# A Study of the Relationship of School Attendance and School Achievement and Social Behavior 

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# A Study of the Relationship of School Attendance and 

School Achievement and Social Behavior

by<br>Gerald Evans Post

A thesis submitted in partial fulfillment of the requirements for the Degree of Master of Education, in the Graduate School of Central Washington College of Education

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# APPROVED FOR THE GRADUATE FACULTY 

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## Chapter I

THE PROBLEM

The behavior problem child in school constitutes a problem of considerable magnitude in the day-to-day life of a school teacher. Why does Jimmy get into so many fights? Why do some children lie, steal, cheat, interrupt, fail to pay attention and demonstrate oruel and belligerent attitudes toward society and the school as one of society's institutions? These manifestations of maladjusted behavior of the aggressive type cannot be overlooked by the teacher. Children so afflicted constantly demand attention by their assertiveness. The existence of the problem is a direct challenge to educators.

Also the child who demonstrates extremely withdrawn and submissive type of behavior must be considered. Since the Wickman study in 1928 , mental hygienists have made educators increasingly aware that while these children are easily overlooked because they do not demand attention, they too must be helped. The continued and prolonged use of withdrawing as a means of escaping from imposed difficulties into more agreeable situations cannot be condoned in children.

The Wickman study demonstrated the divergent points of view of teachers and mental hygienists as shown by the following table: 1

[^0]Teachers Regard:

| Most Serious | Least Serious |
| :---: | :---: |
| Inmoralities | Withdrawing recessive personality and behavior traits |
| Dishonesties |  |
| Transgressions against authority |  |
| Violations of: |  |
| Orderliness in classroom |  |
| Application to school work |  |
| Extravagant aggressive personality and behavior traits |  |
| Mental Hygienists Regard: |  |
| Most Serious | Least Serious |
| Withdrawing | Immoralities |
| recessive personality and behavior traits | Violations of school work requirements |
| Dishonesties | Extravagant behavior |
| Cruelty |  |
| Temper tantrums Truancy | Transgressions against authority |
|  | Violations of Orderliness in class |

Since children who manifest each type of behavior are found in every classroom, it is obvious that understanding of them is essential to good teaching.

Of course, socially acceptable behavior is a relative thing. To fly into a rage at the mention of a deceased relative in our society would be considered a sign of maladjustment, but among certain tribes of American Indians, it would not be so viewed. By the same token, some forms of aggressive behavior contain great social values while some are definitely anti-social. In order to eliminate the need for adjusting to any particular requirement of living, an individual may attack the frustrating

1. Horner, Karen, The Neurotic Personality of Our Times, New York, Norton and Company, 1937, p. 15.
force with such vehemence that it is altered or reduced. Such attacks are beneficial when they promote the general welfare or contribute to the good of society. Of course, such attacks must often fail but even in failing they can produce much good by diverting the attacker into other areas of endeavor. It must be understood that these attacks carried over into adult life and made upon law and authority signify neuroses. These attacks may also be anti-social when they injure or infringe upon the privileges of other members of the society.

The principal demonstrations of attacking types of behavior are attacks against authority. The aggressive behavior frequently found in schools is an attack upon the orderliness of the school. These attacks are apt to take the form of temper outbursts and rage directed at the teacher or the principal who must enforce the necessary rules of the school. However, these attacks are not always directed at adults. Often they take the form of outbursts against other children when they attempt to set up standards for activities or enforce the rules of playground 1

A second method of reacting to an unpleasant requirement of society is by submitting to the requirement. This type of behavior is also very relative. Children and adults gratify their desires in daydreams, literature, and even sleep, which may be considered to be a form of escape. These are considered normal in all individuals. Submission is a sign of neuroses only when it prevents the individual from meeting responsibilities. Carried to this extreme, submission frequently results
I. Wicknan, Op. Cit. p. 22.
in regression of the individual. We can help to prevent this in children by teaching them to discern between those things which can be altered and those which must be endured.

These two common manifestations of socially unacceptable behavior are considered to pose a serious challenge to educators. The problem of school attendance and its relationship to socially acceptable behavior and achievement is the major concern of this research.

