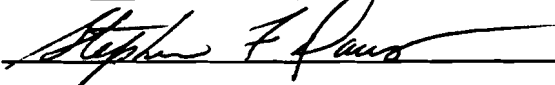


AN ABSTRACT OF THE THESIS OF

Rebecca R. Hendrix for the Master of Science
in Psychology presented on April 8, 1992

Title: The Relationship Between Delinquent Attendance, Exam
Performance, Final Grade, and Grade Point Average

Abstract Approved: 

The present study was designed to ascertain the relationship between poor attendance rates, exam score, final course grade, and grade point average (GPA). Subjects were 222 introductory psychology students (82 men and 140 women). Each subject was classified by gender (male or female) and attendance as either delinquent (missed 3 or more 50-minute Monday-Wednesday-Friday classes or 2 or more 80-minute Tuesday-Thursday classes between exams) or regular. Initial, midterm, and final exam scores were gathered for each subject as well as overall course grade, semester grade point average (GPA), and American College Test (ACT) scores. Separate unweighted means, fixed factor analyses of variance were conducted to examine differences between gender and attendance on exam scores, course grades, GPA, and ACT scores. Those subjects with delinquent attendance rates received significantly lower scores than those with regular attendance on midterm and final exams, course grade, and GPA. A significant effect of gender was found in terms of final exam scores and course grade; females received higher scores than males.

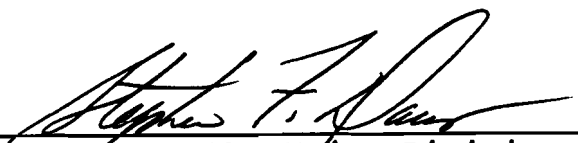
THE RELATIONSHIP BETWEEN DELINQUENT ATTENDANCE,
EXAM PERFORMANCE, FINAL GRADE, AND GRADE POINT AVERAGE

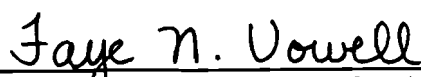
A Thesis

Presented to
the Division of Psychology
and Special Education
EMPORIA STATE UNIVERSITY

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Rebecca R. Hendrix
April, 1992


Approved for the Major Division


Approved for the Graduate Council

ACKNOWLEDGEMENTS

I would like to thank the members of my committee, Dr. Deanna Hawes, Dr. Bill Yates, and especially my chairman, Dr. Stephen F. Davis, who read the many versions, for serving on my committee. Their guidance, comments, and suggestions were most beneficial.

I would also like to thank several other people who contributed to the completion of this project. I would like to thank Dr. Loren Tompkins for his ideas and input regarding the statistical design and for help in attaining various pieces of information. I would like to thank each of the graduate assistants who allowed me access to their class records: Sara Armstrong, Kathie Harris, Holly Miller, Kaira Miller, and Heather Yates. In addition, I would like to thank those students who helped me gather the data: Cynthia Goevert, Carol Lathrop, Holly Miller, Myra Pfeifer, and Doug Hamel.

Finally, I would like to thank my parents, Dean and Betty Freeman, who have supported me throughout my academic career. Thank you to my friends who were always there to help and offer advice: Roger Edson, Ann Thompson, Gina Lomax, and Rick Christy. Last, but certainly not least, I would like to thank my husband, Russell Hendrix, who put up with the bad, as well as the good times.

TABLE OF CONTENTS

	page
LIST OF TABLES	ii
CHAPTER	
1. INTRODUCTION.	1
2. METHOD.	12
3. RESULTS	15
4. DISCUSSION.	20
REFERENCES	24
APPENDIX A	27

LIST OF TABLES

	page
Table 1: Number of Subjects per Cell by Gender and Attendance	16
Table 2: Mean Midterm Exam Scores by Gender and Attendance	16
Table 2: Mean Final Exam Scores by Gender and Attendance	17
Table 3: Mean Course Grade by Gender and Attendance . .	18
Table 4: Mean Semester GPA by Gender and Attendance . .	18
Table 5: Mean Course Grade for Each Class Section by Gender and Attendance	19

CHAPTER 1

INTRODUCTION

Student retention is an issue that many college administrators face annually. Angelo (1990) indicates that colleges lose approximately 25 to 65% of their incoming freshman class each year. He adds that 60 out of every 100 freshmen will drop out of their first college of attendance without graduating. A little less than 50% of these drop-outs will not return to any college.

