .03$). The summary of this analysis of variance is presented in Table 7.

Figure 1 is a graphic representation of the Trainee's Competence X Trainer's Sex interaction collapsed over the status variable. The t-test between male and female evaluations of the competent trainee indicates that the competent trainee was not differentially evaluated by males and females ($t = 1.14, df = 38$). Male Ss, however, typically evaluated the noncompetent trainee more favorably than did the female Ss ($t = 2.56, df = 38, p < .02$). The means upon which the t-tests are based may be found in Table 8.

**Questionnaire data**

In addition to serving as a check on the manipulations, the questionnaire was designed to tap other perceptions of the trainers which might serve to further explain the results obtained on the primary measure. In view of the mixed results obtained on the checks of the manipulations these additional measures may provide an insight into how the trainers perceived the experiment.
TABLE 7

Summary of Analysis of Variance of Trainers' Evaluation of the Trainee

<table>
<thead>
<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>90.13</td>
<td></td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>258.13</td>
<td>2.12</td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>156.41</td>
<td>1.28</td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>795.67</td>
<td>6.52*</td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>122.00</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
Fig. 1. Trainers' mean evaluation of the trainee as a function of trainers' sex and trainee's competence (Lower score = more positive evaluation).
### TABLE 8

Trainers' Mean Evaluation of the Trainee

<table>
<thead>
<tr>
<th></th>
<th>Higher Status</th>
<th>Lower Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Competent</td>
<td>Noncompetent</td>
</tr>
<tr>
<td>Male Trainer</td>
<td>7.03</td>
<td>6.90</td>
</tr>
<tr>
<td>Female Trainer</td>
<td>6.64</td>
<td>7.20</td>
</tr>
</tbody>
</table>

**Note:** 1 = very good
           11 = very bad
Trainee's difficulty. The questionnaire revealed that Ss believed that the higher status trainee (i.e., the graduate student) had more difficulty in learning the task (Appendix 1, Item 2) than did the lower status high school student ($F = 7.86$, $df = 1/72$, $p < .01$). Table 9, a summary of the analysis of variance for this item, indicated that the main effect of status was the only significant result of this analysis.

The means for this item as well as those for the following items are presented in Table 10.

Trainee's performance. When asked how well their trainee had performed (Appendix 1, Item 4) male and female Ss again disagreed. The analysis of variance for this item shows a significant Trainee's Status X Trainers' Sex interaction ($F = 4.19$, $df = 1/72$, $p < .05$). Female trainers believed that the higher status trainee performed better than the lower status trainee while males held the opposite belief (see Figure 2). The analysis of variance for this item is summarized in Table 11.

Predictability of the trainee. The performance of the competent trainee was seen to be less predictable (Appendix 1, Item 3) than the performance of the noncompetent trainee ($F = 15.97$, $df = 1.72$, $p < .01$). Furthermore, sex of the trainer interacted significantly with competence of the trainee ($F = 4.42$, $df = 1/72$, $p < .05$). An examination of Figure 3 suggests that this interaction was caused largely by the large difference in female trainers' ratings of the competent and noncompetent trainee on the trainee's predictability. This conclusion is justified in that females did rate the competent trainee lower than the noncompetent trainee on predictability ($t = 5.86$, $df = 46$, $p < .001$) while the male trainers did not differ in their ratings of the competent and non-
### TABLE 9

Summary of Analysis of Variance of Trainers' Mean Rating of Trainee's Difficulty

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>19.68</td>
<td>7.86 *</td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>4.18</td>
<td>1.67</td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>5.81</td>
<td>2.32</td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>2.30</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>2.50</td>
<td></td>
</tr>
</tbody>
</table>

