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FACTORS RELATED TO ABSENTEEISM AND LATENESS TO CLASS IN NINTH GRADE SPECIAL NEEDS STUDENTS

A STUDY

PRESENTED TO

THE FACULTY OF THE SCHOOL OF EDUCATION

OLD DOMINION UNIVERSITY

IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE

MASTER OF SCIENCE IN EDUCATION

by
TUCKER GERARD FREEMAN
March 1980

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This research paper was prepared by Tucker Gerard Freeman under the direction of Dr. Malvern L. Miller in VIAE 636, Problems in Education. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the Degree of Master of Science in Education.

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CHAPTER 1

INTRODUCTION

Skipping class, truancy, and lateness to class are becoming the most pressing problem in our public high schools (Duke, 1978, p. 325). Many different factors related to this problem have been explored and need to be continually examined in order that parents, teachers, guidance counselors, administrators, and juvenile authorities can stay current with this pressing issue.

STATEMENT OF PROBLEM

The problem of this study will be to examine if there is a functional relationship between certain variables and skipping class, truancy, and lateness to class. The study will be conducted on and limited to ninth grade students in "special needs" at Washington-Lee High School in Arlington, Virginia. The school years in the study will be 1977-1978 and 1978-1979.

RESEARCH GOALS

The objectives and questions of this study are as follows:

- 1. Has the 7:30 A.M. starting time of the high school influenced the attendance patterns of ninth grade students at Washington-Lee?
- 2. Have peer associations and influence related to attendance patterns at Washington-Lee High School?

BACKGROUND AND SIGNIFICANCE

School administrators have identified their most pressing problems in high schools consist of skipping class, truancy and tardiness (Vuke, 1978, p. 325). Washington-Lee High School in Arlington, Virginia is no

exception to these pressing problems. Being a member of the faculty at Washington-Lee (working with special needs students), the researcher has noted grave concern at faculty meetings and through conferences with teachers, administrators and guidance counselors concerning skipping class, truancy, and lateness to class. The majority of the offenders (by ratio to overall school population) have been ninth grade "special needs" students.

Students who are not in school are usually somewhere else in the community. The absentee problem at Washington-Lee has aroused some negative feedback from the community to our school principal and his assistant principals.

The transition of the ninth grade students from the junior high schools to the senior high schools has been a difficult alteration for students, teachers, guidance counselors, and particularly the administrators. Many diciplinary problems have arisen from placing the ninth graders into the high schools. Enigmas have arisen from combining impressionable and less mature ninth graders with older students (10-12) who are permitted to function more i dependently without stringent guidelines. Ninth grade students are now able to blend in with juniors and seniors during free periods and also in designated smoking areas. They are being exposed to negative influences of older high school students as well as some positive ones.

LIMITATIONS OF THE STUDY

The findings and conclusions in this study will be limited to ninth grade students in "special needs" programs. The study will be limited to Washington Lee High School in Arlington, Virginia.

The study will not be concerned with excused absences and prolonged sickness. Sickness will be limited to that which is legitimate and substantiated by a doctor or a parent.

The study will be limited to a two year period. The school years to be included in the study will be 1977-1978 and 1978-1979.

The study will confine itself to only the research questions mentioned. It will not deal with any other factors or influences such as sincerts incarcerated in reform schools or detention centers.

"Special needs" students will be limited to the work experience and career exploration program. It will not include physically handicapped, gifted/talented, and emotionally mentally retarted students unless they were in the W.E.C.E.P. Program. The study will consist of only those students who completed the program. Those who dropped out or withdrew from the program will not be included in the study.

ASSUMPTIONS

Records of attendance for the school years 1977-1978 and 1978-1979 were accurately kept and accessable to the researcher. The records will be accurately transcribed and tabulated by the researcher.

Teachers and administrators at Washington-Lee High School will support this study.