Rotter (1988) indicates that grades have the greatest influence on retention of freshman and sophomore college students; students with low grades tend to drop out of college. Therefore, it seems logical that methods to increase grade point average (GPA) must be developed in order to increase retention. Rotter delineates several procedures which could be implemented to increase grades; these methods include study skill instruction, improved faculty-student relationships, increasing student confidence in major selection, and regular class attendance. These behaviors enhance attention and processing of material thus improving understanding and hopefully increasing grades (Rotter, 1988).

Educators have, for many years, believed that the amount of effort put forth by each student reflects the level of reward (a grade) that person should receive (Hill, 1990; Schuman, Walsh, Olson, & Etheridge, 1985). Various

researchers have investigated this belief by attempting to relate the amount of time a student spends studying with the grade received.

Schuman et al. (1985) defined effort as the amount of studying or other class preparation done by a student. They proposed that GPA would be positively related to the quantity of study an individual expended. To test this prediction, a series of studies was conducted at the University of Michigan. In the first and third study, subjects consisted of 424 and 273 students from the Literature, Science, and Arts Colleges, respectively. The second study used students in a specific course, Organic Chemistry. The final investigation consisted of a stratified random sample of 64 students from the total undergraduate student body.

Throughout this series, students were interviewed, surveyed, and asked to give a time chart of their activities. Scholastic Aptitude Test (SAT) scores and GPAs also were gathered for each subject. Schuman et al. (1985) found a weak, inconsistent association between the number of hours studied and grade received. They found that studying on the weekend, as opposed to during the week, was more likely to affect GPA. A strong positive correlation between class attendance and GPA also was revealed.

Hill (1990) proposed that the inconclusive results reported by Schuman et al. (1985) were simply an artifact

created by the samples that were used. Hill (1990) conducted two different replications at a different university to try to support his assumption that the more effort (time spent studying) a person expended the higher the grade achieved. Answers to questionnaires, semester grades, first exam scores, scores on the final exam, and number of absences were used to determine the relationship between effort and reward. In agreement with the Schuman et al. (1985) data, Hill (1990) reported a positive correlation between weekend study and grade earned and a negative correlation between class absences and GPA. Thus, Hill's (1990) data supported the Schuman et al. (1985) results.

Because effort, as defined by number of hours studying, appears to have only a small nonsignificant effect on GPA (Hill, 1990; Schuman et al., 1985), other factors which influence grades remain to be delineated. Intuitively, one expects that the ability of the student should be one of these factors. Ability can be examined through the use of past measures of aptitude such as high school GPA, American College Test (ACT) or SAT scores, and college GPA for courses already taken.

Hogrebe, Cannon, and Ervin (1984) emphasized the relationship between high school academic performance and college achievement. They postulated that high school GPA, college preparatory classes, first-quarter GPA in a college course, and number of class absences during the first

quarter of college were related. To test this assumption, high school GPA, transcripts, and course grades from high school student record files were collected in addition to first quarter absences for a college developmental studies course. They also collected high school teacher ratings of ability for each subject.

When the data were analyzed, Hoglebe et al. (1984) found a significant negative correlation between high school GPA and college course absences. In addition, first quarter college GPA revealed a significant negative relationship with college absenteeism. Hoglebe et al. also found a positive correlation between high school GPA and high school teacher ratings of the students. Of all the variables examined, Hoglebe et al. concluded that the best predictor of college developmental studies success was high school GPA.

The above studies have in common one important finding, grades seem to be related to class attendance. Class attendance is a general predictor of involvement in education (Rotter, 1988); greater involvement in one's education should result in higher grades. This premise seems to be related more to motivational characteristics of the students rather than effort or ability in a classroom (Buckalew, Daly, & Coffield, 1986; Hill, 1990). Several investigators have taken this line of reasoning to examine the relationships between class attendance and the grade

that is achieved.

One indicator of student motivation may be the timeliness of enrollment. The results of several studies examining the effect(s) of this factor have yielded mixed results. Angelo (1990) defined a late registrant as one who enrolled in a course after the end of the first week of classes. This week of absence was believed to hinder students' grades because they missed too much important introductory material. Angelo also postulated that late registrants would drop classes more often than timely registrants because they missed vital introductory information. He also believed that late registrants who did persist would have significantly lower course grades because they continued to have an information deficit when compared to timely registrants. Contrary to these expectations, Angelo (1990) found that late registrants had a lower noncompletion rate than timely registrants. Moreover, no significant differences were found between the grades of timely and late registrants.