**p < .01**
### TABLE 10

Trainers' Mean Ratings on Questionnaire Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Trainer</th>
<th>Higher Status Competent</th>
<th>Higher Status Noncompetent</th>
<th>Lower Status Competent</th>
<th>Lower Status Noncompetent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainee's difficulty</td>
<td>Male</td>
<td>3.63</td>
<td>2.88</td>
<td>4.38</td>
<td>5.22</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.91</td>
<td>3.67</td>
<td>4.25</td>
<td>4.25</td>
</tr>
<tr>
<td>Trainee's performance</td>
<td>Male</td>
<td>5.88</td>
<td>6.13</td>
<td>5.25</td>
<td>4.88</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>5.09</td>
<td>5.67</td>
<td>5.92</td>
<td>6.33</td>
</tr>
<tr>
<td>Trainee's predictability</td>
<td>Male</td>
<td>6.25</td>
<td>4.50</td>
<td>6.00</td>
<td>5.88</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>7.00</td>
<td>3.58</td>
<td>6.92</td>
<td>4.00</td>
</tr>
<tr>
<td>Reward giving by trainer</td>
<td>Male</td>
<td>5.38</td>
<td>4.75</td>
<td>5.13</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>5.18</td>
<td>6.17</td>
<td>5.83</td>
<td>5.75</td>
</tr>
<tr>
<td>Punish. giving by trainer</td>
<td>Male</td>
<td>5.38</td>
<td>6.63</td>
<td>5.63</td>
<td>6.88</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>5.55</td>
<td>5.00</td>
<td>6.42</td>
<td>4.00</td>
</tr>
<tr>
<td>Similarity</td>
<td>Male</td>
<td>4.63</td>
<td>5.00</td>
<td>4.75</td>
<td>5.86</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>2.64</td>
<td>3.58</td>
<td>4.75</td>
<td>4.08</td>
</tr>
</tbody>
</table>

Note: 1 = greater amount of quality; 9 = lesser amount of quality
Fig. 2. Trainers' mean ratings of trainee's performance as a function of trainers' sex and trainee's status. (Lower score = more positive rating).
TABLE 11

Summary of Analysis of Variance of Trainers' Mean Rating of Trainee's Predictability

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>1.61</td>
<td></td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>75.05</td>
<td>15.97 **</td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>1.43</td>
<td></td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>20.75</td>
<td>4.42 *</td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>2.44</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>4.70</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
** p < .01
Fig. 3. Trainers mean ratings of trainee's predictability as a function of trainers' sex and trainee's competence. (Lower score = more positive rating).
competent trainee on this measure ($t = 1.16, df = 30$).

The analysis of variance on trainers' ratings of trainee's predictability is summarized in Table 12.

**Trainers' behavior.** Male and female trainers also differed in their perceptions of their behavior toward the trainee. These differences, it will be shown in this section, largely reflect differences in their behavior as measured by the primary measure. The results obtained on the questionnaire items asking how rewarding (Appendix 1, Item 5a) and how punitive (Appendix 1, Item 5b) trainers felt they had been in evaluating the performance of the trainee indicated that Ss were able to accurately rate their own behavior.

When asked to rate how punitive Ss thought themselves to be toward the noncompetent trainee, female self-ratings indicated greater punitiveness than did the ratings of males ($t = 4.35, df = 46, p < .001$). The primary measure indicated that females evaluated the performance of the noncompetent trainee more negatively than did the males.

The analysis of variance from which the above interaction is taken is reported in Table 13. A graphic representation of the interaction is presented in Figure 4.

**The Trainers' Sex X Trainee's Competence interaction** for the item asking Ss how rewarding their behavior toward the trainee had been was not significant ($F = 2.95, df = 1/72, p < .10$). However, the trends within this interaction closely approximate the pattern obtained in the interaction between trainers' sex and trainee's competence on the primary measure. Again on this measure, as on the primary measure and the measure of trainers' ratings of their punitiveness, no differences were obtained between male and female trainers in their ratings of how re-
### TABLE 12

Summary of Analysis of Variance of Trainers' Mean Ratings of Trainee's Performance

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>2.16</td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>2.21</td>
<td></td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>1.90</td>
<td></td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>10.03</td>
<td>4.19*</td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>3.04</td>
<td>1.27</td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>2.40</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05*
## TABLE 13

Summary of Analysis of Variance of Trainers' Mean Ratings of their Punishment Giving

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>.26</td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>14.98</td>
<td>3.69</td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>4.18</td>
<td>1.03</td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>35.86</td>
<td>8.84 *</td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>4.18</td>
<td>1.03</td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>4.06</td>
<td></td>
</tr>
</tbody>
</table>

**p < .01**

* indicates significance at the .01 level.
Fig. 4. Trainers' mean ratings of own punitiveness toward the trainee as a function of trainers' sex and trainee's competence. (Lower score = more positive rating).
warding they were toward the trainee ($t = 0.50$, $df = 38$). However, male ratings of how rewarding they were toward the noncompetent trainee were higher than the ratings of female trainers ($t = 2.69$, $df = 38$, $p < .02$). This finding is again consistent with the findings on the measures of evaluation and punitiveness in that males evaluated the performance of noncompetent trainees more positively than did females. Also, males considered their behavior toward the noncompetent trainee less punitive than did the females.

