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A Study of Grade Expectation  
versus Actual Performance  
on Examinations

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Reading Head: Expectancy vs. Actuality  
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Abstract

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**Gretchen Ann Eagen**

**Running Head: Expectancy vs Actuality**

Abstract

Several studies have examined level of expectation. However, much attention has been concentrated in the area of general success and failure, and relatively few studies have focused on actual grade prediction. It has been demonstrated that various independent factors influence a person's expectancy level (e.g., sex, past performance). In the present study, six psychology classes at Lycoming College were used in a grade expectancy study. Subjects were asked to estimate their expected grade on exams in various points of the semester. In addition, other pertinent information was gathered such as the academic status of the student, which helped to define the relationship between various independent variables and grade prediction. Other variables included type of exam (e.g., essay, multiple choice), predictions across several exams, and types of psychology courses. The experimental questions helped to determine how accurately people could predict their performance on examinations and what variables influenced grade prediction.

A Study of Grade Expectation versus  
Actual Performance on Examinations

The transition from high school to college can be a difficult experience for many students; aside from the personal adjustments of leaving home and living with large numbers of peers, the academic pressures can also increase substantially. While in high school, students compete against the entire population completing the typical twelve years of secondary education. They no longer do this in college, but must compete against those students who had the motivation to continue their education and who were chosen on the basis of their academic and intellectual accomplishments. Many students who performed relatively well in high school suddenly find that they do not do as well against the more select group. It is often discovered that entering freshmen have an unrealistic expectation of college academics, and the results of their first few exams are disappointing (Deese and Deese, 1981). One would anticipate that most students would learn to adjust to the new environment with time and become aware of the study habits and expectations so that they will know how well they will perform. On the other hand, almost any faculty member could give several examples of students who go through their entire

college career with unrealistic expectations of how well they compete at the college level. As a result they may not live up to their expectations and often blame the exams or professors, although sometimes they blame themselves or develop low self images.

Since expectations are important components of our lives, they have long been an interest to psychologists. Many aspects of people's expectations of performance have been studied. Sometimes expectations are based on previous performance, and other times it may be based on the performance of others. Most often it is a combination of the two. Psychologists have built an entire literature within the field of social psychology on this topic. Expectancy theory, level of aspiration, attribution theory, and social comparison theory are all systems of explanation used by social psychologists to study this issue.

Expectation is a fairly well developed theoretical concept. It refers to an act of forecasts, a process of looking forward to something that is likely to happen. At one time or another everyone consciously or unconsciously anticipates something. It may be as trivial as what one expects to eat the next day or more importantly, whom one expects to marry. Although expectation is quite common among most people, it varies in degree from person to person due to the influence of different factors such as sex, Grade Point Average, and past performance. Since it

is a common state of mind and contains a great deal of variety, people have studied expectancy theory. One main area has been a focus on performance. They have tested individuals' expectations and predictions of such things as success and failure (Smolen (1978), Irfani (1980), Inagi (1978), Kutz, Jackson and Reuben (1978)). Many studies have dealt with teachers', friends', parents', and audiences' expectations of the performance of others. But surprisingly few studies have been directed at studying student academic expectations.

The purpose of this study is not designed to extend expectancy theory, at least not directly. Rather, its focus is an area of expectation that may be of particular interest and concern to education and people involved in the educational process. How well do students perform on a day to day basis? Obviously, this is of great importance to the individual student. Someone who consistently feels he has done well based upon the amount of study time and apparent understanding of the material is bound to be disappointed by test results which do not correspond to those expectations. Such students seek many explanations to account for this, including the possibility that the test was unfair, others cheated, or he or she did not study enough. According to faculty perspectives, it is just as painful for them to watch a student who consistently does poorer than he anticipated. On the other hand, students who do better

than they anticipated may think the exam was too easy, they have talent, or they were just plain luck. For these reasons it is obvious that the relationship between expected and actual performance is an important issue for both students and faculty.

The development of expectation is influenced by various factors which help to determine what level a person will attain. One such factor is self evaluation. Self evaluation is a measurement of how an individual views himself, which includes his attitudes towards his goals, values, abilities, and personal worth. An individual's self concept is said to be one of the most crucial parts of his personality. The pattern of characteristics and ways of behavior account for an individual's unique adjustments to his total behavior. It includes major traits, interests, values, attitudes, self image, abilities, behavior patterns, and emotional patterns.<sup>1</sup> The basis for a healthy adjustment is a realistic self evaluation and full measure of self acceptance. For instance, an individual with a consistent systematized conception of his ideals, goals, and possibilities gives him a sense of personal identity and development of his own unique life style. However, if he lacks self confidence and sets unrealistic goals for himself, he is likely to develop feelings of inferiority which causes him to either avoid competition or to overcompensate by attempting to prove his superiority to others.<sup>2</sup> Therefore self evaluation is a major determinant of a person's attitudes and expectations. But it too can be affected by personality.



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For instance, a study conducted by Smolen (1978) found that many depressed psychiatric inpatients have a lower self evaluation of their performance than the nondepressed patients.

Through a number of studies it has been demonstrated that a person's expectations of his success and failure are determined by previous attitudes and actual performance. Many such studies have focused on the area of academic. Irfani (1980) found that students' personality and actual performance affect the view of themselves as being academically successful or unsuccessful. Although this study did not specify how these factors, personality and performance, affect his or her view, a study conducted by Katz, Jackson and Reubon (1978) was more specific. They established that academically successful grade school students appeared to appraise themselves less favorably and were more biased to self criticism than that of the unsuccessful academic subjects. A test somewhat similar to this dealt with mental ability and level of aspiration and was somewhat contradictory to the previous study. Singh and Kumar (1979) found that male and female undergraduates were equally as intelligent, but males had slightly lower aspiration levels than females. It was also demonstrated that the more intelligent subjects achieved more, and higher expectations led to higher achievement. A study with fourth and fifth graders performed by Midlarsky and Mcknight (1980) also indicated that the

development of self evaluation and expectations concerning feedback, which is a measure of one's own previous performance. More specifically, evaluative feedback had a greater effect on the self evaluations than the actual past performance did, whereas past performance had a much stronger influence on expectations and performance than evaluative feedback.

A person's expectation of general success and failure tends to fluctuate and is influenced by various factors, which were mentioned in the previous studies. An individual's aspiration of performance and the variables that influence it have not been studied in the area of grade expectation. Morrison and Morrison (1980) conducted a study indicating that performance, low self esteem, and high need for approval were related to underestimation of academic performance. In this study, college students estimated their grade on a final exam after taking the test. The results showed that subjects with low self esteem estimated they would get lower grades.

Self esteem refers to a measurement of one's own self including attitudes, goals, appearance, etc...: however, school self esteem refers primarily to the self evaluation of one's academic ability. The subjects with high need for approval versus those with low need for approval showed no difference in estimated grades.<sup>3</sup> A study dealing with expectancy level of high school and college students was performed by Inagi (1978). He found that the subjects'

expectancy was lower for those who ascribed failure to stable factors (those factors that are relatively permanent and balanced) than those who ascribed failure to unstable factors (those factors that occur because of the influence of some fact or condition that produces them). The former expected to receive lower grades on the next exam than those who ascribed failure to unstable factors.<sup>4</sup> Birkel and Straub (1979) conducted a study with grade school children in which they asked the children to estimate their grades before and after taking an exam. Results indicated that the subjects' grade expectations were mainly determined by previous feedback regarding grades.

The previously mentioned studies have focused on the factors involved that help to determine expectation. A few studies have tested a person's capability of predicting his actual performance. Pfeiffer (1977) studied the ability of grade school students to predict their grades, and to see which students were able to do better. He studied children's ability to predict their performance in a course. It was found that 18 percent of the reported grades deviated from the grades actually received higher actual grades than they predicted. It was indicated that top pupils made fewer errors than those in the bottom quarter. Positive self evaluations were found in the top portion of the class where negative self evaluations were in the lower quarter.<sup>5</sup>

In summary, with respect to the specific issue of predicting

grades, there have been relatively few studies. The study by Pfeiffer (1977) tested subjects actual and predicted performance on semester tests. The study by Birkel and Straub (1979) tested prediction before and after one semester test. While helpful, it is apparent that considerably more could be done in terms of simply obtaining more factual information on how accurate such expectations are among different students in different kinds of courses and exams.

Between 1978 and 1980, Dr. Howard Berthold collected pilot data on expected and actual performance on exams in beginning and advanced psychology courses. Preliminary analysis showed a surprisingly low correlation between the two, seldom exceeding  $r=20$ . The pilot raised a number of interesting questions.

1. Would more systematic data collection confirm the low correlation between expected and actual performance?
2. Is the correlation unique to the exam by this professor, or is the correlation characteristic of expectations and performance across all professors in a similar course, for example between beginning and seasoned professors?
3. Is performance easier to predict on some types of exams than others (e.g., multiple choice exams as opposed to essay exams)?

4. Is it easier to predict exam performance in some subjects (say, mathematics and the sciences) than in others (say, English and philosophy)?
5. Do students become more accurate in subsequent exams i.e. how valuable is feedback on previous exams for evoking prediction on subsequent ones?
6. Are upper classmen better predictors than under classmen?
7. Does the size of the class and therefore the size of the comparison group, affect the accuracy of prediction?
8. What is the absolute difference between expectation and performance?

Perhaps if we knew the answer to questions like these, we would be able to prepare ourselves better for the results of unrealistic expectations. Perhaps, also, if we knew the factors which affected such expectations, attempts could be made to reduce the discrepancy so that students could make more realistic appraisals of how well they will do with given amounts of study.

The present study was not able to study all of these issues. Nevertheless, it did analyze some of the factors which are relevant to this important topic which should be

of considerable concern to students and educators. The study helped to determine how accurately people can predict their performance on examinations and discovered some variables which influence grade prediction.

Exams were given by the course instructor, on which the subjects estimated their grade at various points. The subject's personal identity was not revealed. Each individual recorded the last three digits of his social security number on the prediction questionnaire. The estimations were paired with the actual grade by watching up the social security numbers. In this way, no one other than the subjects knew what their prediction was.

Before each exam and other prediction trials, I addressed the class. At this time, I discussed the general nature of the study, the fact that predictions would be totally confidential and would not influence on their examination grades, and the procedure for predicting and coding the questionnaires. I then distributed the prediction questionnaires, and answered any questions.

Each psychology class was given the same general instructions at the top of the prediction questionnaire, but some classes had slightly different procedures so that different aspects of analysis could be explored.

For Introduction to Psychology 100, Social, Personality, and Learning Psychology, the first questionnaire was distributed after the first exam and asked the subjects to put the number of correct answers they expected to receive. This was done by

General Methodological Considerations

The present study utilized six psychology classes at Lycoming College. Several semester exams were given by the course instructor, on which the subjects estimated their grade at various points. The subject's personal identity was not revealed. Each individual recorded the last three digits of his social security number on the prediction questionnaire. The estimations were paired with the actual grade by matching up the social security numbers. In this way, no one other than the subjects knew what their prediction was.

Before each exam and other prediction trials, I addressed the class. At this time, I discussed the general nature of the study, the fact that predictions would be totally confidential and would not influence on their examination grades, and the procedure for predicting and coding the questionnaires. I then distributed the prediction questionnaires, and answered any questions.

Each psychology class was given the same general instructions at the top of the prediction questionnaire, but some classes had slightly different procedures so that different aspects of analysis could be explored.

For Introduction to Psychology 10C, Social, Personality, and Learning Psychology, the first questionnaire was distributed after the first exam and asked the subjects to put the number of correct answers they expected to receive. This was done by

using a 100 point scale which also had a letter grade listed beside it. (See Appendix A). Due to a misunderstanding of instructions on the first questionnaire, the format was changed on the second and third prediction trials to a more direct and concise manner, so that they were sure to record in only numerical form. These prediction trials took place directly after the exams. On these prediction sheets, the subjects were asked to indicate how many questions on their specific exam they believed they got correct, on the second questionnaire, no letter grade was represented. (See Appendix A).