Many studies have been made to determine the relationship between school attendance and achievement and other measurable factors. The findings seem to point out that non-attendance has little effect on achievement as measured by grades. Is regular attendance as important as we think it is?

Data are still needed as to effect of absence on general attitude of the pupil. Is he likely to be accepted as a member of the group? Is he likely to be as interested in the school and various activities of the school? What does absence do to him as a citizen of the school? ${ }^{1}$

Therefore, it seems important for this research to seek answers to the following questions.

1. Is there a relationship between non-attendance and the frequency of behavior problems?
2. Is there a relationship between non-attendance and poor school achievement?
3. Is a cause-effect relationship apparent in any relationships which may be discovered?
4. Monroe, Paul, Editor, Cyclopedia of Educational Research, New York,
MacMillan Company, 1950, p. 920.
5. Are there major differences in numbers of children with an overly submissive type of behavior problem as compared with those who are too aggressive?
6. Are there obvious differences in numbers of boys and girls whose behavior is socially unacceptable?

This study has been undertaken to answer these questions. A serious attempt has been made to measure the intangibles of behavior and compare them with attendance and achievement records.

The study was conducted during the school year 1952-53 in the public schools of Longview, Washington. Convenience and availability of data were determining factors in this selection.

## Chapter II

## REVIEW OF THE LITERATURE

In order to give a background of information for the present problem it is necessary to review the research in the field of attendance and achievement and also some of the work which has been done on ohildren's behavior as it relates to this study. Since Butler first focused attention of the area in 1925, a great many studies have been made on the problem of non-attendance and its effect on achievement with widely varying results.l

The findings of Butler in 1925 and in a subsequent study in 1936 on a much larger scale than the first, indicated a high ratio between poor attendance and poor marks. The studies were made on high school children by comparing grades given by teachers to the attendance of the students. Although Butler found a high positive correlation, he did not attempt to show that absence is the sole cause or even the main cause of poor marks. He pointed out that the attitude and disposition of the student influence both attendance and achievement. ${ }^{2}$

Crider using the same technique as Butler on a college level found results comparable to those of Butler. ${ }^{3}$

[^1]In 1928 Feingold attacked the problem from a slightly different angle. Using a demerit system for misconduct and letter grades for scholarship, he studied 183 high school seniors. Feingold then reported a direct cause-and-effect relationship:

There is no question that attendance affects scholarship. There is a direct relationship between attendance and scholarship as well as between conduct and scholarship. However, scholarship does not depend on attendance only. Other oonditions which hinder attendance more than likely hinder scholarship also. Nevertheless the relationship is too obvious to be overlooked. The poor scholar is also the poor school citizen and vice versa.

Finch and Nemzek criticized the methods used in earlier researoh and attempted to equalize socio-economic factors and intelligence in a study made on a large group of junior high school children in 1940. Their study reported no relationship between attendance and achievement in the group of boys and only a slight relationship in the group of girls.

Wetzel, in a study made in 1928, concurred with findings of previous studies that a relationship exists. However, he emphasized that the nature of the child was undoubtedly a determining factor in both attendance and achievement. He pointed out that if a child has the desire to attend school, he more than likely will also have the desire to do his school work. ${ }^{4}$

1. Feingold, Gustave A., "Soholarship, Attendance and Deportment", School and Society, XXVII (1928), pp. 333-5.
2. Ibid, p. 335.
3. Finch and Nemzek, "Attendance and Achievement in Secondary School", Journal of Educational Research, 34: Oct. 1940, pp. 125-6.
4. Wetzel, H. A. "School Attendance and Scholarship", School Review, XXXVI, (1928), 99, 118-20.

At the beginning of this chapter it was stated that the results of studies of attendance and achievement had produced varying results. The foregoing studies have shown that a relationship exists between attendance and achievement. However, some studies show different findings.

From a very extensive study of 828 children begun in 1925 and covering attendance over a four year period, Heilman reports:

The untenable custom of classifying children on the basis of the amount of attendance.....cannot be justified either by the results of investigations or by teaching experiences. Even though the bright students devote only one fifth as much time to their studies as the dullest, they still make the higher grades. In the public school there are children who, in spite of inferior application, complete the work of the plementary school in one third the time required by the dull.