The only finding with regard to this item that is not also reflected on the primary measure and on trainers' perceptions of how punitive they had been toward the trainee was a main effect of sex obtained on this item. Across all other variables males considered themselves to be more rewarding toward the trainee than did the females ($F = 5.71$, $df = 1/72$, $p < .05$).

Table 14 and Figure 5 reflect the analysis of variance performed on trainers' ratings of how rewarding they felt they had been toward the trainee.

**Similarity.** The item asking Ss how similar they felt toward the trainee (Appendix 1, Item 7) yielded a surprising result. Female Ss assigned themselves a higher degree of similarity to the trainee, who had always been referred to by $E$ as a male, than did the male Ss ($F = 4.99$, $df = 1/72$, $p < .05$). The variables of status and competence did not have an effect on this rating (see Table 15).
TABLE 14

Summary of Analysis of Variance of Trainers' Mean Ratings of their Reward Giving

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
<td>1</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>16.28</td>
<td>5.71*</td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>2.95</td>
<td>1.03</td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>1.82</td>
<td></td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>8.43</td>
<td>2.95</td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>2.85</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
Fig. 5. Trainers' mean ratings of own rewarding behavior toward the trainee as a function of trainers' sex and trainee's competence. (Lower score = more positive rating).
## TABLE 15

Summary of Analysis of Variance of Trainers' Mean Ratings of Similarity

<table>
<thead>
<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status (A)</td>
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<td>4.90</td>
<td>1.57</td>
</tr>
<tr>
<td>Competence (B)</td>
<td>1</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Sex (C)</td>
<td>1</td>
<td>15.59</td>
<td>4.99 *</td>
</tr>
<tr>
<td>A x B</td>
<td>1</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>A x C</td>
<td>1</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>B x C</td>
<td>1</td>
<td>8.26</td>
<td>2.64</td>
</tr>
<tr>
<td>A x B x C</td>
<td>1</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>72</td>
<td>3.12</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$
DISCUSSION

The results obtained in the present investigation were not the ones which had been predicted. The primary predictions offered were that the higher status trainee's performance would be evaluated more positively than the performance of the lower status trainee. Furthermore, it was expected that the competent lower status trainee's performance would be evaluated more positively than that of the noncompetent lower status trainee. The obtained effect of trainers' sex on the evaluative behavior of trainers was not expected.

Two items on the questionnaire were included as indices of how successful the manipulations were. The results obtained from the analyses of these two items provide only partial support that the manipulations were perceived by subjects as the manipulations were intended.

Subjects did perceive their own social status being intermediate, with the graduate student being of higher status and the high school student of lower status than themselves. The analysis of variance performed on the derived status scores indicated a strongly significant main effect for status. However, inspection of Table 6 indicates that although subjects fairly consistently perceived a difference in status between themselves and the trainee the magnitude of this difference was very small. The range of the mean difference in status scores across all conditions was only 1.45 scale points. The maximum possible range for this score was 18 scale points.
In the Introduction it was argued that trainers' evaluation of the trainee's performance would vary as a function of the difference in status between the trainer and the trainee. The primary measure, trainers' mean evaluation of the trainee's performance, did not show a difference in trainers' evaluations as a function of the status manipulation. In the present experiment the absence of a significant finding on that measure in relation to the status factor may have been due to the small difference trainers perceived between their own status and that of the trainee. The differences in status produced by the manipulations used here may not have been great enough to cause a difference in trainers' evaluations of the higher and lower status trainees.