For the class Introduction to Psychology 10D, the first questionnaire was split into two sections consisting of two 50 point scales written in the same manner as the first questionnaire in the previous section (See Appendix A). The first scale asked for the number of correct answers they expected to receive on the essay section of the exam, and the second scale asked for the number of correct answers they expected to receive on the multiple choice section of the exam. The second and third prediction trials took place directly after the second and third exams. This time, they again had the two fifty point scales for the same purpose mentioned earlier, but the questionnaire was changed to the more concise and direct method used on the last two exams described



in the previous section (See Appendix A).

For the class Industrial Psychology, all three prediction trials took place after the first examination. The first was directly after the exam was taken, the second was a week after the exam before the grade distribution was posted on the board, and the third was a week after the exam after the grade distribution was posted. These questionnaires were made up in the revised manner. Subjects were asked how many of the test questions they believed they got correct (See Appendix A).

The following general instructions were given before each prediction trial:

"I am doing a study to determine how accurately people can predict their performance on examinations. If you are willing to help, please fill in the information below. The code on your sheet will be used to correlate estimates with actual performance. In this way no one other than yourself will know what your prediction was. The computerized analysis of the data will simply manipulate numbers so that the only thing anyone else will see is the combined data for the entire group. Do not feel that this will influence your final grade in any way because your instructor will not know your predicted grade either."

For the actual analysis, the data was reduced to the subjects which predicted for all three trials, so that it would be consistent throughout. The portion of the result section including the correlations was calculated with a hand calculator. The various Analysis of Variance tests were computed by the BMD statistical package using the DEC PDP-11/70 computer.

### Specific Method and Data Analysis

The data analysis specifies the nature, procedure, and outcome of experimental questions studied in each class.

This section will be broken down into experiments by the specific class being studied.

#### I. Experiment One: Introduction Psychology 10D.

The experimental questioned pursued in this class was a comparison of estimates on multiple choice and essay portions of three exams. A second question was a comparison between academic status of the students.

A.) A correlation test ( $r$ ) measured the relationship between actual and predicted scores on the multiple choice and essay portions for each exam. The  $\leq .05$  level was the level of determination for all statistical tests. On the essay portion of the exam, a significant relationship was found on all three exams. The relationship increased in each additional trial. On the multiple choice portion, a significant relationship was found on the first and third exam, the first exam showed the highest level of significance and the correlation on the second exam wasn't significant. (See Table 1).

B.) A correlation test ( $r$ ) measured the relationship between actual and predicted scores on the overall exam, in which the multiple choice and essay scores were combined. At the

p-.05 level, a significant relationship was found on the first and third exam, with the third exam showing no significant relationship. It appears with the combined scores that the essay portion may have had an influence in building the relationship on the third exam, but multiple choice influenced the lower relationship on the first and third exam (See table 2).

C). A 2X3 Analysis of Variance test analyzed the absolute difference of absolute scores by ignoring the sign of the difference. This was done to determine whether there was a difference between actual and predicted scores between the multiple choice and essay portions on three exams, and to see if there were any interactions between the type of exams and testing trials. The means and standard deviations are shown in Table 3, and the ANOVA is shown in Table 4 and Figure 1.

The students did the same on prediction in comparison with actual scores on both the multiple choice and essay portions, for no significant difference was found between actual and predicted scores on the different type exams. It was also found that the students were most accurate in their predictions on the third exam for both multiple choice and essay section, appearing that the students prediction ability increased with time. This significance was found at a one tailed level at .05.

D.) A 2X2X3 Analysis of Variance analyzed the difference

of actual scores. This was done to determine whether there was any difference on actual and predicted scores on the multiple choice and essay portions of exams, and to see if there were any interactions between the types of exams, prediction ability, and prediction trials. The means and standard deviations are shown in Table 5, and the ANOVA is shown in Table 6 and Figures 2 and 3.

Various aspects were found significant on a two tailed test at  $p \leq .05$  level. This included a significant difference between prediction trials 1, 2, and 3 with actual and predicted scores combined, multiple choice and essay portions of the exam, and an interaction between the types of exams and prediction trials. These had little meaning in the overall analysis.

What proved to be interesting is that the actual and predicted scores did not differ on the overall exam, appearing that the students prediction were the same in comparison with their actual scores. But when looking at the interaction between Actual/Predicted and Essay/Multiple Choice there was a significant difference which showed that students predictions may appear the same on an overall exam, but when breaking it down into types of exam there is a difference and they were simply balancing each other out. By looking at the means, it is clear that students predicted higher than their actual scores on the multiple choice section, but predicted lower than their actual scores on the Essay portion.. This was consistent on all three exams for both essay and multiple choice.

A significant interaction was also found between types of exams, prediction trials and prediction ability which showed that the type of prediction outcome in comparison with actual performance for the multiple choice and essay portions were significantly related and carried on throughout the three prediction trials: that is, the same type of relationship was similar in each of the three outcomes.

E.) A 2X3X2 Analysis of Variance analyzed the actual scores (multiple choice and essay combined) by comparing the academic status of the individual subjects. This was done to determine whether there was a difference between actual and predicted scores between the developmental and non-developmental students, and to see if there was any interaction between the status of the student, the prediction trials and prediction ability. The means and standard deviations are shown in Table 7, and the ANOVA is shown in Table 8 and Figures 4 and 5.

A significant difference was found between the developmental status groups, in which the nondevelopmental students scored higher on both their estimated and actual scores than the developmental students. There was a significant difference between the three prediction trials, but the estimated and actual scores were added together, so the difference is not that meaningful. There was also a two tailed significant

difference at the  $p \leq .05$  level which showed that the tests and prediction ability were significantly related, but this was discussed in the previous section in detail. Overall, when looking at the means of the estimated scores in comparison of the actual scores, it appears that the developmental student is as equally able to predict his examination score as the nondevelopmental student is capable of doing.

## II. Experiment Two: Introduction to Psychology 10C.

The experimental question pursued in this class was a comparison of estimates on the overall exam grades of three exams (not differentiating between multiple choice and essay).

A.) A correlation test ( $r$ ) measured the relationship between actual and predicted scores of grades on the overall exam for three tests. At the  $p \leq .05$  level, a significant relationship was found on the first and third exam, in which case the first exam had the highest relationship, but the first and third were very close to one another where the second was way off. This relationship is close with the overall for the Introduction to Psychology 10D (See Table 9).

B.) A one way Analysis of Variance test analyzed the absolute difference scores on three overall exams (multiple choice and essay combined) by ignoring the sign of the difference. This was done to determine whether there was a

difference between actual and predicted scores on the first, second and third exam. The means and standard deviations are shown in Table 10, and the ANOVA is shown in Table 11, and Figure 6.

In this analysis, it was found that students did significantly better in their estimations on the second examination. It appeared that they caught on after the first prediction trial, but then went worse on the third trial, but the third trial was still better than the first. This was a one tailed significant difference at  $p \leq .05$  level. It was also found that the relationship between the students prediction and actual scores remained the same throughout the three trials, no real significant difference.

C.) A 2X3 Analysis of Variance analyzed the difference on the actual and predicted scores for three overall exams. This was done to determine whether there was any difference between actual and predicted scores on overall exams between exams 1,2,and3, and to see if there were any interactions between the ability to predict and the prediction trials. The means and standard deviations are shown in Table 12, and the ANOVA is shown in Table 13, and Figure 7.

When actual and predicted scores are combined, there is a significant difference between exams 1,2 and 3. Students scores were simply lower on exam 1 than on exams 2 and 3.

There was no significant difference between the students prediction and actual scores on the overall exam (multiple choice and essay combined), which helps to confirm the fact that there is no difference between students prediction and actual scores on the overall examination; which was thoroughly explained in the section under Introduction to Psychology 10D. There were no significant interactions between tests and prediction ability, in which case the difference between actual and predicted scores were similar for each examination.

### III. Experiment Three: Industrial Psychology.

The experimental question pursued in this class was a comparison of estimates on one exam at three points:

- 1.) Immediately after the examination
- 2.) One week after the examination, before the distribution of grades was posted on the board.
- 3.) One week after the examination, after the distribution of grades was posted on the board.

A.) A correlation test ( $r$ ) measured the relationship between actual and predicted scores of the three different prediction trials. At the  $p=.05$  level, a significant relationship was found on all three predictions. The third prediction has the highest relationship, which would appear that the students prediction ability increased with time, but this does not



appear to be so, because the relationship is lowest in the second prediction, and the first prediction is relatively close to the third (See Table 14).

B). A one-way Analysis of Variance analyzed the absolute difference of scores by ignoring the sign of the difference. This was done to determine whether there was a significant difference between the three prediction trials on the one exam. The means and standard deviations are shown on Table 15, and the ANOVA is shown on Table 16 and Figure 8.

It was found that students got significantly better on the second prediction, after having the opportunity to think about the exam. But they then got worse on the third prediction. This showed that there is a significant difference between students predictions on one examination when given the time to think about the exam and see the distribution.

C.) A 2X3 Analysis of Variance analyzed the difference of actual and predicted scores. This was done to determine whether there was a difference between the actual and predicted scores on the three prediction trials for one examination. The means and standard deviations are shown in Table 17, and the ANOVA is shown in Table 18 and Figure 9.

It was found that students estimate differently from prediction to prediction. They were most confident a few days after the exam when they had a chance to think

over the exam, but their confidence lowered after seeing the distribution of grades. It was the worst directly after taking the examination. This significant difference between the prediction trials was on a two-tailed test at a  $p=.05$  level.

#### IV. Experiment Four: Experimental, Social, and Personality Psychology.

The experimental questioned pursued in these classes was to compare the difference between various psychology courses, and to see if there was a relationship between a seasoned professors and a new professor.

A.) A correlation test ( $r$ ) measured the relationship between actual and predicted scores on three overall exams in Experimental Psychology. At the  $p\leq.05$  level, a significant relationship was found on the second examination only. The first and third exams were insignificant, with the third being the worst (See Table 19).

B.) A correlation test ( $r$ ) measured the relationship between actual and predicted scores on three overall exams in Social Psychology. At the  $p\leq.05$  level, a significant relationship was found on the first and third examinations. The first had the highest relationship. This pattern has occurred with two other psychology courses also (Introduction to Psychology 10C and 10D). The second exam was found

insignificant (See Table 20).

C). A correlation test ( $r$ ) measured the relationship between actual and predicted scores on three overall exams in Personality Psychology at the  $p \leq .05$  level. A significant relationship was found on the second exam only, as in Learning Psychology. The first and third exams were insignificant, with the first being the worst (See Table 21).

D). A 3X3 Analysis of Variance test analyzed the absolute difference of scores by ignoring the sign of the difference. This was done to determine whether there was a difference between the actual and predicted scores between the three psychology courses. The means and standard deviations are shown in Table 22, and the ANOVA is shown in Table 23 and Figure 10.

In this analysis, it was found that the students ability to predict did in fact differ between courses, this analysis does not show exactly what difference it was, but will be analyzed in the next section. The difference between the courses were not significantly different between exams, but was consistent for each class over the three exams. The significant difference between courses was found at the  $p = .05$  level on a one-tailed test.

E.) A 3X3X2 Analysis of Variance analyzed the difference of actual and predicted scores between the three psychology courses on three exams. This was done to determine whether

there was a difference between actual and predicted scores between the three psychology courses, and to see if there were any interactions between the courses, prediction trials, and prediction ability. The means and standard deviations are shown in Table 24, and the ANOVA is shown in Table 25 and Figures 11 and 12.

In this analysis, various items were found significant, but due to the fact that the actual and predicted scores were combined it does not have much relevance here. What is interesting is that a significant difference was found between actual and predicted scores in all three classes. There was also a discrepancy between actual and predicted scores on each test. Subjects in Personality and Social Psychology, who were taught by the new professor, estimated much lower on the first exam, but improved on the second and third exams. The subjects with the seasoned professor showed the same discrepancy between actual and predicted scores on all three exams. When viewing the means, it appears that the subjects with the seasoned professor made slightly more accurate predictions than did the subjects with the new professor.

### Dicussion

The results of this experiment did provide some new and interesting information on students' capability of estimating their performance in academics, and also some factors which influence one's predicting ability. In other studies dealing with expectancy, much attention has been placed in the areas of self evaluation (Smolen, 1978), self-esteem (Morrison and Morrison, 1980), and stable and unstable factors (Inagi, 1978), in which comparisons were made between individuals in those areas and the difference it had on prediction, (e.g., high self esteem student versus low self esteem student- who predicts better?). But little attention focused on how well students predict overall and what were some of the more detailed causal factors that may have influenced such outcomes. The present study did compare some groups of individuals, but it also helped to evaluate some of these questions and those that were asked earlier.