On the other hand, Mannan and Preusz (1976) found that the grades of late registrants were significantly lower than those of timely registrants. Mannan and Preusz (1976) compared 257 late registrants with 257 regularly enrolled students. They examined GPA as a measure of achievement and reported that timely registrants received higher grades than late registrants. The most startling finding was that 6.5%

of the timely registrants received a course grade of F while 24.1% of late registrants received this grade. In this case, late registration, 6 days of missed classes, seemed to have hindered grade acquisition.

A third major study of late registrants has been reported recently by Diekhoff (1992). This study examined several characteristics of timely and late registrants. Among these academic outcome measures were: scores on the first examination, course grade, number of absences following enrollment, and attrition. The subject sample consisted of 1,518 students enrolled in introductory psychology classes over a 14-year period. Of this number, 123 students (8.1%) were classified as late enrollees-- students who missed at least 2 classes because of late registration and who were not on first day class rosters. One hundred twenty-three timely registrants were randomly selected to serve as a comparison control group.

Comparisons of the late and timely registrants failed to yield reliable differences on first-exam grades or on course grades. These findings are consistent with those reported by Angelo (1990). However, Diekhoff (1992) found that late registration adversely influenced attendance in classes having a nonrestrictive attendance policy; late registrants missed more classes. In those classes having a restrictive attendance policy, late registrants suffered significantly greater attrition than did timely registrants.

Another motivational factor that may be related to classroom performance is academic curiosity. Vidler (1980) assumed that those students who attend class voluntarily are more likely to desire learning and thus will have higher GPAs. He gave students two different tests of intellectual curiosity and received ratings from teachers about the students. The teacher ratings included a general assessment of the amount of curiosity each student displayed about learning. In addition to these variables, class attendance was taken. These measures were used to relate the degree of academic curiosity with the grade received. Vidler found that course grades and attendance were related; those students who attended class regularly did better on exams. Finally, a positive correlation was found between academic curiosity and attendance.

Research conducted by Buckalew, Daly, and Coffield (1986) and Brocato (1989) support Vidler's (1980) conclusion that grades and absences are negatively related. Buckalew et al. (1986) were interested in the relationship between attendance at the first class meeting and overall course performance. They reported that even initial class attendance was related to overall course grade; students missing the initial class performed less well in the course.

Brocato (1989) used grade and absence data from economics courses at The University of North Texas to examine the relationship between grades and attendance. He also

compared upperclassmen (juniors and seniors) with lowerclassmen (freshmen and sophomores) to investigate the effect(s) of maturity. Consistent with previous data, Brocato reported a significant negative correlation between class absence and grade. He also found this correlation to be stronger among freshmen and sophomores than for juniors and seniors. Brocato concluded that regular class attendance may be more important for freshman and sophomores than upperclassmen.

Jones (1984) proposed four models to explain the relationship between class attendance and grades. The Motivation Model says that GPA and class absences are indirectly associated. In this situation, the mediating factor is the student's desire to acquire a college education; low motivation causes more absence and lower grades. The Ability Model states that GPA and class absences are mediated by the scholastic ability of a student; low ability results in low grades and more missed classes. Classes might be missed in order to avoid a context of frustration and failure. The Attendance Model explains the relationship between absences and GPA as being directly related; delinquent attendance decreases grades. Finally, the Achievement Model states that absence and GPA have a direct negative relationship; low grades lead to delinquent attendance. It may be that students become discouraged with low grades and stop attending class.

Jones (1984) tested these models by administering a questionnaire designed to assess motivation, acquiring four sets of exam grades, and examining attendance reports. As expected, Jones found that attendance was negatively related with grades.

Since both the Achievement and Attendance Models predict direct negative correlations between exam scores and attendance, Jones (1984) concluded that the data fit these two models best. Since the indirect effects of motivation and ability were controlled for in Jones' study, these factors could not influence the outcome. Because the four sets of test grades were significantly related to absences occurring before each exam, Jones inferred that the data fit the Attendance Model best. However, since Jones (1984) reported correlational data, the specific nature of a causal-effect relationship could not be stated.

Griffore and Griffore (1982) attempted to explore the issue of achievement as related to academic self-concept and academic futility. By giving a pretest-posttest battery of self-concept, anxiety, and academic futility scales, they found that students who had lower GPAs had lower academic self-concept scores and higher academic futility scores. These factors possibly could lead to decreased class attendance as purported by Jones' (1984) Achievement Model.