The reinterpretation of the Ring and Farina (1969) study supports the notion that a small difference in status may not produce a difference in trainers' evaluations. In connection with that study it was hypothesized that trainers' evaluation of the lower status trainee would become more negative as a function of the increasing difference in status between the trainer and the trainee. As the obtained ratings of status difference between the trainer and the lower status trainee in the present study was very small, the negative results obtained on the primary measure may not yet be considered to be a rejection of the hypothesis.

The lack of confirmation that the competence manipulation was successful makes it difficult to interpret the significant result obtained on the primary measure, trainers' mean trial-by-trial evaluation of the trainee's performance. The significant finding on this measure was that females evaluated the performance of the noncompetent trainee more negatively than did males. The status of the trainee did not significantly affect trainers' trial-by-trial evaluation of the trainee.
The item on the questionnaire asking subjects to rate the trainee on capability (Appendix 1, Item 1) was intended as a check of the competence manipulation. No significant results were obtained from the analysis of variance for that item. Two possible explanations for the absence of any significant findings on that item suggest themselves to the author. The first is that the manipulation was not successful. The second is that the item used to verify the success of the manipulation was inadequate for the purposes it was intended to serve.

The item asked subjects how capable they believed the trainee to be. The item did not ask how capably the trainee had performed on the task. Instead, it asked how capable he was without referring to the task. Thus, subjects may have interpreted the item as asking for a general judgement of the trainee's capability. If this were true, it would be reasonable to say that the capability shown by the trainee on the task accounts for only a fraction of the variance of trainee's general capability. Unfortunately, no reasonable test of this interpretation exists in the data.

The competence manipulation used in this experiment appears to be very similar to the competence manipulation used by Lanzetta and Hannah (1969). In that experiment E told subjects that several of the sophomore classes had been tested for their ability to do the kind of task used in the experiment (Lanzetta and Hannah, 1969, p. 248). E then looked at a clipboard containing a list of names and told the subject that his trainee had scored very high (or, low) on the previous test and that as a result he should have an easy (or, hard) time with the task.

The instructions used in the present experiment varied the prior task competence of the trainee by indicating that the trainee had participated in similar studies designed to determine how other discriminations
were learned. The major difference in the two manipulations is that in the present investigation the trainer was told that the trainee would do well or poorly. In retrospect, these terms appear to reflect a harsher evaluation of the trainee's past performance than the terms easy and hard used by Lanzetta and Hannah (1969). The consequence of the use of the terms well and poorly may have been to make the manipulation too transparent. However, no subject indicated such a sentiment to E, either on the questionnaire or verbally.

A further difficulty in interpreting the Trainee's Competence X Trainers' Sex interaction obtained on the primary measure lies in the nature of the design used. This difficulty would be present even if the manipulations had been completely verified. The interaction found on this measure indicates that the design used was an incomplete design.

As has been stated, no difference was expected in the evaluative behavior of male and female trainers. Consequently, no attempt was made to vary the sex of the trainee. The trainee was always referred to as a male. E was also male. Thus, even if an attempt could legitimately be made to explain the results obtained on the primary measure, they would of necessity be very tenuous. The design used here would not allow the resolution of the question whether the difference obtained was a function of the sex of the trainer and sex of the trainee. In other words, from the present design it is impossible to determine whether the two sexes evaluate the performance of a trainee differently, regardless of the sex of the trainee, or whether both sexes evaluate the performance of a like-sex trainee differently than that of an opposite-sex trainee. Additionally, the author is not aware of a possible theoretical stance which could be assumed to explain such sex effects.
It is interesting to note that the pattern of evaluative behavior observed for male trainers in this experiment appears very similar to the pattern observed by Lanzetta and Hannah (1969). In both experiments male trainers evaluated the performance of the noncompetent trainee more favorably than that of the competent trainee. This similarity of findings suggests in the instances where the trainer is male that the competence manipulation was successful. The different pattern of evaluative behavior observed for female trainers remains problematic. Trainers' ratings of the trainee's performance and degree of difficulty he encountered further complicate the comparison of male and female trainers' behavior since they indicate that male and female trainers perceived the nature of the task differently. The two items reflecting this difference are discussed below.

In addition to these two items one other item from the questionnaire yielded results which may be discussed. The remaining items relating to trainers' ratings of the predictability of the trainee and to trainers' ratings of their own behavior are omitted from the discussion. The significant results obtained on these measures all involve the competence manipulation. As the nature of that manipulation in this experiment is unclear, no explanation of those results may be given.