Denworth reached a similar conclusion in a study made in 1928:
Of the homogeneous groups studied (5), the most variable group in length of school attendance is the least variable in mental and educational ages: the least variable group in attendance is the most variable group mentally and next to the most variable educationally. Apparently differences in the amount of schooling of these pupils of single age do not account for differences in their mental and educational development. ${ }^{2}$

One other interesting study should be mentioned in connection with attendance and achievement. Obrien ${ }^{3}$ made a comparison of achievement of 861 pupils attending one teacher schools in Kanass for eight months of

1. Heilman, J. D., "The Relative Influence Upon Educational Achievement of Some Hereditary and Environmental Factors", 27th Yearbook of NSSE, p. 65.
2. Denworth, Katherine M., "The Effect of Length of School Attendance Upon Mental and Educational Ages", 27th Yearbook of NSSE, p. 87.
3. Obrien, F. P., "The Conditional Value of a Longer School Year in One Teacher Schools", 27th Yearbook of NSSE, p. 93-6.
Cumblary Collego
the year with achievement of 334 pupils who were attending one teacher schools in the same area for only seven months of the year. He found that although generally the children who had been going to sohool eight months of the year were superior, they were not far enough ahead to make the additional time spent worthwhile.

Obrien also divided the total number of children into three groups based on per cent of attendance. The results of achievement tests of each of the lower groups frequently surpassed the upper group. In none of the eight grades was the upper attendance group superior in all tests. Obrien concludes that regular attendance is not such an important influencing factor in achievement as has been assumed. ${ }^{1}$

In addition to the many studies made of attendance and achievement, some of the studies which have analyzed children's behavior should also be mentioned here. Following the same general vein as the Wickman study mentioned in Chapter I, Del Solar studied attitudes of teachers, children, and parents toward behavior difficulties in children. She noted a significant change in attitudes since the Wickman Study. Both parents and teachers were more concerned about children who showed submissive type behavior than about those who showed aggressive behavior. ${ }^{2}$

Haggerty studied the incidence of behavior problems in a group of eight hundred ohildren. Although his findings are broken down into

1. Ibid, p. 96.
2. Del Solar, Charlotte, Parents and Teacher View the Child, Bureau of Publications, Teachers College, Columbia Univ., New York, 1949.
categories such as truancy, lying, cheating, bullying, defiance, sexual activity, etc., they may be freely interpreted as showing the frequency of behavior problems to be about one child out of seven. He also found the highest incidence of behavior difficulties among boys and among the lower intelligence or retarded groups. ${ }^{l}$

The problem of sex differences in incidence of aggressive
behavior is of considerable importance in the research. In reference to this problem, Jones reaches two broad generalizations:

In the first place, it seems......that girls may be more influenced by what they think is expected of them by adult society. Second, the fact that there are more boys than girls who fail to meet the minimum standards of moral conduct, coupled with the findings of equality of the sexes in honesty, cooperativeness, etc., among the random samplings of school children, may indicate either that there is greater variability among bgys than girls, or that the boys are more aggressive than girls. ${ }^{2}$

It was extremely difficult to find reliable data concerning the per cent or number of the school population who are considered to be behavior problem children. Findings have been reported which ranged from two per cent to forty-five per cent. These results seemed to be dependent on the method applied and the location chosen by the investigator. A further handicap in the present investigation was that other available studies had been concerned only with aggressive forms of behavior such

[^2]as juvenile delinquency. However, the importance of the recessive and submissive type of behavior deviate should not be overlooked.

The preceding review of research in these fields is not intended to be all-inclusive. Undoubtedly, worthwile studies have been unintentionally omitted. Nevertheless, it is submitted as a representative review of investigations of import to the present study.

## Chapter III

THE STUDY

In order to answer these questions it was necessary to gather data from a school that had a large enough school population so that only a single grade need be used. Because of the availability of the data and size of the school system, the public schools of Longview, Washington, seemed ideally suited to this purpose.