The most general question asked was "What was the absolute difference between expectation and performance?" In this aspect, it focused on an overall difference between actual and predicted scores. All-inclusive, it was found that there was no real relationship of students' predicted and actual scores, but rather a difference in other areas such as between trials where their ability either increased depending

upon the circumstances involved. In this area, it would appear that students were totally capable at predicting scores.

To be more specific in the students' ability in predicting, the actual scores were analyzed. Again looking at the overall exams of the students, there appeared to be no difference between the relationship of their actual and estimated scores. But more significant difference were indeed found when looking at more detailed questions.

For instance, the question of whether students were better capable of predicting on one type of exam than another helped to raise some valuable points. As mentioned earlier, it appeared on the overall exams that there was no significant difference between the students' predicted and actual scores on the total exam. However, it was found that the students predictions did in fact differ on the separate portions of the exam, but that the actual and predicted scores of each section were balancing each other out. More specifically, the subjects were over-estimating their performance on multiple choice portions of exams, and underestimating their performance on essay portions of exams. It appears that students have more confidence with multiple choice questions than essay questions, but in actual performance they are better in the latter. This confidence in expectancy may be connected with the fact that students believe they can

perform better on identification type exams than on pure recall examinations.

Previous studies have focused on past performance and its influence on expectation (Mislarsky and McKnight, 1980). This study did not compare performance in previous years, but it did look at the question of whether students become more accurate in prediction with subsequent exams. There was a significant difference found in estimations between different exams. It was shown that in some classes students estimated much better on the third examination, which suggests that students' prediction ability increases with time. In other classes, however, students predicted better on the second exam, but did worse on the third. Since this trend of increasing capability is fairly consistent, the drop that occurred on the third exam may have been due to a harder test.

Since there was a difference in students' capability in predicting on subsequent exams, a more detailed analysis proved interesting. This question was "Do students' predictions change for one exam over time?" It was in fact found that there was a significant difference in prediction trials. It was shown that the best estimate was a second prediction one week after the exam. The third estimate dropped after seeing the distribution of grades, but not lower than the first

directly after the examination. From this analysis it appears that students are least confident with their performance directly after taking their exam, but are most confident after having the chance to discuss and think over the exam. When evaluating themselves with the rest of the class after seeing the distribution, it appears they feel less confident.

Since several different psychology courses were being studied, it was possible to analyze the question of whether there is a difference in students' ability to predict between various classes. Although this dealt with one area of study, psychology, some interesting results were developed. It was found that there was a difference in prediction between three courses: Learning, Personality (both advance psychology courses), and Social Psychology (mid-level or "average" psychology course). Although two of the courses were advanced and one was average, the difference was not developed between these factors. What did appear was that the two courses taught by the new professor (one advance and one average) differed from the one taught by the seasoned professor (an advance course). It was found that students in the courses taught by the new professor estimated very high in comparison with their actual score on their first exam, but showed little difference on the second and third exams. With the seasoned professor, estimations stayed relatively



stable over time. It appears that students familiar with the professor and his teaching are better at estimating than those with a new professor.

Since many professors work with many students who consistently say that they have studied and studied for an exam, but still end up doing much worse than they believe they should have for the amount of studying put in, the students' academic status was compared with their predicting ability. An analysis was done comparing the predictive accuracy of developmental students to regular (nondevelopmental) students. The results in this area showed that there was no significant difference between the two groups in their ability to predict exam performance. Thus, it appears that these students' capability of predicting are the same, and that the complaints can come from any student.

Although this study covered many of the questions previously asked, there are more that could be explored in future study which may help in other areas of prediction. This could include sex difference, the difference between G.P.A.s, freshmen to seniors, and different course areas. If further study were to be pursued, some of the following items might be taken into account. First, detailed specification of the subjects, as to what type of estimation should be recorded; second, a longer testing period, such as two semesters, and third having more subjects contributing to the complete data analysis.

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<sup>1</sup>Robert M. Goldenson, Ph.D., "Personality Disorders  
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<sup>2</sup>Robert M. Goldenson, Ph.D., "Self-Concept Tests",  
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<sup>3</sup>Thomas E. Morrison and Russell L. Morrison, "Self-esteem  
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<sup>4</sup>Leisuro Inagi, "Causal ascription and expectancy of  
success", Japanese Psychological Research, 1977, 19, 23-30.  
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<sup>5</sup>Horst Pfeiffer, "How forth graders remember, predict,  
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## Footnotes

<sup>1</sup>Robert M. Goldenson, Ph.D., "Personality Disorders (Character Disorders)", The Encyclopedia of Human Behavior: Psychology, Psychiatry, and Mental Health, 2, 1941.500, 741.

<sup>2</sup>Robert M. Goldenson, Ph.D., "Self-Concept Tests", The Encyclopedia of Human Behavior: Psychology, Psychiatry, and Mental Health, 2, 11180.500, 1150.

<sup>3</sup>Thomas L. Morrison and Randell L. Morrison, "Self-esteem need for approval and self estimates of academic performance", Psychological Reports, (1978, 43, ) 503-507. (Psychological Abstract, 63, 10653)

<sup>4</sup>Lelsuro Inagi, "Causal ascription and expectancy of success", Japanese Psychological Research, 1977, 19, 22-30. (Psychological Abstract, 59, 12304)

<sup>5</sup>Horst Pfeiffer, "How forth graders remember, predict, and evaluate their grades.", Psychologie In Erziehung und Unterricht, 1977, 24, 267-275. (Psychological Abstract, 63, 10656)

Table 1

Correlation on Actual/Predicted Scores on 3 Exams for  
Multiple Choice and Essay Portions of the Exam for  
Introduction to Psychology 100

EXAMS	TYPE EXAM			
	ESSAY		MULTIPLE CHOICE	
	d.f.	r	d.f.	r
1	42	.33 <sup>n</sup>	41	.48*
2	41	.53*	40	.293
3	38	.60*	41	.41*

\*p &lt; .05

Table 2

Correlation on Actual/Predicted scores on 3 Exams on The  
Overall Exam for Introduction to Psychology 100

EXAMS	r	
	d.f.	r
1	41	.35*
2	41	.23
3	38	.67*

\*p &lt; .05

Table 3

Absolute Difference Means and Standard Deviations on  
3 Exams for Multiple Choice and Essay Portions of the  
Exam for Introduction to Psychology 100

EXAMS	TYPE EXAM			
	ESSAY		MULTIPLE CHOICE	
1	MEAN	6.96	6.33	
	S.D.	3.83	3.31	
2	MEAN	6.33	6.89	
	S.D.	5.21	3.98	
3	MEAN	5.44	5.26	
	S.D.	5.49	4.67	

MARGINAL MEAN 6.21

Table 1

Correlation on Actual/Predicted Scores on 3 Exams for  
 Multiple Choice and Essay Portions of the Exam for  
 Introduction to Psychology 10D

TYPE EXAM

SOURCE		DEGREES OF FREEDOM		MEAN SQUARE	CORRELATION		TAIL PROBABILITY
		ESSAY			MULTIPLE CHOICE		
MEAN	1	42	1	6247.14	43	.48*	0.0000
EXAMS	2	41	36	20.74	40	.293	
	3	38			41	.41*	
				19.86	2.75		0.0710
				0.85			
				0.72	0.01		0.9187
ERROR		26		28.85			

\*p ≤ .05

Table 2

Correlation on Actual/Predicted Scores on 3 Exams on the  
 Overall Exam for Introduction to Psychology 10D

Table 5

		d.f.	r
	1	41	.35*
EXAMS	2	41	.25
	3	38	.67*

\*p ≤ .05

Table 3

Absolute Difference Means and Standard Deviations on  
 3 Exams for Multiple Choice and Essay Portions of the  
 Exam for Introduction to Psychology 10D

EXAMS		ESSAY		MULTIPLE CHOICE	
		MEAN	S.D.	MEAN	S.D.
EXAMS	1	6.96	3.83	6.37	5.31
	2	6.33	5.23	6.89	3.98
	3	5.44	3.49	5.26	4.67

MARGINAL MEAN 6.21



Table 4

Analysis of Variance for Absolute Difference Scores on 3 Exams  
for Multiple Choice and Essay Portions of the Exam for  
Introduction to Psychology 10D

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	6247.14	301.24	0.0000
ERROR	26	20.74		
R	2	29.86	2.75	0.0730
ERROR	52	10.85		
S	1	0.22	0.01	0.9307
ERROR	26	28.85		
RS	2	4.57	0.19	0.8296
ERROR	52	24.39		
T	1	1.49	0.04	0.8462
ERROR	26			

Table 5

Actual/Predicted Means and Standard Deviations on 3 Exams for  
Multiple Choice and Essay Portions of the Exam for Introduction to  
Psychology 10D

EXAMS		TYPE OF EXAM	
		ESSAY	MULTIPLE CHOICE
1	ESTIMATE	35.26	37.93
	ACTUAL	41.19	33.41
	S.D. EST.	4.75	5.04
	S.D. ACT.	4.72	6.48
2	ESTIMATE	38.19	37.22
	ACTUAL	44.44	31.22
	S.D. EST.	6.79	5.66
	S.D. ACT.	4.39	4.79
3	ESTIMATE	36.59	35.96
	ACTUAL	37.81	32.26
	S.D. EST.	7.24	5.56
	S.D. ACT.	6.63	7.05
MARGINAL MEAN		36.79	

Table 6

Analysis of Variance for Actual/Predicted Scores on 3 Exams  
for Multiple Choice and Essay Portions of the Exam for  
Introduction to Psychology 10D

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	438538.27	2078.04	0.0000
ERROR	26	211.03		
TEST	2	122.26	4.83	0.0119
ERROR	52	25.29		
MCES	1	1460.94	87.34	0.0000
ERROR	26	16.73		
TM	2	165.93	12.99	0.0000
ERROR	52	12.78		
PRED	1	1.49	0.04	0.8462
ERROR	26	38.92		
TP	2	26.95	1.99	0.1475
ERROR	52	13.57		
MP	1	1717.64	119.88	0.0000
ERROR	26	14.33		
TMP	1	98.47	7.77	0.0011
ERROR	52	12.67		

Introduction to Psychology 10D

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	807583.38	2225.37	0.0000
GPC	1	2001.72	5.52	0.0278
ERROR	23	362.80		
TEST	2	256.52	3.28	0.0084
TC	2	22.06	0.45	0.6377
ERROR	46	48.57		
PRED	1	0.15	0.00	0.9595
PC	1	73.11	1.25	0.2744
ERROR	23	58.31		
TP	2	28.84	3.37	0.0431
TPC	2	53.80	2.36	0.1058
ERROR	46	22.80		

Table 7

Actual/Predicted Means and Standard Deviations on 3 Exams  
with Developmental and Nondevelopmental Subjects for  
Introduction to Psychology 10D

EXAM		DEVELOPMENTAL		NONDEVELOPMENTAL		MARGINAL
		ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	
1	ESTIMATE	70.75		74.77		72.84
	ACTUAL	70.75		79.92		75.52
	SD EST.	9.86		5.83		
	SD ACT.	7.44		8.98		
2	ESTIMATE	71.58		79.08		75.48
	ACTUAL	72.58		78.08		75.44
	SD EST.	11.77		10.82		
	SD ACT.	7.51		8.63		
3	ESTIMATE	69.00		75.23		72.24
	ACTUAL	64.00		75.46		69.96
	SD EST.	12.43		10.57		
	SD ACT.	12.38		7.90		
MARGINAL MEAN		69.78		77.09		73.58

Table 8

Analysis of Variance for Actual/Predicted Scores for 3 Exams  
with Developmental and Nondevelopmental Subjects for  
Introduction to Psychology 10D

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	807583.38	2225.37	0.0000
GRP	1	2001.72	5.52	0.0278
ERROR	23	362.90		
TEST	2	256.52	5.28	0.0086
TG	2	22.06	0.45	0.6377
ERROR	46	48.57		
PRED	1	0.15	0.00	0.9595
PG	1	73.11	1.25	0.2744
ERROR	23	58.31		
TP	2	76.84	3.37	0.0431
TPG	2	53.80	2.36	0.1058
ERROR	46	22.80		