PROCEEDURES

The total population of the ninth grade W.E.C.E.P. Program at Stratford Junior High School and Washington-Lee High School will be used to conduct this study. The study will consist of the total population in 1977-1978 and 1978-1979.

Data will be collected from school records and old grade books.

Absenteeism will be tabulated for the school year 1977-1978 when the starting time was 8:00 A.M. and the ninth graders had no peer association with older students within the school. Absenteeism will be tabulated for the school year 1978-1979 when the starting time was 7:30 A.M. and the ninth graders were intermingled with older students. Pearsons r will be used to answer questions about data in the form of absenteeism and lateness to class during two different school years.

DEFINITION OF TERMS

Absenteeism will refer to skipping class, truancy, and lateness to class inclusive. Absent meaning not present (at a place)
[Thorndike, Barnhart, 1951, p. 34].

<u>Special Needs</u> as defined by the State Department of Education means students who are; mentally retarded, physically handicapped, emotionally disturbed or cluturally or socially disadvantaged.

<u>W.E.C.E.P.</u> stands for Work Experience and Cooperative Education **Program.** It is primarily composed of culturally and socially **disadvantaged** students.

SUMMARY AND OVERVIEW

In summary, Chapter I has stated a problem with students cutting or skipping class, truancy, and lateness to class. This problem is the most pressing one in our high schools today. At Washington-Lee certain variables may have a relationship to this problem. The two that will be researched are: Starting Time of High School, and Peer Influence. The study will cover two years and consist of the special needs students in the W.E.C.E.P. Program at Washington-Lee High School. The next chapter in this study will consist of other studies and

information in the area of absenteeism.

CHAPTER II

A REVIEW OF LITERATURE

Studies regarding absenteeism and tardiness in high schools have been done. Unfortunately they are not conclusive. This problem has been identified, but few conclusions have been reached as to correlations or factors influencing absenteeism and tardiness in our schools today. One study reviewed showed that there is an increase in absenteeism and tardiness as students become older. The problem is therefore greater in the high schools than it is in the elementary and intermediate schools. The researcher feels that the statement of the problem in this study already acknowledges this as fact. This review of the literature will concentrate only on those studies which have been done in the areas of absenteeism and tardiness that the researcher deems relevant, to this particular research study. Consequently, this chapter will be concise and to the point.

Schools across the nation are suffering from an acute shortage of students and the proliferation of empty desks will continue into the 1980's. State and federal aid to schools is based primarily on enrollments, thus the under populated schools are becoming too expensive to run (Seligmann, 1978, p.94).

Closing Stratford Junior High School in Arlington and combining the ninth grade with the senior high school has been a direct result of this shortage of students. The ninth grade is now part of Washington-Lee High School in Arlington.

Senior high schools have a wider range of non academic activities within the school day. Free periods and frequencies of assemblies and other activities show a correlation to cutting classes in our high schools. The less rigid the school structure the more frequent the

absenteeism, tardiness and cutting class in our high schools (Billington 1978, p. 222).

School administrators in urban and suburban schools across the nation identify the most pressing discripline problems to be skipping class, truancy and tardiness to class. Using field studies and experience as a high school administrator Daniel L. Duke developed a list of prevalent discipline problems: truancy (absence from school without permission), skipping class (absence from class without permission), late to class, classroom disruptions, disrespect, smoking, theft, profanity, drugs, fighting, vandalism, and trespassing. Administrators were asked to rank each problem by order of "most pressing" to "least pressing" (Duke 1978, p. 326). The actual table used in this article best illustrates the results of Dukes' survey at a glance, therefore the researcher has chosen to transpose it directly into this research study.

New York

Urban

Skipping Class

Truancu

Lateness to

Disruption

(DUKE 1978, p. 327)

Most Pressing Problem

Second Most Pressing

Third Most Pressing

Third Least Pressing

*Designates a tie score

California

Urban

Skipping Class

Truancy

Lateness to

New York

Nonwrban

Truancy

Skipping Class

Lateness to "

Disrespect*

California

Skipping Class

Lateness to Class

Profanity*

Failure to

Complete Work*

Nonwiban

Truancy

The following is a daily bulletin from Yorktown High School in Arlington, Virginia. According to this bulletin the periods cut most frequently are periods one and two. Yorktown High School, like Washington-Lee High School begins at 7:30 A.M.