Longriew is a modern city of 23,000 people located in the southwest corner of the state of Washington. The major industries are forest products mills and an aluminum reduction plant. These industries and accompanying minor industries employ approximately seven thousand people.

The local school district operates an educational system serving nearly six thousand children from kindergarten through junior college. There are six elementary schools, one junior high school, one senior high school and one junior college operating within the city limits. During the school year 1952-53 when this study was conducted, all of the sixth grade children in the district were housed in the Kessler Boulevard Elementary School on what was called a "modified platoon system." Under the platoon system, the children had a three hour block of time with one teacher daily and a departmentalized situation during the other half of the day. The sixth grade class was selected for this study because its central grouping (i.e. all in one building) greatly facilitated the study and also the similarity of the program in all class sections would eliminate some variables that might influence the results.

In order to successfully complete the purposes of this study, it was decided to survey the cumulative record folders of all of the sixth grade children and on the basis of school attendance during the 1951-52 school year place them into two groups, a good attendance group and a poor attendance group. Plans were made to discuss the behavior of each child with home room teachers.

Data pertinent to the study was gathered from the children's individual cumulative record cards and recorded on a three-by-five card for each child. These cards inoluded spaces for attendance, I. Q. and other test scores, child's name, group and teacher's name, plus a space for comments about the child. One card was filled out for each of the sixth grade children after which the division into groups was made.

A total of 336 children were found to have been enrolled for one hundred eighty days during the previous year. The attendance range was from 180 days present and no days absent to 126 days present and fiftyfour days absent.

The twenty per cent of the 336 ohildren with the best attendance records were then considered to be Group I while the twenty per cent with the poorest attendance records were placed in Group II. The middle sixty per cent of the group was excluded. Only those students whose attendance records differed by approximately one standard deviation from the mean of the entire group were included. The mean of the entire group was 170.4 days present and 9.6 days absent and the range of the middle sixty per cent was from 166 days present and 14 days absent to 176 days
present and four days absent. This means that Group I differs from Group II by ten days or more in total attendance. It was possible to include 67 students in each of the two attendance groups on this basis of division. In this manner a large enough sample to insure reliability of the study was obtained.

Table I (page 15) shows the attendance record of Group I. The mean attendance for the group is 178.1 days present and 1.9 days absent as compared with a mean for the entire 336 children of 170.4 days present and 9.6 days absent. The range of the group is from 180 days present and no days absent to 176.5 days present and 3.5 days absent. Other data obtained from this table show that 13.4 per cent of this group or nearly one out of seven had perfect attendance. Thirty-three per cent or one out of three are found to have attended 177 days or less. However, forty-two children or nearly 63 per cent were below the mean attendance for the group. Only twenty-five of the children were responsible for raising the mean of the group to 178.1 days present and 1.9 days absent. Perhaps the most significant fact represented by Table $I$ is the high ratio of boys to girls. In this group the ratio is 1.7 to one in favor of the boys while in the total group of 336 children the ratio was reduced to 1.2 to one, though still in favor of the boys. The low ratio of girls to boys in this good attendance group is surprising. It may be assumed that the causes of this ratio are varied. The reasons for nonattendence were not made a part of this study, but probably health consciousness is important. From our American culture it would seem that

the parent would be more inclined to keep their daughters out of school for minor ills. Also boys would be more inclined to pursue an independent course of action and disregard parental suggestions as to missing school. The question arises: is this high ratio of boys to girls in this high attendance group typical of groups with similar records in other areas? While much speculation may be done, it would seem that it would not be true, particularly in agricultural districts. Additional data should be gathered on this topic.

The attendance record for the poor attendance group is given in Table II (page 17). The total number of children is sixty-seven or the same as in Group I. This represents the twenty per cent of the sixth grade children with the poorest attendance records during the 1951-52 school year. The ratio of boys to girls is 1.2 to one or the same as in the totel group.