Table 9

Correlation on Actual/Predicted Scores on 3 Exams on the Overall Exam for Introduction to Psychology 10C

	ESTIMATE	d.f.	r
1	ACTUAL	41	.61*
EXAMS	EST	35	.29
	S.D. ACT	41	.60*

\*p < .05

2	ACTUAL	5.41
	S.D. EST.	9.18
	S.D. ACT.	9.74

Table 10

Absolute Difference Means and Standard Deviations on 3 Exams on the Overall Exam for Introduction to Psychology 10C

	MEAN	S.D.
EXAMS	7.90	7.53

Analysis of Variance on 3 Exams on the Overall Exam for Introduction to Psychology 10C

	MEAN	S.D.
3	6.94	5.00

SOURCE	DEGREES OF FREEDOM	MARGINAL MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	1059905.17	1137.65	0.0000
ERROR	30			

Table 11

Analysis of Variance for Absolute Difference Scores on 3 Exams on the Overall Exam for Introduction to Psychology 10C

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	4066.94	101.16	0.0000
ERROR	30	40.20		
R	2	67.74	2.21	0.1182
ERROR	60	30.61		

Table 12

Actual/Predicted Means and Standard Deviations on 3 Exams on the Overall Exams for Introduction to Psychology 10C

1	ESTIMATE	72.55
	ACTUAL	73.87
	S.D. EST.	9.24
	S.D. ACT.	10.56
2	ESTIMATE	76.68
	ACTUAL	75.41
	S.D. EST.	9.18
	S.D. ACT.	9.74
3	ESTIMATE	77.10
	ACTUAL	75.39
	S.D. EST.	8.26
	S.D. ACT.	9.62
MARGINAL MEAN		75.17

Table 13

Analysis of Variance for Actual/Predicted Scores

on 3 Exams on the Overall Exam for Introduction to Psychology 10C

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	1050905.17	3137.65	0.0000
ERROR	30	334.93		
TEST	2	178.67	4.24	0.0190
ERROR	60	42.17		
PRED	1	13.98	0.27	0.6100
ERROR	30	52.64		
TP	2	41.48	1.28	0.2858
ERROR	60	32.44		

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	3120.10	56.98	0.0000
ERROR	13	54.76		
R	2	149.00	3.18	0.0584
ERROR	26	47.11		

Table 14

Correlation on Actual/Predicted Scores on 1 Exam  
with 3 Predictions for Industrial Psychology

		EXAM 1	
	PREDICTIONS	d.f.	r
	1	13	.74*
	2	14	.61*
	3	15	.77*

\*p < .05

Table 15

Absolute Difference Means and Standard Deviations  
on 1 exam with 3 Predictions for Industrial Psychology

SOURCE	DEGREES OF FREEDOM	EXAM 1	F	TAIL PROBABILITY
MEAN ERROR	13	1 MEAN	11.36	0.0000
		S.D.	10.76	
R ERROR	26	2 MEAN	5.00	0.0149
		S.D.	4.76	
		3 MEAN	9.50	
		S.D.	4.07	

MARGINAL MEAN 8.62

Table 16

Analysis of Variance for Absolute Difference Scores  
on 1 Exam with 3 Predictions for Industrial Psychology

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
1 MEAN ERROR	13	3120.10	56.98	0.0000
2 R ERROR	26	149.60	3.18	0.0584
		54.76		
		47.11		

Table 17

Actual/Predicted Means and Standard Deviations  
on 1 Exam with 3 Predictions for Industrial Psychology

EXAM 1		
	MEAN	72.79
EXAMS	S.D.	14.74
PREDICTIONS		
	MEAN	81.00
	S.D.	5.80
	MEAN	75.29
	S.D.	7.38

MARGINAL MEAN 76.29

Table 18

Analysis of Variance for Actual/Predicted Scores  
on 1 Exam with 3 Predictions for Industrial Psychology

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
1 MEAN	1	244419.43	1214.36	0.0000
1 ERROR	13	201.27		
2 R	2	251.64	4.82	0.0165
2 ERROR	26	52.18		

Table 19

Correlation on Actual/Predicted Scores on 3 Exams  
for Learning Psychology

EXAMS	MEAN	S.D.	d.f.	r
1	12.00	3.71	24	.40
2	8.10	4.05	23	.61*
3	8.00	4.05	19	.35
MARGINAL MEAN	9.3		19	

\* $p \leq .05$

Table 17

Actual/Predicted Means and Standard Deviations  
on 1 Exam with 3 Predictions for Industrial Psychology

		EXAM 1	
EXAMS	1	MEAN	72.79
	2	S.D.	14.74
PREDICTIONS	3	MEAN	81.00
		S.D.	5.80
		MEAN	75.29
		S.D.	7.38

MARGINAL MEAN 76.29

Table 18

Analysis of Variance for Actual/Predicted Scores  
on 1 Exam with 3 Predictions for Industrial Psychology

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
1 MEAN	1	244419.43	1214.36	0.0000
1 ERROR	13	201.27		
2 R	2	251.64	4.82	0.0165
2 ERROR	26	52.18		

Table 19

Correlation on Actual/Predicted Scores on 3 Exams  
for Learning Psychology

EXAMS	2	MEAN	8.10	12.59	11.56	10.65
		S.D.	4.05	7.16	9.05	10.86
	3	MEAN	8.00	11.56	15.11	10.86
		S.D.	7.16	9.05	11.56	10.86
	EXAMS	2	23	.61*		
MARGINAL MEAN		9.37	19	.35	17.85	11.12

\*p ≤ .05



Table 20

Correlation on Actual/Predicted Scores on 3 Exams

on 3 Exams for Social Psychology and Learning.

Social and Personality Psychology

		d.f.	r	
		1	30	.60*
EXAMS		2	22	.29
		3	24	.44*

\*p < .05

Table 21

Correlation on Actual/Predicted Scores on 3 Exams

for Personality Psychology

		d.f.	r	
		1	12	.21
EXAMS		2	12	.79
		3	8	.55

Table 22

Absolute Difference Means and Standard Deviations on

Exams for 3 Courses including Learning, Social, and Personality Psychology.

EXAMS		COURSES			
		LEARNING	SOCIAL	PERSONALITY	MARGINAL
1	MEAN	12.00	10.45	14.89	11.84
	S.D.	7.71	7.78	13.26	
2	MEAN	8.10	12.59	11.56	10.65
	S.D.	4.45	10.01	8.99	
3	MEAN	8.00	11.73	15.11	10.86
	S.D.	7.06	9.35	9.05	
	MARGINAL MEAN	9.37	11.60	13.85	11.12
	MARGINAL MEAN	77.38	71.02	71.81	71.68

Table 23

Analysis of Variance for Absolute Difference Scores

on 3 Exams for 3 Courses including Learning,

Social and Personality Psychology

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	17597.74	233.13	0.0000
NAMES	2	200.29	2.65	0.0807
1 ERROR	48	75.49		
2 ERROR	96	70.24		
3 ERROR	96	70.24		

Table 24

Actual/Predicted Means and Standard Deviations

on 3 Exams for 3 Courses including Learning, Social

and Personality Psychology

	LEARNING	SOCIAL	PERSONALITY	MARGINAL
ESTIMATE	77.20	75.41	76.44	76.29
ACTUAL	80.80	67.86	69.11	73.15
S.D. EST.	9.38	8.68	9.53	
S.D. ACT.	16.20	12.27	16.37	
1 EXAMS				
ESTIMATE	74.15	68.73	73.89	71.76
ACTUAL	71.85	69.86	75.89	71.71
S.D. EST.	8.60	13.79	7.22	
S.D. ACT.	12.03	14.11	16.10	
2 EXAMS				
ESTIMATE	82.05	71.05	74.44	75.96
ACTUAL	78.25	73.23	61.11	73.06
S.D. EST.	7.97	12.47	8.23	
S.D. ACT.	10.56	15.56	15.00	
3 EXAMS				
MARGINAL MEAN	77.38	71.02	71.81	73.66

Table 25

Analysis of Variance for Actual/Predicted Scores on 3 Exams  
for 3 Courses including Learning, Social and Personality Psychology

Figure Caption

SOURCE	DEGREES OF FREEDOM	MEAN SQUARE	F	TAIL PROBABILITY
MEAN	1	1408672.71	2956.38	0.0000
CLASS	2	1382.76	2.90	0.0646
1 ERROR	48	476.49		
TEST	2	94.12	1.24	0.2952
TC	4	323.63	4.25	0.0033
2 ERROR	96	76.17		
PRED	1	520.30	3.16	0.0817
PC	2	146.47	0.89	0.4174
3 ERROR	48	164.59		
TP	2	165.21	3.16	0.0470
TPC	4	330.27	6.31	0.0001
4 ERROR	96	52.34		

exams for Introduction to Psychology 10P.

Figure 4. Collapsed actual and predicted means over 3 exams for developmental and nondevelopmental students for Introduction to Psychology 10D.

Figure 5. Interaction of means for actual and predicted scores with developmental and nondevelopmental students over 3 exams for Introduction to Psychology 10D.

Figure 6. Means of absolute difference scores on 3 exams for Introduction to Psychology 10C.

Figure 7. Actual and predicted means over 3 exams for Introduction to Psychology 10C.

Figure 8. Means of absolute difference scores on 3 exams with predictions for Industrial Psychology.

## Figure Caption

Figure 1. Means of absolute difference scores on 3 exams multiple choice and essay portions of the exam for Introduction to Psychology 10D.

Figure 2. Collapsed actual and predicted means over 3 exams for multiple choice and essay portions of the exam for Introduction to Psychology 10D.

Figure 3. Interaction of means for actual and predicted scores with multiple choice and essay type tests over 3 exams for Introduction to Psychology 10D.

Figure 4. Collapsed actual and predicted means over 3 exams for developmental and nondevelopmental students for Introduction to Psychology 10D.

Figure 5. Interaction of means for actual and predicted scores with developmental and nondevelopmental students over 3 exams for Introduction to Psychology 10D.

Figure 6. Means of absolute difference scores on 3 exams for Introduction to Psychology 10C.

Figure 7. Actual and predicted means over 3 exams for Introduction to Psychology 10C.

Figure 8. Means of absolute difference scores on 1 exam with predictions for Industrial Psychology.

Figure 9. Actual and Predicted means on 1 exam with 3 predictions for Industrial Psychology.

Figure 10. Means of absolute difference scores on 3 exams for courses Learning, Social, and Personality Psychology.

Figure 11. Collapsed actual and predicted means over 3 exams for courses Learning, Social, and Personality Psychology.

Figure 12. Interaction of means for actual and predicted scores for courses Learning, Social, and Personality Psychology over 3 exams.