Table 2: DAILY BULLETIN FROM YORKTOWN

DAILY BULLETIN #51

Monday, November 2i, 1979

FACULTY:

1. Teachers: For your information, the following data has been sent to the Education Center (as they requested).

1978				1978
11/14	11/16		11/14	11/16
58	163	No. absent all day	45	44
262	296	No. absent part of the day	218	192
371	461	No. of periods missed on partial day absence	301	353
English H & PE Math		Class cut most frequently		English Social Studies Math
Pd. 2 Pd. 1 Pd. 5	Pd. 1 Pd. 2 Pd. 6	Period cut most frequently	Pd. 2 Pd. 1 Pd. 3	Pd. 1 Pd. 2 Pd. 5

B. Glenn

Of over forty million students returning to school, millions will be hanging out on the streets. These youngsters will skip school regularily and eventually drop out altogether. The truancy problem is growing to epidemic proportions and educators are at a loss as to what to do about it (Sherman, 1979, p. 44).

Sherman further states that students skip school for a variety of reasons. Many truants simply consider school boring and irrelevant.

Others are humiliated by constant academic failures and feel that the

schools are insensitive to their needs. Some teachers are unaffected by this trend; they quietly hope that these students will stay away and maybe disappear altogether. Many parents don't care if their children skip school and even when they do they can't control them because "Kids have lost their fear of authority and nothing fazes them."

A junior high school in Arizona developed a model treatment program to work with truants. When a student is identified as a truant, skill deficiencies that cause the problems are diagnosed. This helps to identify deficits and avoid trouble situations. The student learns to: label the situation, decide if it means trouble, and act to avoid it. Teachers give feedback and reinforce improvement efforts on behalf of the student (Unger, 1978, p. 317). Attendance was monitered closely and parents and juvenile personnel were kept abreast of absenses. Office referrals were noted and explored with the student bi-weekly with project staff. The student also worked with a career guidance specialist to help with future job alternatives. Truant students demonstrated a 41% reduction in class skipping, after a nine week involvement with skills training (unger 1978, p. 318).

Recognizing absenteeism is paramount to its cure. Employers as well as school officials have studied this problem and have developed some ways to encourage attendance on the job. The researcher finds some of the following statements to be relevant and useful in a school setting as well as at work: Be committed to attendance; Give recognition and encourage attendance; Pay personal attention to your employees; and Stress the importance of each task and use praise when a job is well done (Hayes, 1979, p. 20)

At Central High School in Georgia another method of eliminating attendance problems was initiated. The primary responsibility for attendance was placed upon the students. Five unexcused absences in a quarter (60 days) constituted a loss of credit in that subject. An appeals procedure was established whereby the student along with their parents could appeal first to the principal, and then to the superintendent and the Board of Education. The end result of this system was an increase in attendance by six percent in one year (Childs, 1979, p. 119)

This is not a totally inclusive review of all literature written on the subject of school absenteeism. It does, however, establish a base from which the researcher can attempt to develop this study. Some of these methods of bringing about a cure to this pressing problem will be re-examined later in this research paper. Having concluded the review of the literature, the researcher elects to show the research methods used in this particular study on absenteeism and lateness to class.

CHAPTER 111

METHODS AND PROCEDURES

The methods and procedures used in this study were basically quite simple. Using a daily log in the form of a grade book, the researcher tabulated the total absences and tardies of two years of W.E.C.E.P. classes. This log was kept by the researcher and should be considered primary data.

In the junior high school the entire work experience and cooperative education program was logged daily for absences and lateness to class. Fourteen students were involved in this study which was the entire population of the W.E.C.E.P. Program for the 1977-1918 school year.