This group offers considerable more range in attendance than Group I. The range is from 165.5 days present and 14.5 days absent to 126 days present and 54 days absent. The mean attendance for Group II is 159.1 days present and 20.9 days absent. The mean for the total group of sixth grade children was 170.4 days present and 9.6 days absent. In other words, the average child in Group II was absent about one day in nine, or more than one day every two weeks! At the lower extreme, however, there were three children who were absent more than one day every week!

No significant difference between boys and girls appears in this table. The number of boys and girls seams to be equal at both the top and bottom of the table, with the boys gaining their numerical advantage

ATTENDANCE RECORD GROUP II

| Present | Absent | Boys | Girls | Number |
| :---: | :---: | :---: | :---: | :---: |
| 165.5 | 14.5 | 2 | 1 | 3 |
| 165 | 15 | 3 | 3 | 6 |
| 164.5 | 15.5 | 1 | 1 | 2 |
| 164 | 16 | 3 | 4 | 7 |
| 163.5 | 16.5 | 3 | 1 | 4 |
| 163 | 17 | 1 | 3 | 4 |
| 162.5 | 17.5 | 1 | 1 | 2 |
| 161.5 | 18.5 | 2 | 3 | 5 |
| 161 | 19 | 2 | 1 | 3 |
| 160.5 | 19.5 | 1 | 0 | 1 |
| 160 | 20 | 3 | 4 | 7 |
| 159.5 | 20.5 | 2 | 0 | 2 |
| 159 | 21 | 3 | 1 | 4 |
| 158.5 | 21.5 | 3 | 0 | 3 |
| 158 | 22 | 1 | 0 | 1 |
| 157 | 23 | 1 | 0 | 1 |
| 156.5 | 23.5 | 0 | 2 | 2 |
| 155 | 25 | 0 | 2 | 2 |
| 151.5 | 28.5 | 1 | 1 | 2 |
| 150.5 | 29.5 | 1 | 0 | 1 |
| 150 | 30 | 1 | 0 | 1 |
| 148.5 | 31.5 | 0 | 1 | 1 |
| 139 | 41 | 1 | 0 | 1 |
| 137.5 | 42.5 | 0 | 1 | 1 |
| 126 | 54 | 1 | 0 | 1 |
| Totals: |  | 37 | 30 | 67 |

Mean: 159.1 present, 20.9 absent.
near the mean and median. For example, above 163 days present and 17 days absent the number of boys and girls is equal; below 158 days present and 22 days absent the numbers are again equal.

To further point out the wide range shown by this group, it may be said that the individuals at the top of the table were absent one day out of twelve, while the lone individual at the bottom of the table was absent nearly one day out of three. The second and third children from the bottom had records nearly as bad; their teacher could expect them to be absent two days out of seven. Absences of this sort have serious implications.

Table III (page 19) is presented primarily to point out the large gaps that occurred in the attendance record of the poor attendance group which are not easily seen from Table II. The attendance records are given only in terms of days present and grouped in frequencies of three days. Fifty children or nearly 75 per cent had attendance records in or above the group in which the mean falls.

Graph I (page 20) is presented to give an even clearer picture of the attendance record of the poor attendance group. Table II shows that there were two mode scores, 160 days present and 164 days present. It can be seen from Graph I that the majority of the cases fall in between these figures. This does not tend to follow a normal curve because Group II represents the lower extreme of a larger group. It should be noted that while the range in attendance for Group II was from 166.5 days present and 14.5 days absent to 126 days present and 54 days absent, only four children attended less than 150 days. If these four children were omitted,

## Table III

## GROUPED FREQUENCY TABLE OF ATTENDANCE RECORDS OF GROUP II

Present
165-167.9
162-164.9
159-161.9 22
156-158.9
153-155.9
150-152.9
147-149.9

144-146.9 141-143.9

138-140.9
135-137.9
132-134.9
129-131.9
126-128.9
Total:

19 1 1 0
Frequency
9

7
2

4

1

0

0

0

1
67

Mean: 159.1 days present, 20.9 days absent.