Appendix A

Figure 1

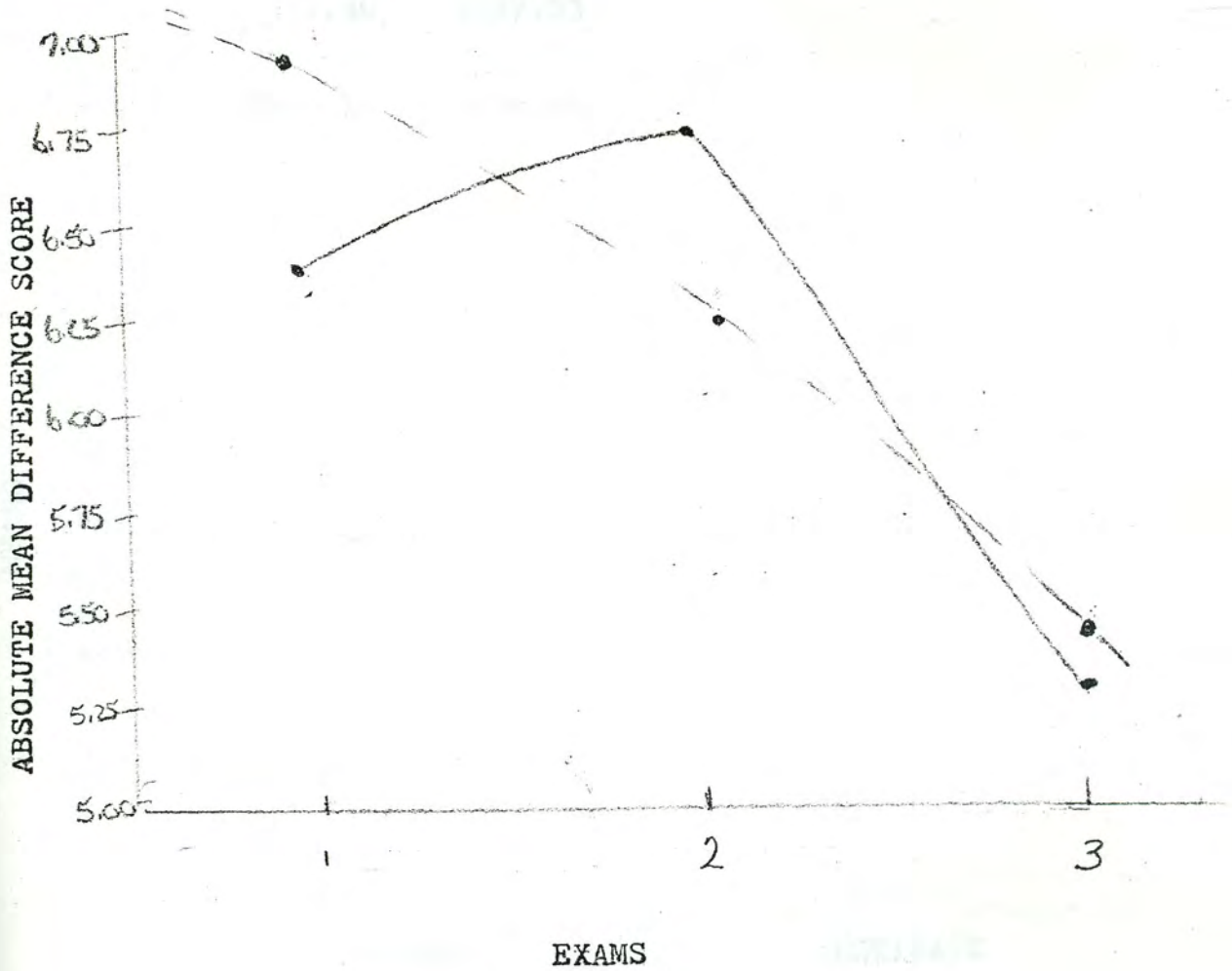


Appendix A

—•— Multiple choice

- - -•- - Essay

Figure 1

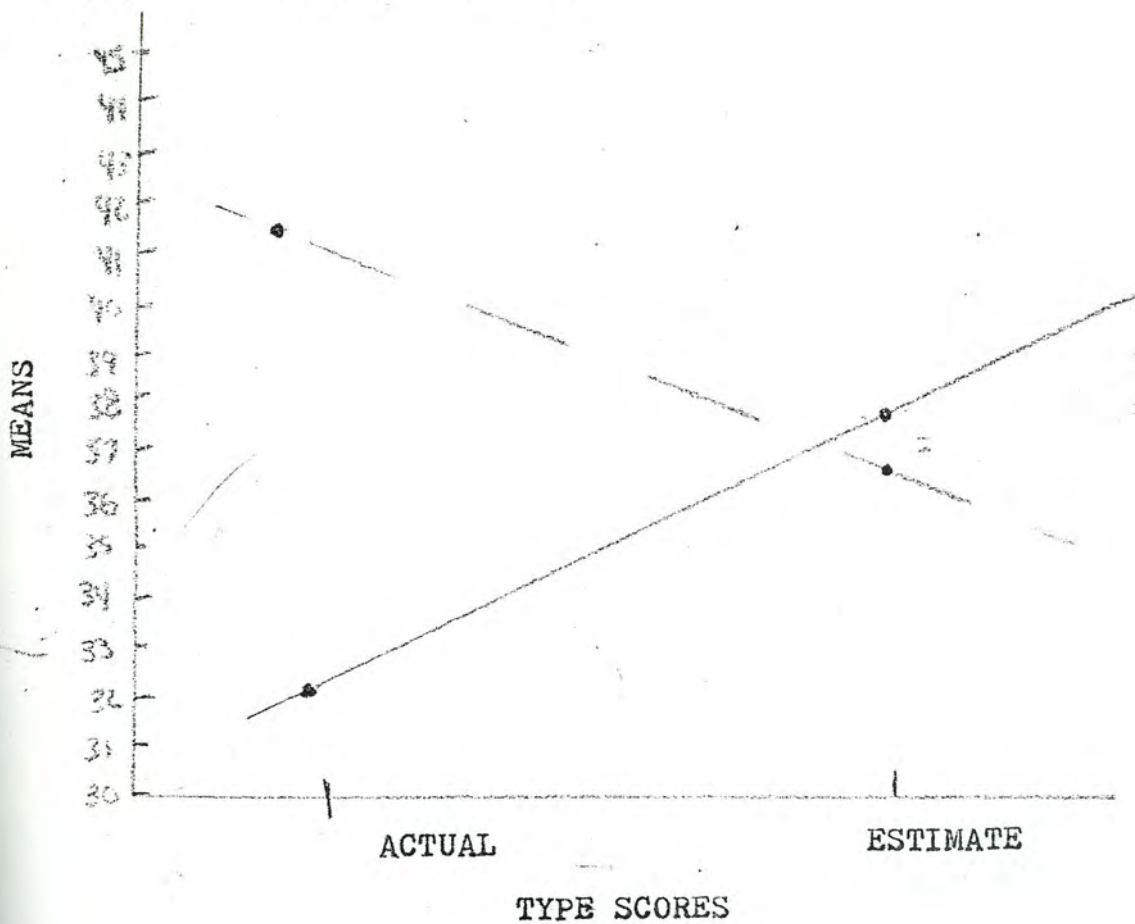


●——● Multiple choice

●- - -● Essay

Figure 2

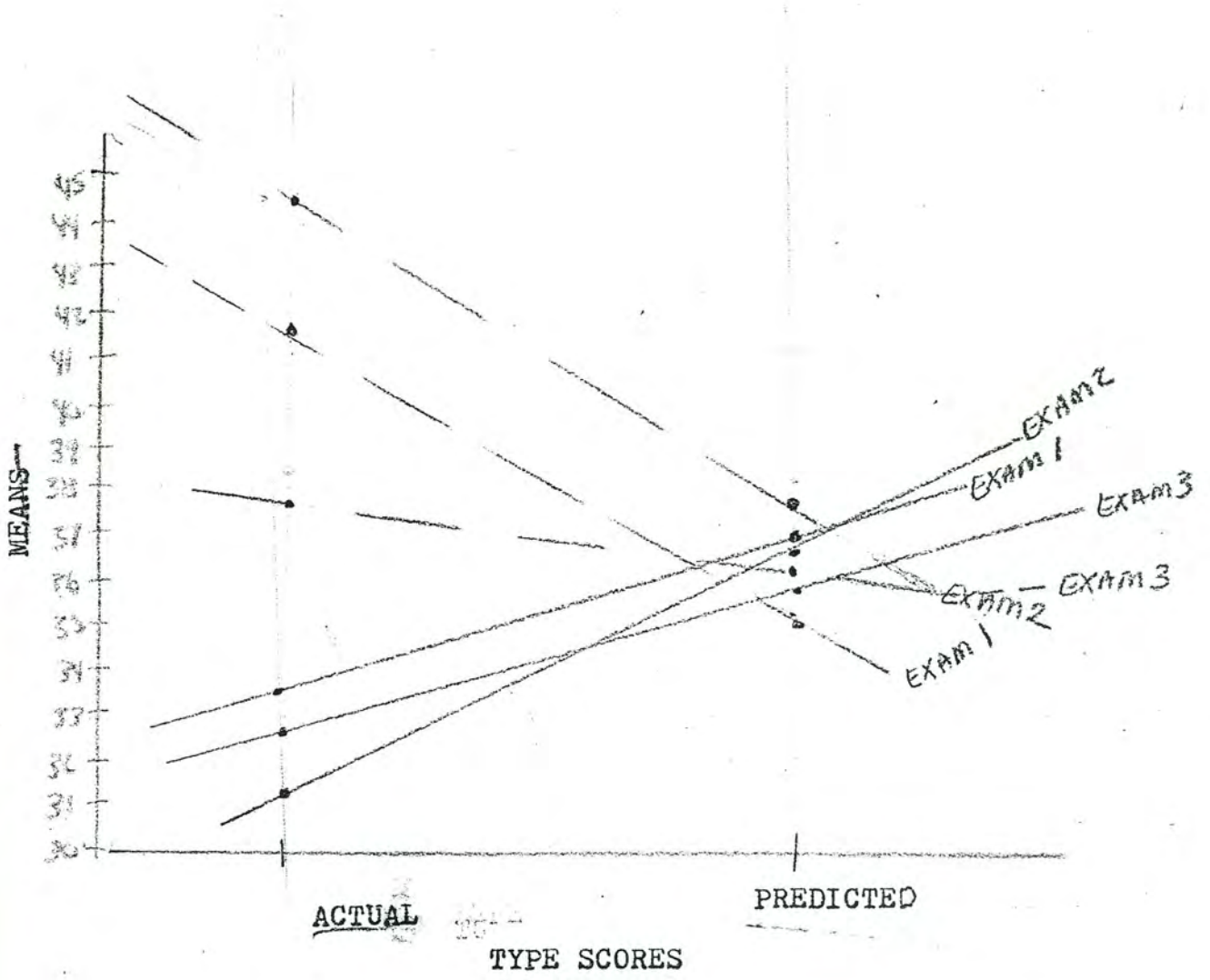
	Actual	Estimate
Multiple Choice	X=32.30	X=37.03
Essay	X=41.14	X=36.68