The grade book was difficult to secure as the junior high school closed at the end of the 1977-1978 school year. The researchers probe for this log took him to the county warehouse. Once permission was granted to search the warehouse for this data, several boxes were uncovered over a period of several days to reveal that the information was not there. The grade book was finally located at the Education Center on the first floor in the back of a file cabinet. Recognizing it to be the correct grade book, the researcher can verify it to be accurate.

The grade book used in the senior high school was easier to ascertain. The entire population of the work experience and cooperative education program was logged daily for the school year 1978-1979 and these records were retained by the researcher personally. Sixteen students were involved in this study, consequently a slight increase in attendance and lateness to class may be expected.

Two forms of analysis will be used on the data collected for this study. A straight line percentage will be engaged to compare each school year. The percentage of absences and lateness to school based on the number of school days in the year will be calculated and compared by the researcher.

Both school years absences and lateness to class were tabulated by the researcher on a daily basis. The results of this log will be covered in the findings of the study.

Pearson \mathbf{r} will be used to calculate the absences of each school year. Pearson \mathbf{r} will also be used to calculate the lateness to class of each school year. The researcher will be seeking a low correlation of this data to show a significant difference in the 1977-1978 school year in the junior high school and the 1978-1979 school year in the senior high school. Two students will be eliminated from the 1978-1979 statistics by the process of random sampling. The researcher will put all sixteen names in a hat and select fourteen at random. This will make the number of students in the 1978-1979 school year equal to the number of students in the 1977-1978 school year. The equal numbers in each school year will allow the researcher to use Pearson ${\bf r}$ successfully in calculating both the absences and the lateness to school. The researcher will be seeking a low correlation using this statistical method. The number of absences will be treated as raw scores. The frequencies of lateness will be also treated as raw scores. The students will be considered one in the same for both years by the researcher, as they do not change in basic type of student, age, or attitude.

The students being considered as the same, the two years of absenteeism and lateness to class will be tabulated. If a significant difference occurs for the two years, the researcher will examine the some factors which may have influenced this difference. These findings will become obvious in the next chapter called research findings.

CHAPTER IV

RESEARCH FINDINGS

The primary objective of this study was to determine if there was a significant difference in absenteeism and lateness to class between two different school years. The same program (W.E.C.E.P.) was taught by the same instructor for the school years 1977-1978 and the school year 1978-1979.

The only major differences in the two programs were that ite starting time changed to 7:30 A.M. and the students were placed in with an older peer group. This older group of students was allowed certain privileges such as free periods during the day and a designated smoking area. Other than these factors the programs were identical in scope, clientele and instructor.

The following table is a comparison of two separate school years by percentage of absences and lateness to class. The percentages were arrived at by dividing the number of absences and lates for each year by the product of the number of school days times the number of students.

Table 3: PERCENTAGES OF ABSENCES AND LATES FOR TWO SEPARATE

	SCHOOL YEARS	
STUDENTS	% OF ABSENCES	% OF LATES
WECEP CLASS 1977-1978 Stratford Jr. High	$\frac{232}{200} \times 14 = 8.2\%$ students	110 200 x 14 = 3.9% students
WECEP CLASS 1978-1979 Washington-Lee H.S.	$\frac{653}{200 \times 16} = 20.4\%$ students	876 200 x 16 = 27.3% students

Using Pearson \mathbf{r} a correlation between the absenteeism and lateness, of the students of each year will be shown. The researcher is looking

for a low correlation showing an extreme difference in the two sets of data rather than a close relationship between them.