Graph I
Histogram of Attendance Record of Group II

Numer of Students


Library
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the range would be shortened by more than half.
Table IV (page 22) compares the I. Q. scores of Group I. Group II and the total gro up of 336 ohildren. These scores were derived from the Kuhlman-Anderson Group Intelligence test administered in 1950 and 1951. The range for the total group of children is from the interval 130--135 to the interval 65-70. The median score for this group is 102.9. The range for the good attendance group is the same as for the total group but the mean is raised slightly to 103.6. However, in the poor attendance group the mean is only 99.8 and the range is shortened so that it reaches from the intervals $125--130$ to $70-75$. A difference of 2.7 points is noted in the mean scores of Group I and Group II. When this difference is compared with the standard error of the difference of the means, a critical ratio of 1.47 is obtained. A critical ratio of 1.47 indicates that there are 86 chances out of one hundred that a real difference exists between the two groups. This is not statistically high enough for a high level of confidence; therefore, it may be said that the two groups are approximately equal in ability.

In Group I the I. Q. scores of fifty per cent of the children fall between 111.1 and 99.7 or a range of 11.4 I. Q. points. From this it may be said that Group I has a quartile deviation of 5.7. The quartile deviation of Group II is 6.43. All measures of central tendency are higher for the good attendance group than either the poor attendance group or the total group of 336 children. It would seem from this that the higher I. Q. children on the whole were more willing to attend school,

Table IV
Grouped Frequency Table of I. Q. Distribution of
Sixth Grade Class in Longview, 1952-53

| I. Q. | Total Group | Group I | Group II |
| :---: | :---: | :---: | :---: |
| 130-134 | 2 | 1 | 0 |
| 125-129 | 3 | 1 | 2 |
| 120-124 | 6 | 0 | 1 |
| 115-119 | 20 | 7 | 2 |
| 110-114 | 44 | 9 | 5 |
| 105-109 | 67 | 14 | 15 |
| 100-104 | 72 | 19 | 9 |
| 95-99 | 61 | 4 | 16 |
| 90-94 | 27 | 4 | 8 |
| 85-89 | 14 | 3 | 4 |
| 80-84 | 11 | 2 | 3 |
| 75-79 | 7 | 2 | 1 |
| 70-74 | 1 | 0 | 1 |
| 65-69 | 1 | 1 | 0 |
| Totals: | 336 | 67 | 67 |
| $Q_{3}$ | 108.7 | 111.1 | 107.2 |
| Median | 102.9 | 103.6 | 99.8 |
| Q1 | 96.4 | 99.7 | 94.35 |
| Q | 6.5 | 5.7 | 6.43 |
| Mean | 102.2 | 103.2 | 100.5 |
| Sigma | 10.25 | 10.92 | 10.24 |
| Standard Error | (Mean) . 56 | 1.34 | 1.26 |
| Standard Error <br> Critical Ratio | of Difference, 1.47 | s I and |  |

perhaps because they were having greater sucoess in school than other children. It must be noted, however, that the child with the lowest I. Q. score is in the high attendance group which tends to refute that theory.

A further study of the table shows that one of the two children in the total group who has an I. Q. over 130 is in Group I. However, of the three children with I. Q.'s from 125 to 130 one is in Group $I$ and two in Group II. At the other extreme, two children with I. Q. scores below 74 appear, one in each attendance group. In Group I, eight children scored below 90 compared with seven children in Group II who scored below 90.

Table $V$ (page 24) shows the achievement scores in terms of grade scores of the two groups. These scores were derived from the Metropolitan Achievement Test which was given to the children in January, 1953. The mean for the entire group of 336 children was 6.3 in terms of grade placement. Since the mean scores of both groups are higher than the mean for the total group of 336 children, the findings of Heck as reported by Monroe would seem to be substantiated. ${ }^{1}$

Comparing the difference of the mean scores of the good attendance group and the poor attendance group with the standard error of the difference of the means gives a critical ratio of 1.75 . This critical ratio permits the statement on the eight per cent level of confidence that a real

[^3]Table V.

## Grouped Frequency Table of Achievernent Test Scores of Sixth Grade Class in Longview, 1952-53


difference exists between the two groups. While this is not statistically significant, it approaches significance.