———— Multiple Choice  
 - - - - - Essay



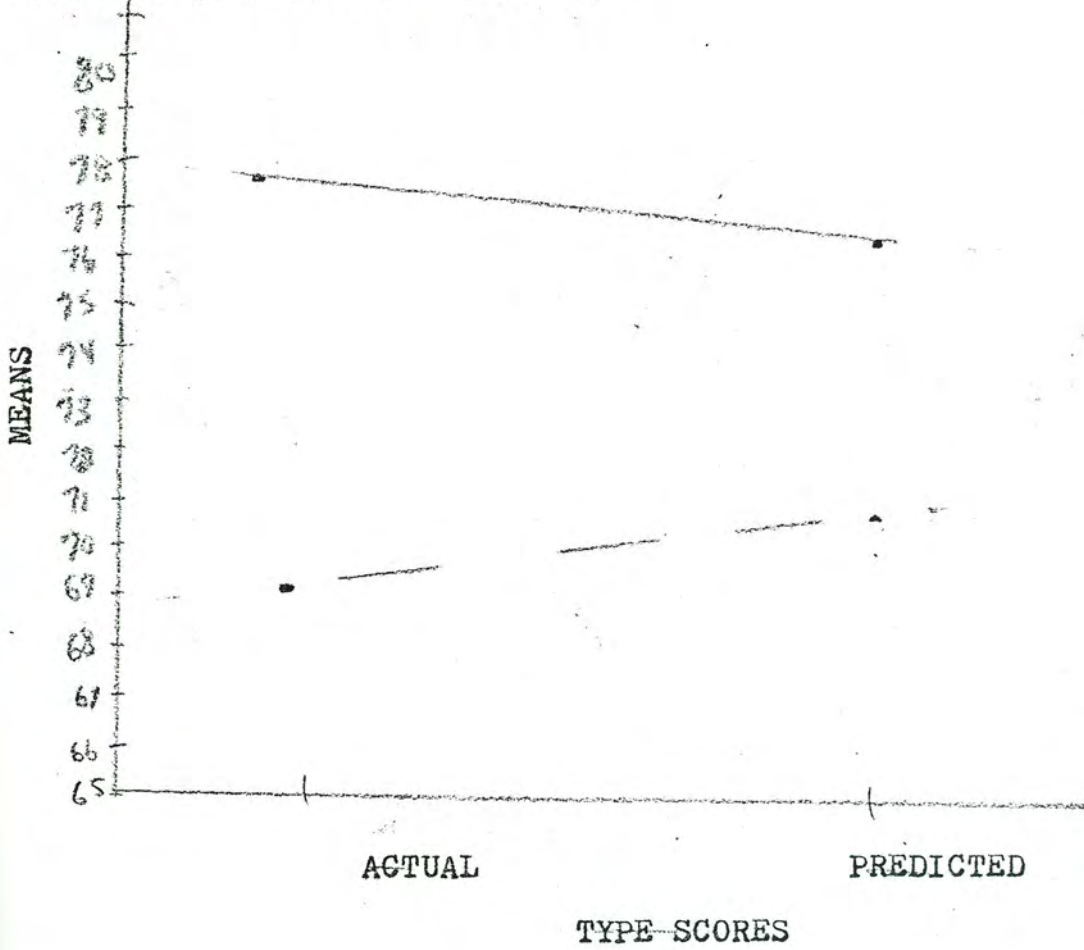
Figure 3



———— Multiple Choice  
----- Essay

Figure 4

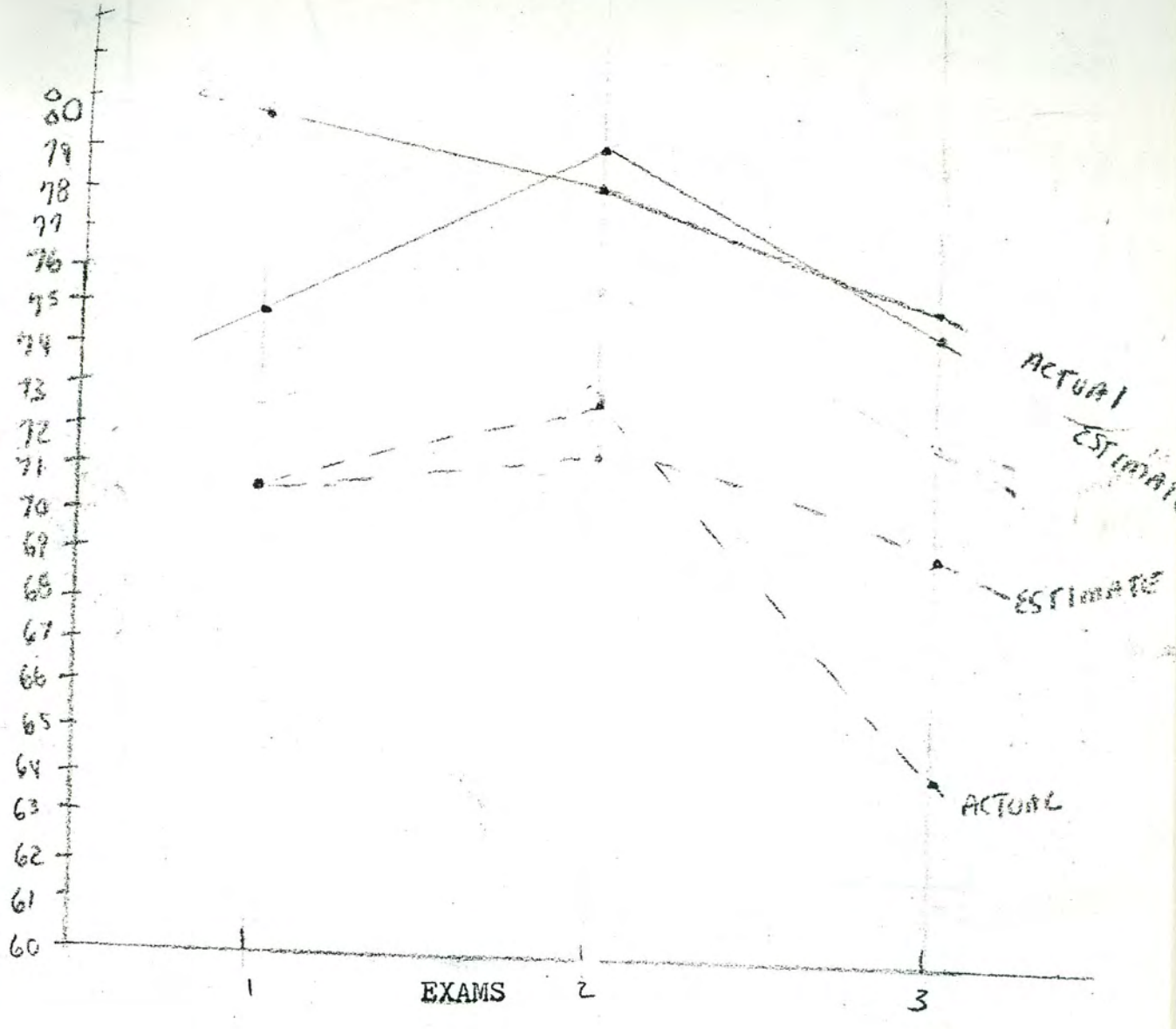
	Actual	Predicted
Develop	$\bar{x}=69.11$	$\bar{x}=70.44$
Nondevelop	$\bar{x}=77.82$	$\bar{x}=76.36$