Table 4:	,	LATENESS TO	CLASS		
	Strat	ford Ir. High	h Was	hington-Lee	
Student	1977-	1978	197	8-1979	
	X	χ²	У	y 2	ху
1	4	16	75	5625	300
2	15	225	67	4489	1005
3	9	81	101	10201	909
4	7	49	67	4489	469
5	18	324	23	529	414
6	7	49	67	4096	448
7	-0-	-0-	51	2601	-0-
8	2	4 .	29	841	58
9	6	36	85	7225	510
10	21	4	72	5184	144
11	-0-	-0-	59	3481	-0-
12	13	169	68	4624	. 884
13	4	16	38	1444	152
14	. 13	169	42	1764	546
N=14	£x = 100	£x ² = 1,142	£y=841	£y2=56,593	£xy = 5839
r = N(£	xy) - [(£ x)	(£y)]		-1598	
NINE	$(x^2 - (\xi x)^2]$	[N & y2 - (&	y) ² J	22563	
14 (5)	839) - [(100)	(841) 7		=07	
V [14	•1,142 -(100)	²] [14•56,5	93 - (841) ²]	•	
= 8250	2-84100				
√ [15	,933 -10,000]	7 [792,302 -	707281]	·	
= -159	8		The coef	ficient here	e is very weak
NI	5988] [\$5021	7			

7	a	h	P	0	5	

ABSENCE FROM CLASS

	Stratfo	Stratford Jr. High Washington-Lee			
Student	1977-19	18	197		
•	. x	χ²	y	y 2	ХУ
1	. 12	144	64	4096	768
2	50	2500	50	2500	2500
3	60	36	41	1296	246
4	20	400	52	2704	1040
5	21	441	76	5776	1596
6	11	121	21	441	231
7	11	121	64	4096	704
8	4	16	12	144	48
9	16	256	37	1369	592
0	10	100	60	3600 .	600
11	29	841	13	169	377
12	-0-	- 0-	53	2809	-0-
13	22	484	64	4096	1408
14	20	400	28	784	560
— V = 14	£x = 232 £x	2 = 5860	£y= 635	£y2=33,8802xy	= 10,670

$$r = \frac{N(\xi XY) - [(\xi X)(\xi Y)]}{[N\xi X^2 - (\xi X)^2]}$$

$$= \frac{14(10,670) - [(232)(635)]}{\sqrt{[14.5860 - (232)^2] [14.33880 - (635)^2]}}$$

The coefficient here is weak.

- .05

When computed with accuracy the correlation coefficient should fall between -1 and +1 for \mathbf{r} . If a relationship is close, \mathbf{r} should fall towards +1. If a relationship is weak, then \mathbf{r} should fall towards -1.

In the computation of lateness to class the coefficient \mathbf{r} is very weak. In computing data that is this obvious it may not have been necessary to use Pearsons \mathbf{r} .

In the computation of absence to class, the coefficient \mathbf{r} is weak. It shows that there is little statistical relationship between the two variables.

The researcher used a straight line percentage and showed a significant difference between two separate years concerning absenteeism and lateness to class. Pearson r was used to also show little statistical relationship between these two years concerning absenteeism and lateness to class. This having been done, the researcher will move on to the summary, conclusions and recommendations of this study.

CHAPTER V

SUMMARY, CONCLUSIONS/RECOMMENDATIONS

SUMMARY

The primary concerns of this study are absenteeism and lateness to class. The study is limited to ninth grade special needs students at Washington-Lee High School and Stratford Junior High School in Arlington The questions of the study deal with starting time and peer influence during two different school years.

Literature reviewed showed that absenteeism and lateness to class are of great concern throughout the schools in the entire country. A number of alternatives have been explored as a result of this concern. Most of these alternatives have achieved varying degrees of success by reducing absenteeism and lateness to class. The problem has not been ignored but it has also not been solved.

In this study the researcher collected primary data from two different school years. The researchers' grade books revealed data concerning absenteeism and lateness to class with the only significant difference in the two years being the starting time and the environment.

The findings in this study showed that there was a significant difference in the attendance patterns for the two different school years. The school year 1977-1978 at Stratford Junior High School showed 8.2% of absences and 3.9% late to class. The number of absences was divided by the product of the number of school days times the number of students. The same method was also used to compute the percentage of lateness to class. The identical procedure was employed for the school year 1978-1979 at Washington-Lee High School. The percent of absences for this year was 20.40% and the percent of lateness to class was 27.3%.