Table $V$ also furnishes data for other interesting comparisons. Seventeen children in Group I achieved on the eighth grade level or above, and the same number of children had scores of 6.0 or lower. The difference in Group II is striking. Only twelve ohildren achieved 8.0 or higher but 32 children scored 6.0 or lower. The highest and lowest scores, 11.0 and 3.6 are both in the poor attendance group. Three children in the good attendance group scored below 4.0 but none were as low as 3.6. The highest score in Group I was 10.0 , a full year behind the highest score in Group II.

Graph II (page 26) analyzes the achievement test scores of the good attendance group. The test was given at the fifth month of the school year and it will be noted from the histogram that the modal soore is 6.1--6.5. The mean achievement for this group was 6.91 which is considerably higher than the mode score. This group forms a skewed curve with the ordinate to the right of and below the mean.

The histogram of achievement scores of Group II (page 27) presents a very different picture than the corresponding graph for Group I. The modal score is much lower, appearing at the interval 4.6--5.0. The mean score, however, is 6.44 which compares favorably with the mean of 6.3 for the total group of 336 children and 6.91 for Group I. As in Group I, a curve would be skewed to the right of the mean score.

The differences in level of achievement of the two groups lack significance. Although Group I shows higher measures of central tendency

Graph II
Histogram of Achievement Scores of Group I

Number of Students:


Graph III
Histogram of Achievement Scores of Group II

this loses importance when the record of Group II is compared with the total group. Because the poor attendance group is superior in achievement to the total group, it seems that non-attendance has had little effect on the achievement level of the group. This is not the answer which might have been expected. This poses the same question found by other investigators in this field: Could this mean that the present educational practice of maintaining a 180 day school year could be in error?

After the groupings were made and a preliminary study of the data obtained had been completed, interviews were held with each child's teacher. The se teachers had the same group of children for a three hour block of time daily, which included reading, language, social studies, home room organization and a playground activity. The interviews were held in the last month of the school year so that the teachers would have had ample time to observe each child's behavior. All interviews were conducted in a relaxed atmosphere when there was no pressure of time.

For the purposes of this study, the emphasis has been placed on locating behavior deviations which are manifested in two general ways. This is an attempt to include what the teachers regard as most serious and what mental hygienists regard as most serious types of problems as pointed out in the introduction. First, the child was included who constituted a problem because his extremely overt behavior offended the dignity of others in the classroom and on the playground. This group
encompassed those children with a belligerent attitude toward others in the school situation, those who exhibited frequent displays of temper and fighting, and those children who frequently ignore the rules for acceptable social behavior.

The second manifestation of behavior deviation considered to be of prime importance was the extremely shy and withdrawn type of behavior. For classification in this group the criterion were:

1. Extreme shyness.
2. Failure to volunteer information and failure to share experiences with the group.
3. Rejection of and by others as shown by teacher's observation and sociograms.
4. Unwillingness to participate in playground or classroom activities or committees.
5. Failure to seek help from teacher because of lack of desire to direct attention toward themselves.

Generally speaking, children who possessed two or more of the above or similar characteristics with little or nothing to counterbalance it, were felt to have a withdrawn type of behavior problem.

In some cases, extremely shy children were found to have obvious reasons for their shyness. One girl, suffering from shyness, was extremely tall and well into puberty. Her shyness was deemed to be a physical problem and she was not included as a behavior deviate for the purposes of this study. A boy who volunteered little and partioipated little was found to have a glass eye: On the strength of his acceptance by the group as charted by a sociogram he was not considered to be a behavior deviate.

Table VI (page 31) shows the frequency of behavior deviates in Group I. The total frequency is evenly distributed over the range of attendance. The highest incidence of behavior difficulties falls at the attendance level of 177 days present. However, no particular significance can be attached to that fact because of the small difference in number and because of the small number of cases. The total number of children with behavior problems is eleven or one out of each six children in this good attendance group. Of these six are the withdrawn or recessive type and five are the overt type. The cases are very evenly divided between the two types of behavior.

The table also shows that nine of the children were boys and two were girls. The boys were about evenly divided between the recessive type of behavior and the aggressive type. However, the two girls are both of the withdrawn type. No girls were found to be aggressive.