————— Nondevelopmental

- - - - - Developmental

Figure 5



—————Nondevelopmental

-----developmental

Figure 6

ABSOLUTE MEAN DIFFERENCE SCORE

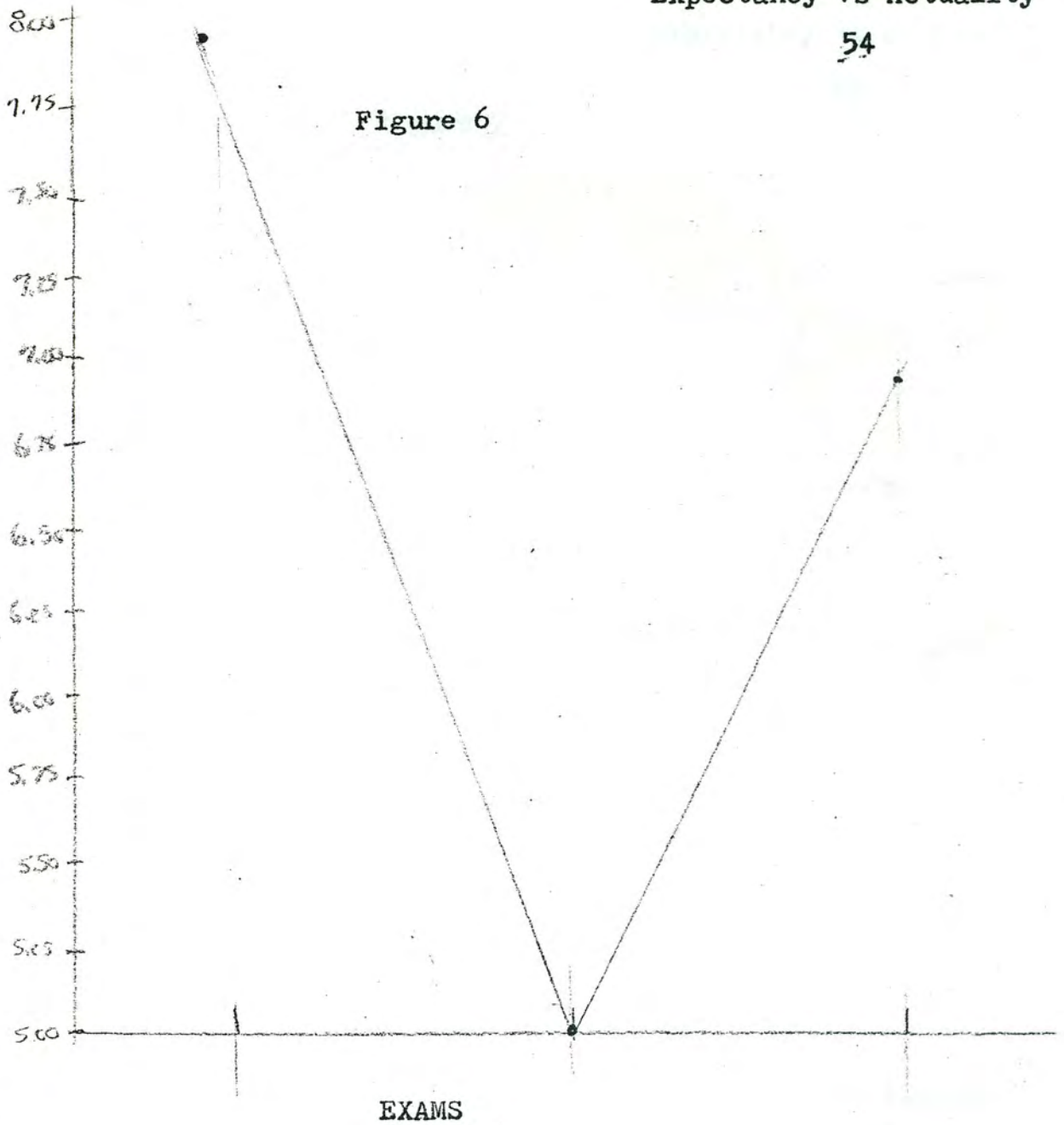


Figure 7

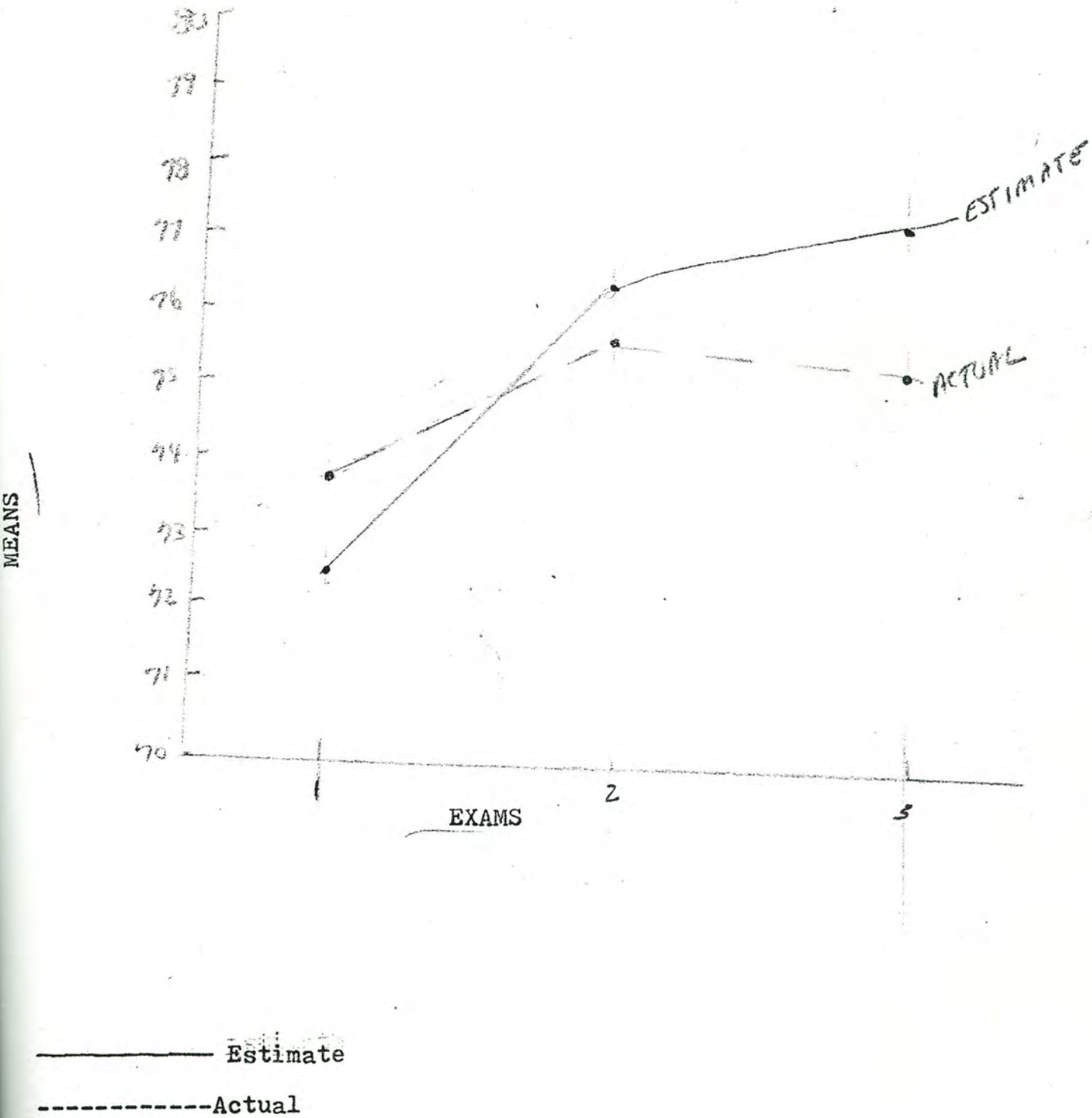


Figure 8

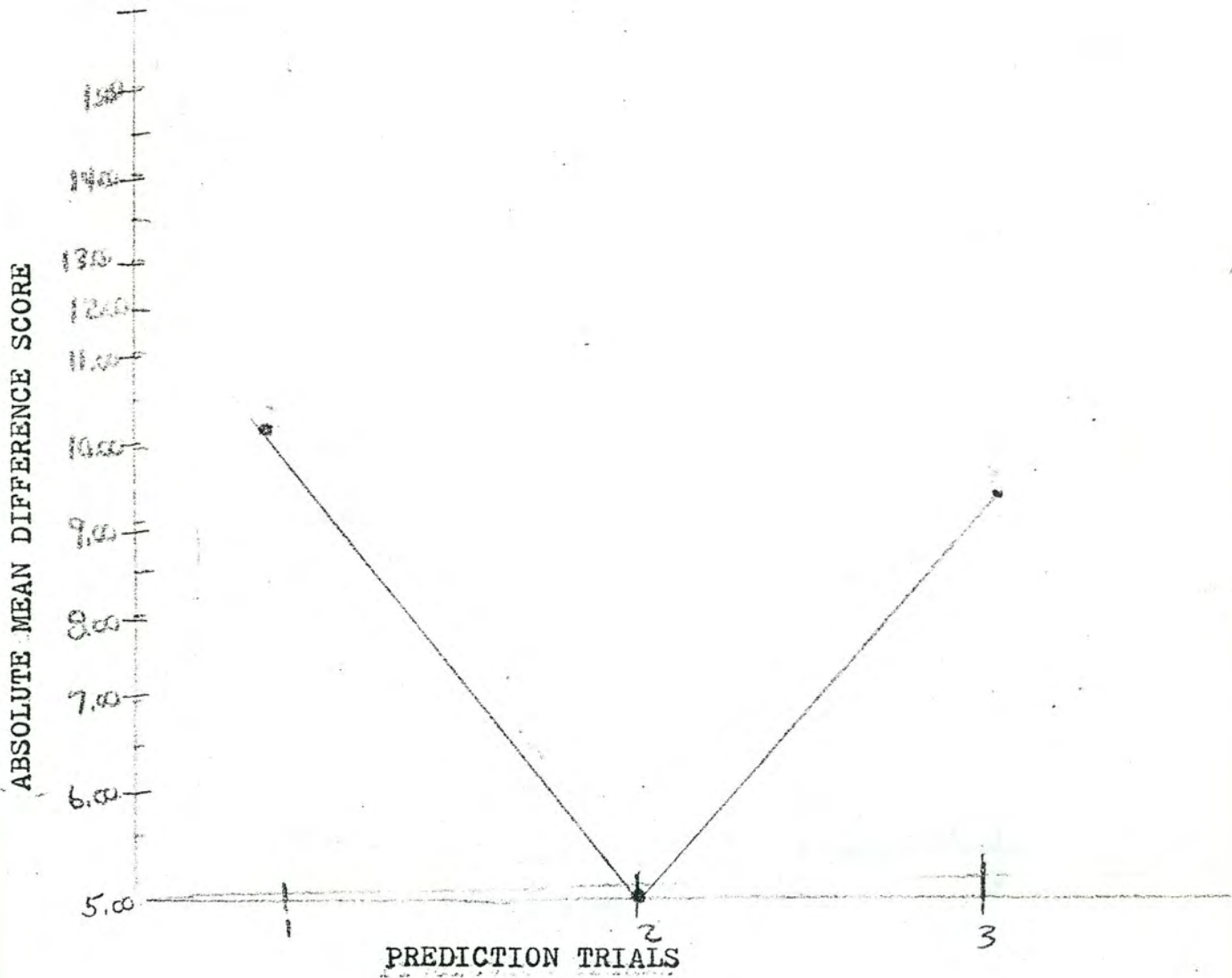


Figure 9

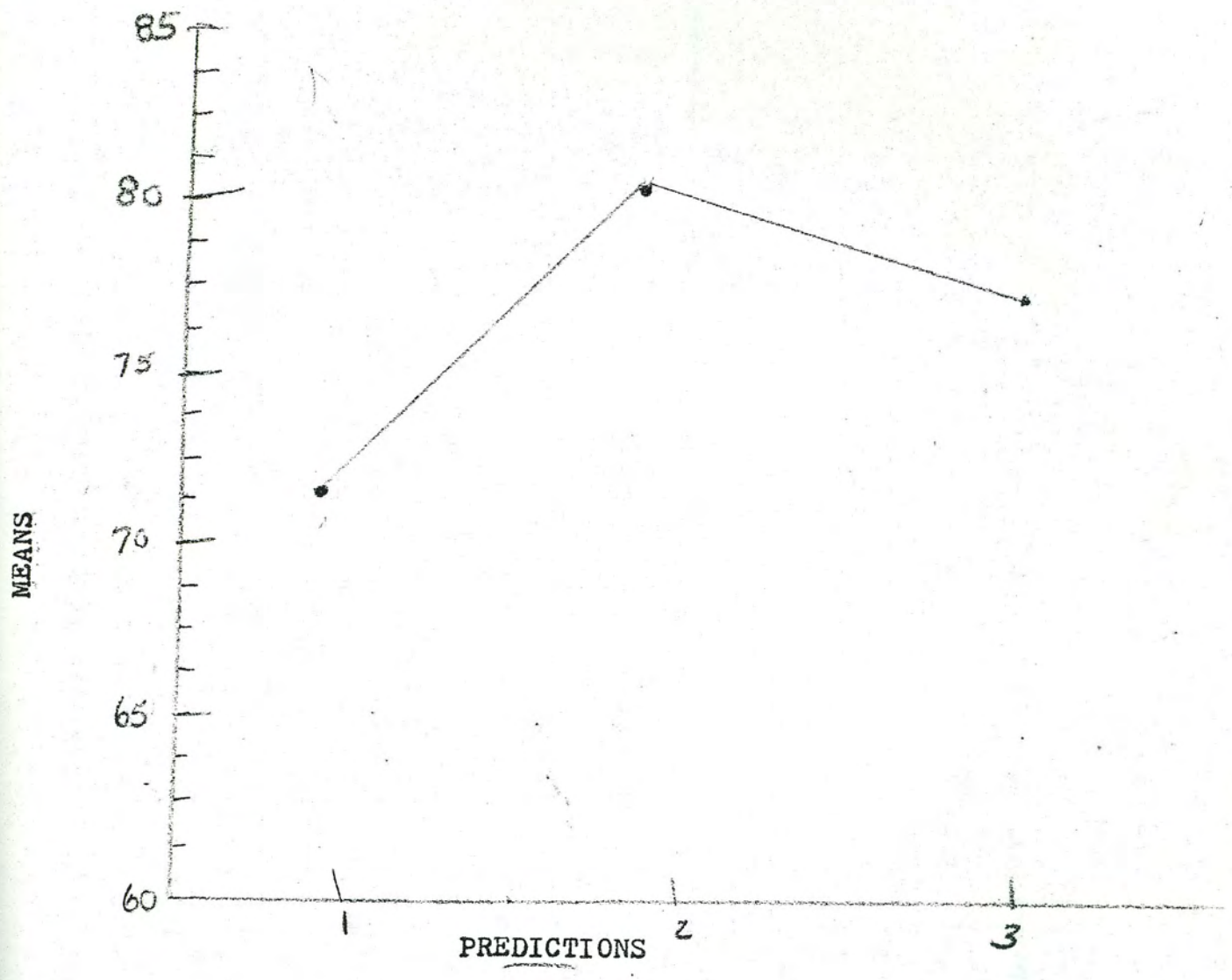
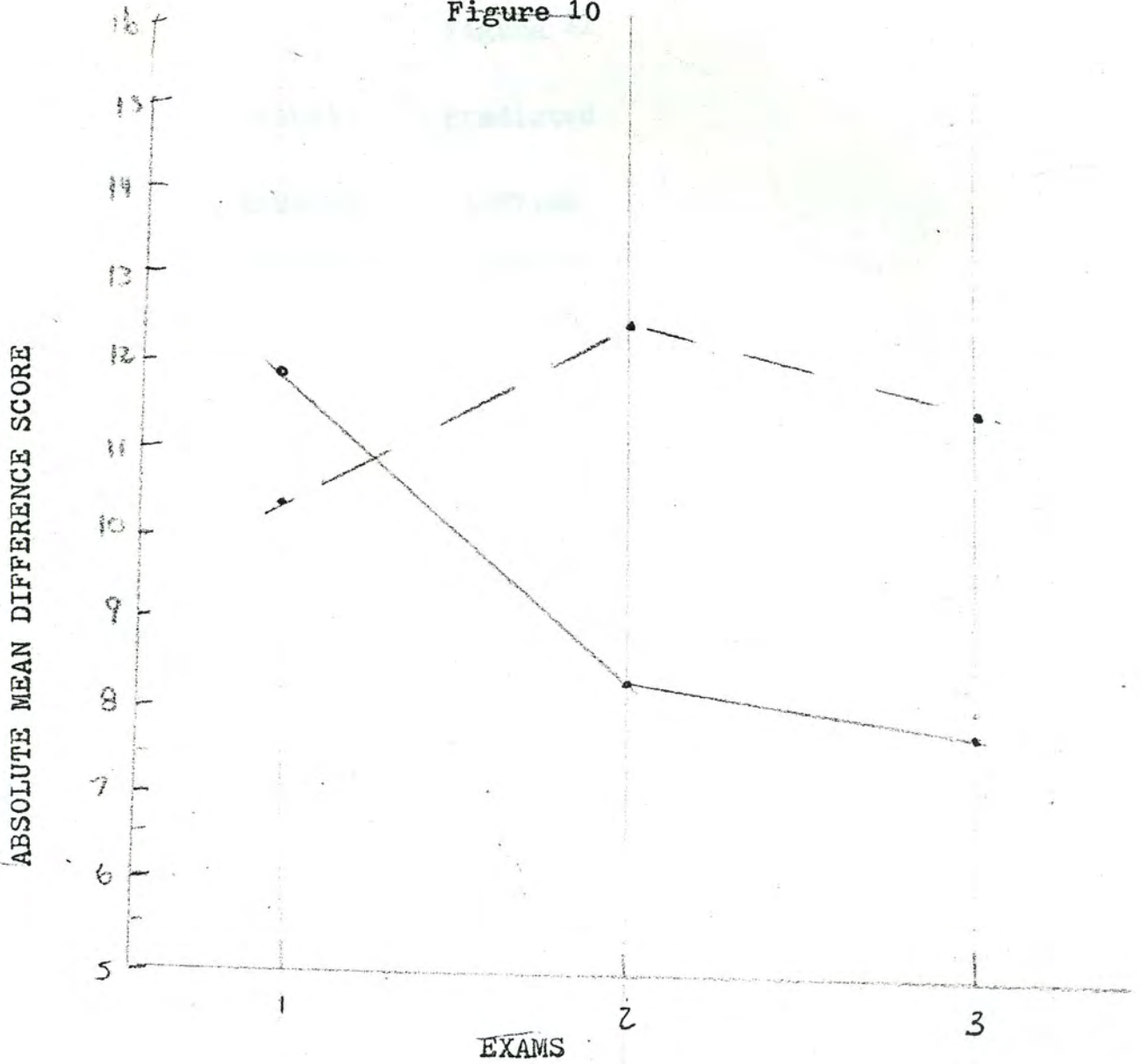