Pearson's was used to determine if there was a relationship between two sets of paired numbers. The paired numbers were the number of absences and lateness to class for two different school years. The students were considered the same for both years as they do not differ. The researcher was looking for weak coefficients showing no strength of relationship between the two school years. This weak statistical relationship indicated a strong difference in the absenteeism and lateness to class during the two school years. This strong difference having been established, the researcher will now draw some conclusions from the findings in this study.

CONCLUSIONS

The conclusions of this study are drawn from the findings. The basic conclusion is that absenteeism and lateness to class increased considerably in ninth grade students since their transfer to the senior high school. Other conclusions can be drawn from this basic one.

The researcher concludes also that some differences in the two different school years have influenced this increase in absenteeism and lateness to class. The first and most obvious of these differences is the starting time. The earlier starting time in the senior high schools has increased the amount of absenteeism and lateness to class. The next and less obvious of these differences is the peer influence in the senior high school. No statistics have been introduced in this study to support this conclusion, so this will merely be considered the opinion of the researcher. When students are not in class, they must be somewhere clse. At Washington-Lee High School a large portion of these students are in other areas, provided for within and by the school itself.

These areas include the smoking area outside the cafeteria and inside the cafeteria area known as the commons. These areas are designated to be used by older high school students with parential consent. These areas are being visited by ninth grade students during class time. The students in these areas are not in their designated classes, making them late to class or absent altogether. The researcher has not gathered statistics to support this conclusion other than casual observation. The opinions of the researcher will be further expressed in the section entitled "Recommendations."

RECOMMENDATIONS

C

It is the primary recommendation of the researcher that further studies be conducted regarding absenteeism and lateness to class in Arlington County. These studies should be continued until this problem can be related to several causal factors.

The suggestions for utilization of the findings of this particular study are to re-examine the 7:30 A.M. starting time of our high schools. Although this relieves some county-wide transporation problems, it may have some detrimental effects on the educational process in our schools. By beginning the school day at a time more condusive to their parents work day it may allow for more home control in getting students to school on time.

Tighter controls on younger students should be investigated as a form of preventative maintenance. Students should not be permitted to fall into patterns which will eventually result in their inability to succeed. Ninth grade students who belong in class should be in class. First offenses should never be ignored because rules without teeth will

always be ignored.

Individual schools should be held responsible for educating and retaining their students rather than just passing them along to Adult Education or alternative programs outside their particular school. Schools are too eager to drop students because they can't "CUT" the regular program. Any programs that are initiated to deal with the problems of absenteeism should be conducted within each school, not outside the school. Absenteeism and lateness to class at Washington-Lee is not an Arlington County problem, it is a Washington-Lee problem and should be resolved within the school itself.

BIBLIOGRAPHY

- Billington, B. M., "Patterns of Attendance and Truancy A Study," Educational Research Vol. 30 (November, 1978), p. 221.
- Childs, Mary Lee, "Making Students Accountable for Absences," NASSP Bulletin Vol. 63 (April 1979), p. 119.
- Duke, Daniel L., "How Administrators View the Crisis in School Discipline," Phi Delta Kappan Vol. 59 (January, 1978), p. 326.
- Hayes, James L., Absenteeism: "The Death of Productivity," American Schools/Universities Vol. 52 (September, 1979), p. 20s.
- Seligmann, Jean, "Empty Desk Blues," Newsweek (April 24, 1978), p. 94.
- Sherman, Diane, "Chasing Ghosts," Newsweek (August 27, 1979), p. 44.
- Thorndike/Barnhart, The Complete Desk Dictionary (New York, 1951), p. 34.
- Unger, Karen V., "A Truancy Prevention Project," Phi Delta Kappan Vol. 60 (December, 1978), p. 317.