Course attendance and course grades appear to be closely related both in high school and in college.

Research indicates that as attendance becomes remiss, grades tend to drop (Buckalew et al., 1986; Brocato, 1989; Hill, 1990; Hogrebe et al., 1984; Jones, 1984; Mannan & Preusz, 1976; Schuman et al., 1985; Vidler, 1980). However, these studies were concerned with the effect of initial class attendance on the first exam or the effect of an overall attendance pattern on final class grade. It is possible that delinquent attendance between the administration of class exams impairs a portion of class performance measures without harming the final grade. For example, a student may miss a week of classes during the middle of a semester and do poorly on the next exam. However, this student's final class grade may not be affected because he or she completes homework assignments or does well on all other exams. Thus, the relationship between attendance and course grade may be weak, while the relationship between attendance and the grade received on a specific exam may be quite substantial.

There may be several different reasons for low attendance rates among college students. First, college students who miss more classes may have low ability, poor organizational skills, and/or ineffectual study skills which result in lower grades. Second, students may become apathetic about a certain class after receiving a low exam grade(s). Such apathy would lead to decreased attendance. Finally, some students may not be willing to put forth the effort required to sustain a high GPA.

The current research attempts to determine if those subjects with delinquent attendance [miss three 50-minute Monday-Wednesday-Friday (MWF) or two 80-minute Tuesday-Thursday (TTH) classes between exams] will do worse on the next exam as compared to those who attend class regularly. Those students who have delinquent attendance are believed to be weaker students as seen by measures of ability such as ACT scores. Further, it is proposed that those students who miss more than a total of 6 MWF classes or 4 TTH classes throughout the semester will have a lower course grade than those students who miss fewer days.

It is important to study the above factors in an attempt to further understand the grade/attendance relationship and how it might contribute to the prediction of student academic performance. By using knowledge about this relationship, researchers can begin to develop methods to increase attendance and thereby raise GPA. Finally, this research is important in that it will help resolve discrepancies that currently exist in the research.

CHAPTER 2

METHOD

Subjects

Subjects were 222 students (82 men, 140 women) enrolled in 9 sections of introductory psychology courses at Emporia State University in the Fall semester, 1991. These 9 sections were taught by 5 different teachers. All students volunteered to participate in the study.

Emporia State University is located in a small, rural, Midwestern city. In general, the student population reflects this rural background. Demographic information about the subjects in the current study is as follows:

Age: Range (18-59) Mean (19.68) Standard Deviation (3.78)

Ethnic Background: 203 White, 6 Black, 7 Hispanic, 4 Native American, 2 Asian

Student Status: 209 traditional, 13 nontraditional

Class Level: 197 freshmen, 18 sophomores, 3 juniors, 3 seniors, 1 graduate

Data Sources

Data was collected from three primary sources throughout the course of the study. The first source was the classroom instructor. From the instructors, the researcher obtained social security numbers, attendance information, exam grades in percentages, and final course letter grades.

The second information source was the Emporia State

University mainframe computer. From accessing student enrollment records, several factors were identified for each subject. These factors included gender, class level, race, age, number of credit hours taken during the Fall 1991 semester, GPA for the Fall 1991 semester, status as a traditional or nontraditional student, and reenrollment information.

The final source was student enrollment records. From these records, ACT scores were acquired.

Procedure

Each introductory psychology instructor was asked for attendance information, exam grades, and final course grades for those students who agreed to participate in the study. Participation was solicited by passing out an informed consent form in conjunction with each subject's final exam. The consent form is shown in Appendix A.

Each subject's attendance record was then determined. Absences were counted prior to the first exam, midterm, and final. Days which had lectures related to any other exam were discarded. For example, Class A had 5 exams, test 1 was the first exam, test 3 was the midterm, and test 5 was the final. Days between tests 1 and 2 and between tests 3 and 4 were discarded because any absences during this time would not influence the grade on the midterm or final (assuming these exams are not cumulative).

By using this method, subjects with delinquent

attendance were determined. Attendance was considered delinquent when a student missed 3 or more 50-minute Monday-Wednesday-Friday (MWF) classes or 2 or more 80-minute Tuesday-Thursday (TTH) classes between exams.