When trainers were asked how much difficulty the trainee had in learning the task (Appendix 1, Item 2) they indicated the belief that the higher status trainee had more difficulty than the lower status trainee. It should be remembered that the performance of the trainee was held constant across all conditions of the experiment.

One possible explanation for this interesting result is that subjects expected the graduate student to have less difficulty on the task
than the high school student. Such an expectation may be the result of subjects' feeling that the graduate student, having already demonstrated a greater general learning competence by having attained graduate student status, should be able to perform well on any learning task.

In a sense, then, the result obtained from the analysis of this item suggests that the status manipulation used in this experiment was at least partially confounded with competence. Theoretically, one does not attain the status of a graduate student without a demonstration of some competence in learning situations.

Subjects' ratings of how well they thought the trainee had done (Appendix 1, Item 4) in learning the task reveal a curious interaction. Males believed that the lower status trainee had done better than the higher status trainee. Females, however, indicated the opposite belief, that is, the higher status trainee was seen to have done better than the lower status trainee.

This interaction is curious in that it seems to be in partial contradiction to the finding obtained on the item asking subjects how much difficulty the trainee had. All subjects felt that the higher status trainee had greater difficulty on the task than did the lower status trainee. Males further indicated that that higher status trainee did more poorly than the lower status trainee. Females, however, believed that the higher status trainee did better than the lower status trainee.

The results obtained from these two measures suggest that females see a positive relationship between the difficulty the trainee had and how well he did. A correlational analysis of these two items confirms the positive relationship \((r = .45, df = 22, p < .05)\) indicating that if a female subject rated the trainee as having great difficulty, she
was also likely to rate him as having done well. The corresponding correlation for male subjects was not significant \( r = -.29, \text{df} = 14 \). However, the direction of the correlation is consistent with the pattern suggested by a comparison of the results obtained from the analyses of variance for the two items. The trend suggested by these analyses is that males thought the trainee who had little difficulty did better than the trainee who had much difficulty. However, the trend is not a significant one.

The obtained relationship between female trainers' ratings of how well a trainee did and the amount of difficulty he encountered is an interesting relationship. Trainers had no indication of the trainee's behavior during the experiment with the exception of seeing his estimate reflected as a light on his panel. Thus, they had no information beyond the trainee's performance upon which to base any judgement concerning the degree of effort or the amount of difficulty the trainee may have had.

In the absence of any such information, the expected relationship between trainers' ratings of how well the trainee had done and the amount of difficulty he had encountered would be a negative one, not a positive one. Consider an observer watching the performance of an actor on a task in a situation where the observer is unable to determine how much effort the actor is expending to produce the performance. If for some reason the observer rates the performance of the trainee highly, he should also rate him as having had little difficulty. In the absence of any other information the two attributions are usually linked in that fashion.

If the observer knew or believed he knew that the task was a simple one then the linkage between the two attributions would be even more probable. If an actor performs well on an easy task the reasonable attri-
bution an observer would make of the amount of difficulty the actor had would be that he had very little difficulty. However, if the actor performed poorly on an easy task, the corresponding attribution on the amount of difficulty he had encountered would be that he had had much difficulty.

Thus, if the female trainers perceived the task to be a difficult one and that the higher status trainee had difficulty on the task, it would have been reasonable for them to also say that he had done fairly well. This would be true for no other reason than high effort, indicated by the difficulty this trainee had, in a difficult situation should be rewarded. Additionally, it should be mentioned again that subjects had only an approximate measurement of the trainee's performance. While they were told on each trial which response was to be considered correct, they were not given a standard for evaluating the overall performance of the trainee.

A similar analysis of ratings made by male subjects on these two scales suggests the existence of a trend that males considered the task easier than did female subjects. However, this trend is not significant.

No item was included on the questionnaire to test whether subjects perceived the task to be easy or difficult. Thus, no direct test exists of whether female subjects actually did perceive the task as a difficult one. However, the assumption that they did appears to be a reasonable one. Moreover, the traditional socialization pattern found in this society is one which encourages the female sex to perceive anything mechanical as difficult with which to work. The predisposition to believe that anything mechanical is difficult for the female sex to
grasp may have been operating in the present investigation. The sound of
the clicks was mechanical. The operations required of subjects, the
evaluation of patterns between lights and the pressing of switches may
also have been interpreted as being mechanical.