Figure 10

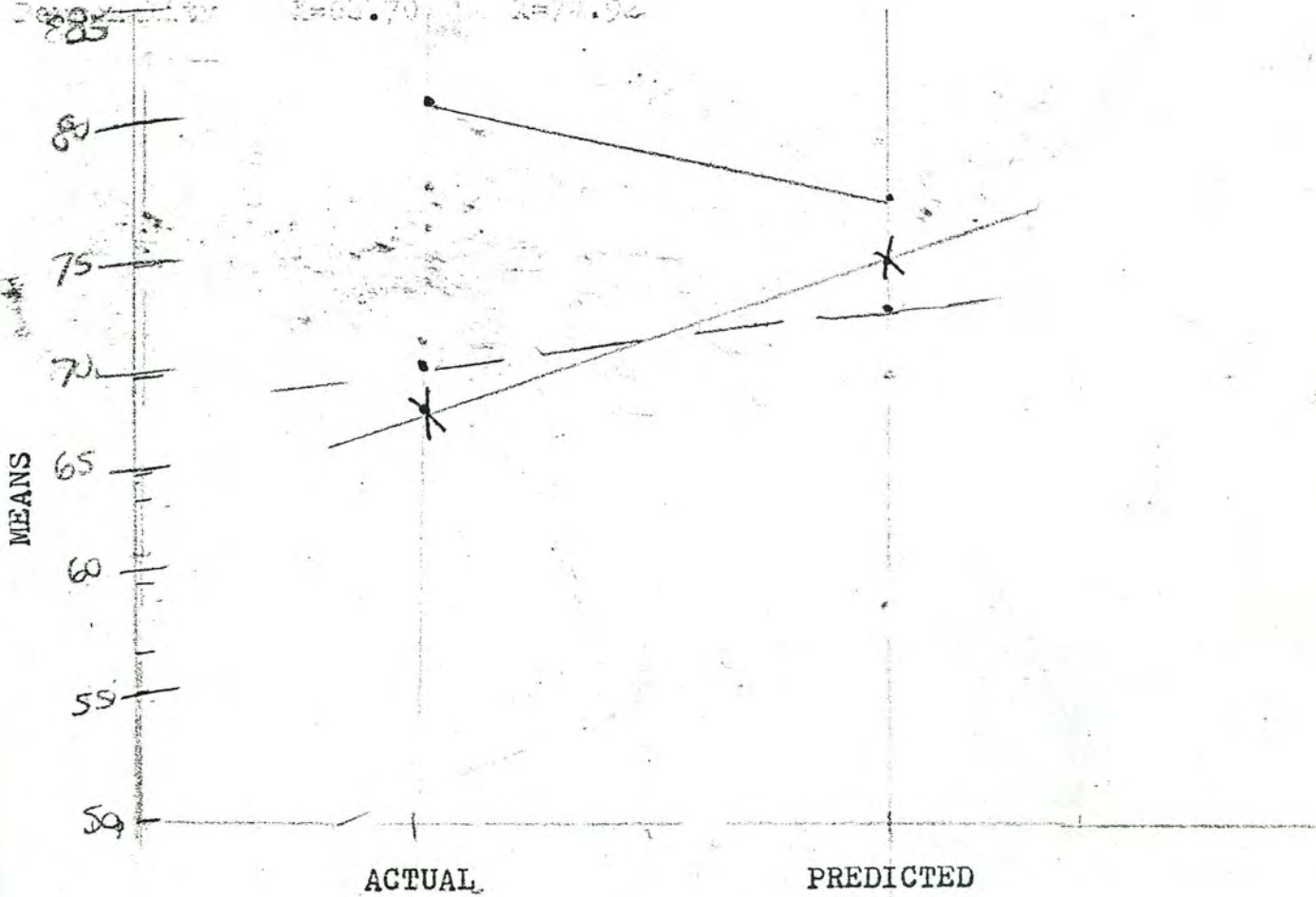


- Learning
- - -•- Social
- X- - - - XPersonality



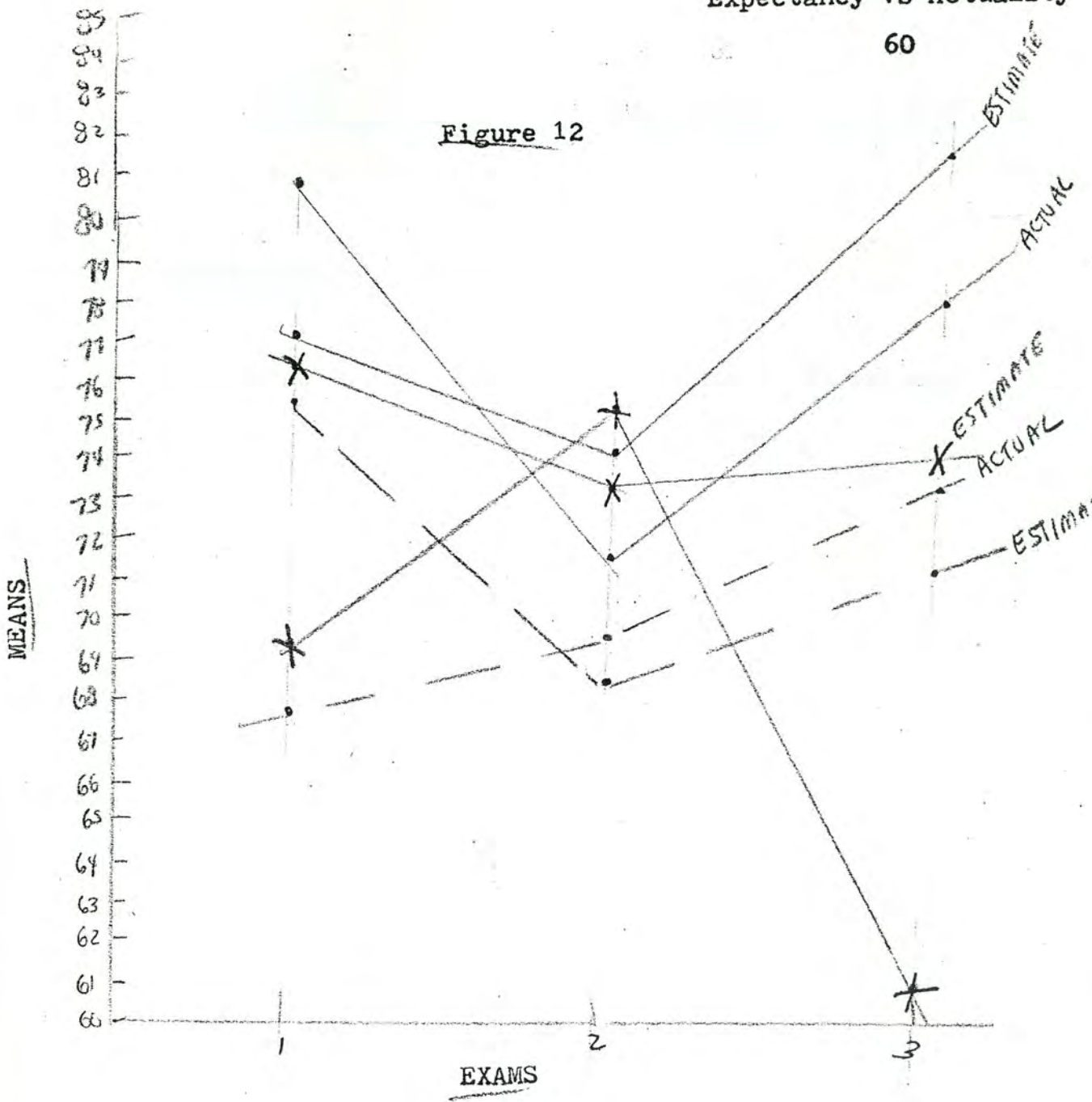
Figure 11

	<u>Actual</u>	<u>Predicted</u>
Learning	X=81.25	X=77.80
Social	X=70.32	X=74.04
Personality	X=68.70	X=74.92



● Learning  
 - - - Social  
 X Personality

Figure 12



- Learning
- - -•- Social
- X-X- Personality

First Questionnaire

Prediction Questionnaire used by Introduction to Psychology 10D,

Social, Personality, and Learning Psychology

General Instructions as written in Proposal

\*Please put the number of answers you expect to get right on this portion of the test. (PUT SPECIFIC SCORE)

\*Use the following Scale:

(A) 45-50

(B) 40-44

(C) 35-39

(D) 30-34

(F) Below 29

YOUR ESTIMATE OF YOUR SCORE: \_\_\_\_\_ \*ESSAY

Thank you for your help.

First Questionnaire

Second Questionnaire

Prediction Questionnaire used by Introduction to Psychology 100,  
Social, Personality, and Learning Psychology

General Instructions as written in proposal

General Instructions as written in proposal

\*Please put the number of answers you expect to get right

on this portion of the test. (PUT SPECIFIC SCORE)

\*YOU WILL BE ESTIMATING THE ESSAY AND MULTIPLE CHOICE  
PORTIONS OF THE TEST SEPARATELY.

ESTIMATE \*Use the following scale:

(A) 45-50 OUT OF THE 50 POINTS ON THE ESSAY PART OF THE TEST HOW  
MANY DO YOU BELIEVE YOU GOT CORRECT?

(B) 40-44

PUT SPECIFIC NUMBER \_\_\_\_\_

(C) 35-39

(D) 30-34 OUT OF THE 50 POINTS ON THE MULTIPLE CHOICE PART OF THE  
TEST HOW MANY DO YOU BELIEVE YOU GOT CORRECT?

PUT SPECIFIC (F) Below 29 \_\_\_\_\_

LAST YOUR ESTIMATE OF YOUR SCORE:            \*MULTIPLE CHOICE

Thank you for your help.

Thank you for your help.

Second Questionnaire

Prediction Questionnaire used by Introduction to Psychology 10D

General Instructions as written in proposal

\*YOU WILL BE ESTIMATING THE ESSAY AND MULTIPLE CHOICE PORTIONS OF THE TEST SEPERATELY.

ESTMATES:

OUT OF THE 50 POINTS ON THE ESSAY PART OF THE TEST HOW MANY DO YOU BELIEVE YOU GOT CORRECT?

PUT SPECIFIC NUMBER \_\_\_\_\_

OUT OF THE 50 POINTS ON THE MULTIPLE CHOICE PART OF THE TEST HOW MANY DO YOU BELIEVE YOU GOT CORRECT?

PUT SPECIFIC NUMBER \_\_\_\_\_

LAST 3 DIGITS OF YOUR SOCIAL SECURITY NUMBER \_\_\_\_\_

Thank you for your help.

First Questionnaire

Prediction Questionnaire used by Introduction to Psychology 100C,  
Learning, Social and Personality Psychology

General Instructions as written in Proposal

\*Please put the number of answers you expect to receive.

\*Use the following scale:

(A) 90-100

(B) 80-89

(C) 70-79

(D) 60-69

(F) Below 60

(PUT SPECIFIC SCORE)

YOUR ESTIMATE OF YOUR SCORE: \_\_\_\_\_ \*

Thank you for your help.

Prediction Questionnaire used by Industrial Psychology  
Second Questionnaire

on all three Predictions  
Prediction Questionnaire used by Introduction to Psychology 10C,

Learning, Social, and Personality Psychology

General Instructions as written in Proposal  
\*You will be predicting your examination grade three

times:  
Estimate:

1.) After finishing the test  
OUT OF THE \_\_\_ POINTS ON THE TEST HOW MANY DO YOU BELIEVE YOU  
2.) At the next class period  
GOT CORRECT?

3.) After the distribution of grades has been posted  
PUT SPECIFIC SCORE \_\_\_\_\_  
on the board

LAST 3 DIGITS OF YOUR SOCIAL SECURITY NUMBER \_\_\_\_\_

Thank you for your help.

OUT OF THE 100 POINTS ON THE TEST HOW MANY DO YOU  
BELIEVE YOU GOT CORRECT?

PUT SPECIFIC NUMBER \_\_\_\_\_

LAST 3 DIGITS OF YOUR SOCIAL SECURITY NUMBER \_\_\_\_\_

Thank you for your help.

Prediction Questionnaire used by Industrial Psychology  
on all Three Predictions

General Instructions as written in Proposal

\*You will be predicting your examination grade three  
times:

- 1.) After finishing the test
- 2.) The next class period
- 3.) After the distribution of grades has been posted  
on the board

Estimate (one, two, or three—depending which prediction trial  
it was)

OUT OF THE 100 POINTS ON THE TEST HOW MANY DO YOU  
BELIEVE YOU GOT CORRECT?

PUT SPECIFIC NUMBER \_\_\_\_\_

LAST 3 DIGITS OF YOUR SOCIAL SECURITY NUMBER \_\_\_\_\_

Thank you for your help.