Once the information was received from course instructors, the Emporia State University mainframe computer was accessed to collect subjects' gender, class level, race, age, number of credit hours taken for the Fall 1991 semester, GPA for the Fall 1991 semester, status as a traditional or nontraditional student, and reenrollment information. A student was considered traditional if date of high school graduation was May 1987 or later. Records of enrollment for the Spring semester of 1992 showed which students reenrolled in courses. Credit hours taken and GPA were determined by using only those classes in which the subject received a traditional grade of A, B, C, D, or F. Grade point average was calculated by assigning each letter grade a value; for example, A = 4, B = 3, C = 2, D = 1, F = 0. This value was then multiplied by the credit hours associated with the class the grade was received for. For instance, in a course worth 3 credit hours, a student received an A; thus, the product is 12. The products were then summed and divided by the total number of credit hours to yield a GPA for each student. Finally, ACT scores were obtained for each student.

CHAPTER 3

RESULTS

Attendance rates were determined for 82 males and 140 females. A subject was considered delinquent if 3 or more MWF classes or 2 or more TTH classes were missed prior to the initial, midterm, and/or final exam. The total number of absences throughout the entire semester was also determined for each subject regardless of test administrations. In terms of the entire semester, a subject was considered delinquent if 6 or more MWF or 4 or more TTH classes were missed. Table 1 shows the number of delinquent and regular subjects by category and gender.

Separate unweighted means, fixed factor analyses of variance (ANOVA) were run on the data to investigate the effects of gender (male or female) and attendance (delinquent or regular) on initial, midterm, and final exam scores. The effects of gender and attendance were similarly evaluated for final grade, semester GPA, and ACT scores.

The analyses yielded an interesting pattern of effects. There were no significant differences in gender or attendance on first exam scores. However, a significant effect of attendance was found on the midterm exam scores, $F(1, 218) = 21.42, p < .0001$. Subjects with delinquent attendance scored significantly lower on the midterm than subjects with regular attendance. Mean performance on the midterm exam for all groups is presented in Table 2.

Table 1

Number of Subjects per Cell by Gender and Attendance.

	<u>Initial Exam</u>	
	<u>Delinquent</u>	<u>Regular</u>
<u>Males</u>	10	72
<u>Females</u>	8	132
	<u>Midterm Exam</u>	
	<u>Delinquent</u>	<u>Regular</u>
<u>Males</u>	15	67
<u>Females</u>	15	125
	<u>Final Exam</u>	
	<u>Delinquent</u>	<u>Regular</u>
<u>Males</u>	16	66
<u>Females</u>	16	124
	<u>Semester Attendance</u>	
	<u>Delinquent</u>	<u>Regular</u>
<u>Males</u>	29	53
<u>Females</u>	40	99

When analyzing course grade by semester attendance, the delinquent female category equals 40 because one student received an Incomplete for the course.

Table 2

Mean Midterm Exam Scores by Gender and Attendance.

	<u>Delinquent</u>	<u>Regular</u>
<u>Males</u>	71.00	82.57
<u>Females</u>	72.53	84.71

The final exam also revealed a significant effect of attendance, $F(1, 218) = 11.43$, $p < .0009$. Again, students with delinquent attendance scored significantly lower than those with regular attendance. The final exam scores also exhibited a significant effect of gender, $F(1, 218) = 4.30$, $p < .039$; males received significantly lower scores on this exam than females. Table 3 displays the final exam means for all groups.

Table 3

Mean Final Exam Scores by Gender and Attendance.

	Delinquent	Regular
Males	67.38	78.71
Females	74.88	83.40

In order to analyze course letter grades, the grades were first converted to numbers, A = 4, B = 3, C = 2, D = 1, F = 0. Analysis of these converted scores revealed both gender and attendance effects. Females received significantly higher course grades than males, $F(1, 217) = 4.68$, $p < .032$. Those students who showed a pattern of delinquent attendance throughout the semester (missed 6 or more MWF or 4 or more TTH classes) received significantly lower grades than students with regular attendance, $F(1, 217) = 30.38$, $p < .0001$. Mean course grade by group are shown in Table 4.

Table 4

Mean Course Grade by Gender and Attendance.

A = 4	B = 3	C = 2	D = 1	F = 0
	Delinquent	Regular		
Males	2.07	2.92		
Females	2.43	3.21		

When the effects of gender and attendance were evaluated in terms of semester GPA, a significant effect of attendance was found. Students with delinquent attendance throughout the semester had lower GPAs than students with regular attendance, $F(1, 218) = 39.49, p < .0001$. Table 5 presents mean semester GPA by gender and attendance.