One item from the questionnaire remains to be discussed. On the
item (Appendix 1, Item 7) asking subjects how similar they believed
themselves to be to the trainee female subjects indicated that they
believed themselves to be more similar to the male trainee than did male
subjects. An explanation for this finding has not been found by the
author, and furthermore, no explanation even suggests itself.

Theoretical Implications

Only one finding obtained in the present investigation related
directly to the theoretical rationale offered in the Introduction. The
finding of no difference on the primary measure, trainers' mean evaluation
of the trainee's performance, as a function of the status manipulation
was tentively interpreted in light of the small but significant differences obtained on trainers' ratings of the difference in status between
themselves and the trainee. In view of the prediction made that the effect of status difference on trainers' evaluation of the trainee would
increase as a function of the increase in the difference in status the
finding of no difference on the primary measure related to the status
variable was not seen as a basis for rejection of the hypothesis. As
the manipulation created only a small difference in status between the
trainer and the trainee, no large difference in trainers' evaluation of
the trainee as a function of the status variable could be expected.

Of course, this finding does not constitute verification of the
hypothesis. It has not yet been shown that a large difference in status
between trainer and trainee produces a difference in trainers' evaluation
of the trainee. This remains to be done.

The absence of confirmation of the competence manipulation made the analysis of any measure which produced a significant difference as a function of the competence variable not possible. This problem is discussed more fully in relation to the methodological implications the present investigation has for further research employing a similar design.

**Methodological Implications**

A constant finding obtained in the present investigation was that sex of the trainer appeared to interact with the other variables on almost every measure. The discussion of the questionnaire items dealing with trainers' ratings of the amount of difficulty the trainee had encountered and how well the trainee had done suggests that the sex differences obtained may have been a function of how male and female trainers saw the task.

A future investigation employing the variables of status and competence should control for possible differences in which males and females view the task. In the present study it appears that females saw the task to be a more difficult one than did males. As Lanzetta and Hannah (1969) indicate, differences in perception on the part of the trainers concerning the task may produce differences in trainers' evaluation of the trainee's performance.

The manipulation of trainee's prior task competence is another weak point in the present investigation. From the data obtained here it is difficult to say with precision whether the manipulation was unsuccessful or whether the instrument intended to verify the success of the manipulation was inadequate. The manipulation used by Lanzetta and Hannah (1969) appears to have been very successful. Thus, a future study may be wise in modeling the competence manipulation more closely upon their manipulation.
REFERENCES


Appendix 1

Questionnaire

1. How capable do you think your pupil is?

: (1) ____________ : ____________ : ____________ : ____________ : (9):
very capable not at all capable

2. How much difficulty did he have in learning the task?

: (1) ____________ : ____________ : ____________ : ____________ : (9):
very much little

3. From what you were told about him, how predictable did you find his performance?

: (1) ____________ : ____________ : ____________ : ____________ : (9):
very predictable unpredictable

4. How well did your pupil do?

: (1) ____________ : ____________ : ____________ : ____________ : (9):
very well poorly

5. Please rate your responses to the pupil on the following scales.

a. : (1) ____________ : ____________ : ____________ : ____________ : (9):
rewarding not at all rewarding

b. : (1) ____________ : ____________ : ____________ : ____________ : (9):
punishing not at all punishing

6. Please place yourself and your pupil on the scales below.

: (1) ____________ : ____________ : ____________ : ____________ : (9):
high status low status

PUPIL

: (1) ____________ : ____________ : ____________ : ____________ : (9):
high status low status
7. If you were to meet your pupil, how similar to you do you think he would be?

\[(1): \quad \vdots \vdots \vdots \vdots \vdots \vdots \vdots : (9): \quad \text{very}
\text{very}
\text{similar}
\text{dissimilar}\]

8. In your own words, please describe your pupil's performance. Did he do well or poorly? How do you explain his behavior?

9. How did you respond to him?

10. Please describe the study and its purposes.