Table 5

Mean Semester GPA by Gender and Attendance.

A = 4	B = 3	C = 2	D = 1	F = 0
	Delinquent	Regular		
Males	2.00	2.82		
Females	2.29	2.92		

The analysis of ACT scores failed to yield significant gender and attendance effects. Thus, differences in initial ability measures were not a confounding factor in this study. ACT scores were available for only 147 subjects; 11 delinquent males, 33 regular males, 24 delinquent females, 79 regular females.

Finally, a one way ANOVA was performed to ascertain

differences between class sections. A significant between-classes effect was found, $F(8, 212) = 3.68, p < .0005$. Again, one female subject was removed from the analysis because her class grade was Incomplete. Post hoc analysis (Tukey's HSD test) indicated that subjects in Class Sections 1, 2, 5, and 8 received significantly ($p < .05$) higher grades than subjects in Class Section 6. Subjects in Class Section 2 received a significantly ($p < .05$) higher grade than subjects in Class Section 4. The mean course grade for each class section by gender and attendance is shown in Table 6.

Table 6

Mean Course Grade for Each Class Section by Gender and Attendance.

A = 4 B = 3 C = 2 D = 1 F = 0

	<u>Delinquent</u>	<u>Regular</u>
<u>Section 1</u>		
Males	2.00	3.85
Females	2.75	3.47
<u>Section 2</u>		
Males	2.50	3.80
Females	3.50	3.38
<u>Section 3</u>		
Males	2.50	2.80
Females	1.00	3.17
<u>Section 4</u>		
Males	2.00	2.67
Females	1.00	2.73
<u>Section 5</u>		
Males	3.00	2.71
Females	3.67	3.55

<u>Section 6</u>		
Males	1.40	1.17
Females	2.63	4.00
<u>Section 7</u>		
Males	2.00	3.00
Females	2.40	3.00
<u>Section 8</u>		
Males	3.50	3.33
Females	2.80	3.20
<u>Section 9</u>		
Males	1.67	3.29
Females	1.60	3.06

CHAPTER 4

DISCUSSION

In general, the results of the current study supported the hypotheses. Students who had delinquent attendance between exams received lower exam grades than students with regular attendance. Students with more than six MWF or four TTH absences received lower grades for the course and exhibited lower GPAs.

Clearly the present results corroborate previous reports (Brocato, 1989; Buckalew et al., 1986; Hill, 1990; Hoglebe et al., 1984; Jones, 1984; Mannan & Preusz, 1976; Schuman et al., 1985; & Vidler, 1980). These researchers found negative relationships between absences and course grades. Unlike the previous studies, the current research went one step further by examining data not only at the beginning of the class but also during the middle and end of the class. The present results show that delinquent attendance between exams impairs performance on the next exam regardless of when the exam occurs during the course.

The current study establishes the importance of class attendance. If the goal of higher education is the acquisition of knowledge then ways to discourage delinquent attendance must be found. First, instructors could implement restrictive attendance policies. For instance, the instructor could state that each absence would result in the decrease of course grade by one letter. Second,

incentives could be given for attendance. For example, the instructor could give extra credit points for attendance on randomly selected days. Finally, faculty can try to exhibit a caring attitude toward students and develop high quality teaching techniques (Rotter, 1988).

It is important that students acquire basic principles in a field early in their education. Thus, when attempts to increase attendance fail, instructors must find alternate ways to encourage learning of the material. Kiewra (1985) suggests one way to encourage learning is by making the instructor's own notes available for student use. Professor's notes typically are more organized and complete than those taken by a student during class. Thus, the amount of information gleaned by the student will be superior if the instructor's notes are consulted. In fact, Kiewra found that learning from a lesson is promoted by reviewing the instructor's notes regardless of whether the student merely listens to the lecture, takes notes during the lecture, or is absent from the lecture.

Rotter (1988) suggests that students who miss class but still complete assignments may not suffer low grades. Thus, they acquire information by outside study. By completing assignments, students review and consolidate material learned in class even if they do not attend. Consequently, even though the student is absent, the individual is still learning the material. Therefore, it seems logical that

11

instructors assign homework and emphasize its completion as part of their teaching methods.

Another factor involved in attendance is the student attitude toward faculty. Rotter (1988) indicated that students who dropped out of college were more likely to communicate feelings of dissatisfaction toward faculty than those who persisted. This finding could be extended to individual classrooms. Perhaps, students do not attend class because of dissatisfaction with the instructor. Hence, it may become necessary to increase faculty/student relationships, as well as instructional quality.

Future studies need to focus on ways to increase student involvement in education. Since low attendance and low grades are related, explanations for low attendance must be examined. Various ways to increase attendance rates need to be developed and studied in an attempt to keep students in class. It is hoped that the results of this study, as well as future investigations, will contribute to the understanding of the formation and maintenance of class attendance.

However, future researchers need to be aware of several potential considerations. First, in the current study, those subjects who were considered delinquent during the first exam period may not have been delinquent on the subsequent exams. Because of this, the carryover effect of a poor grade due to delinquent attendance is not controlled

for on later tests. Hence, it is proposed that a repeated measures format may enhance the understanding of attendance patterns between exams. A second problem concerns the between-section differences of the classes, especially in grading. Future researchers could control this factor by having a set grading format for each instructor and class involved. An alternate plan would be to have each section taught by the same teacher who would use the same grading practices in each class. Finally, the current results should be carefully generalized because subjects were solicited from intact groups. Thus, these groups may have particular characteristics not found in other samples.

REFERENCES

- Angelo, D. T. (1990). The relationship between late registration and student persistence and achievement. College and University, 65, 316-327.
- Brocato, J. (1989). How much does coming to class matter? Some evidence of class attendance and grade performance. Educational Research Quarterly, 13(3), 2-6.
- Buckalew, L. W., Daly, J. D., & Coffield, K. E. (1986). Relationship of initial class attendance and seating location to academic performance in psychology classes. Bulletin of the Psychonomic Society, 24, 63-64.
- Diekhoff, G. M. (1992). Late registrants: At risk in introductory psychology. Teaching of Psychology, 19, 49-50.
- Griffore, R. J., & Griffore, G. D. (1982). Some correlates of high and low first term achievement in college. College Student Journal, 16, 249-253.
- Hill, L., Jr. (1990). Effort and reward in college: A replication of some puzzling findings. Journal of Social Behavior and Personality, 5, [Special Issue], 151-161.
- Hogrebe, M. C., Cannon, S. B., & Ervin, L. (1984). High school measures predicting performance in college developmental studies courses. Educational and Psychological Research, 4, 97-109.

- Jones, C. H. (1984). Interaction of absences and grades in a college course. The Journal of Psychology, 116, 133-136.
- Kiewra, K. A. (1985). Learning from a lecture: An investigation of notetaking, review, and attendance at a lecture. Human Learning, 4, 73-77.
- Mannan, G., & Preusz, G. C. (1976). University late registrants and related academic problems. College Student Journal, 10, 375-379.
- Rotter, N. G. (1988). Student attrition in a technological university: Academic lifestyle. College Student Journal, 22, 241-248.
- Schuman, H., Walsh, E., Olson, C., & Etheridge, B. (1985). Effort and reward: The assumption that college grades are affected by quantity of study. Social Forces, 63, 945-966.
- Vidler, D. C. (1980). Curiosity, academic performance, and class attendance. Psychological Reports, 47, 589-590.

APPENDIX A
INFORMED CONSENT FORM

INFORMED CONSENT FORM

The Division of Psychology and Special Education promotes the practice of protection for human subjects participating in research and related activities.

The following information is provided so that you can decide whether you wish to participate in the present study. A project is being conducted to determine the academic progress of students in Introductory Psychology. Your instructor will be supplying information concerning your performance in Introductory Psychology. All information will remain confidential.

You should be aware that, even if you agree to participate, you are free to withdraw at anytime, and that if you do withdraw from the project, you will not be subjected to reprimand or any other form of reproach.

Subject

Date

To: All Graduate Students Who Submit a Thesis or
Research Problem/Project as Partial Fulfillment of
the Requirements for an Advanced Degree

From: Emporia State University Graduate School

I Rebecca Hendrix, hereby submit this thesis to Emporia State University as partial fulfillment of the requirements for an advanced degree. I agree that the Library of the University may make it available for use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

Rebecca R Hendrix
Signature of Author

April 28, 1992
Date

The Relationship Between

Delinquent Attendance, Exam

Performance, Final Grade, and GPA

Title of Thesis

Jackie Tullard
Signature of Graduate Office Staff

April 28 1992
Date Received