The frequency of behavior deviates in the poor attendance group is given in Table VII (page 32). The total number of cases is sixteen or nearly one out of four as compared with one out of six for Group I. There are eleven of the recessive type and five of the aggressive type found in this group.

Again sex differences provide a basis for interesting oomparisons. Ten girls were considered to have behavior problems by their teachers and only six boys were so considered. In their teacher's opinion, all of the girls were of the withdrawn or recessive type. Nearly all of the boys, or five out of six, were considered to be much too aggressive. No girls were found to be overly aggressive.

# Table VI <br> Frequency of Behavior Deviates <br> Group I 

| Present | Absent | Wi thdrawn |  | Overt |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Boys | Girls | Boys | Girls |
| 180 | 0 | 1 |  | 1 |  |
| 179 | 1 |  |  | 1 |  |
| 178.5 | 1.5 | 1 |  |  |  |
| 178 | 2 |  | 1 | 1 |  |
| 177.5 | 2.5 |  |  | 1 |  |
| 177 | 3 | 2 |  | 1 |  |
| 176.5 | 3.5 |  | 1 |  |  |
|  |  | 4 | 2 | 5 | 0 |

## Table VII

Frequency of Behavior Deviates Group II

| Present | Absent | Withdrawn |  | Orert |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Boys | Girls | Boys | Girls |
| 165.5 | 14.5 |  |  | 1 |  |
| 164 | 16 |  | 1 |  |  |
| 163.5 | 16.5 |  |  | 1 |  |
| 163 | 17 |  | 2 |  |  |
| 162.5 | 17.5 |  | 1 |  |  |
| 161.5 | 18.5 |  | 1 |  |  |
| 161 | 19 |  | 1 |  |  |
| 160 | 20 |  | 1 |  |  |
| 159 | 21 |  |  | 1 |  |
| 158.5 | 21.5 | 1 |  |  |  |
| 156.5 | 23.5 |  | 1 |  |  |
| 151.5 | 28.5 |  |  | 1 |  |
| 148.5 | 31.5 |  | 1 |  |  |
| 137.5 | 42.5 |  | 1 |  |  |
| 126 | 54 |  |  | 1 |  |
|  |  | 1 | 10 | 5 | 0 |

One other fact is worthy of note. Of the eight children with poorest attendance appearing on Table II (page 17), four or fifty per cent reappear on this table as behavior deviates. To make the figures more revealing, it should be noted that of the four children wi th the poorest attendance as shown by Table II, three reappear on this table. With the exception of the last four cases, the other children are evenly distributed over the attendance range.

The exceptionally high incidence of behavior problems at the lower end of the attendance scale is one of the most revealing facts discovered in this study. This would seem to give positive indication that a relationship exists between non-attendance and social behavior, particularly at this level of attendance. It is indeed unfortunate that the study did not include a larger group of children at this attendance level. Their inclusion would have made further definition of this relationship possible.

## Table VIII

Total Number of Behavior Deviates
In Groups I and II

| Withdrawn |  | Overt |  | Number |
| :---: | :---: | :---: | :---: | :---: |
| Boys | Girls | Boys | Girls |  |
| 4 | 2 | 5 | 0 | 11 |
| 1 | 10 | 5 | 0 | 16 |
| 5 | 12 | 10 | 0 | 27 |

Table VIII (above) shows the total number of behavior deviates found in both groups. Ten boys were classed as the aggressive type with
no difference found in the frequency in each attendance group. An additional five boys were found to have recessive types of behavior problems for a total of fifteen behavior problems of all types among the boys. The ratio of boys to girls in the total number of behavior problems is 1.25 to one or approximately the same as in the original group. The twelve girls who were reported to have behavior problems were all of the withdrawn type. There were no incidences of aggressive behavior among girls.

The total incidence of both types of behavior problems was twentyseven cases out of 134 children. If this is representative of the total school population, then a teacher may expect that more than one child out of five needs a great deal of help in working out behavior problems.

However, the most important difference shown in the table is the larger number of children with a withdrawn type of behavior problem as compared with the aggressive type of behavior. In the good attendance group the numbers are about equal, but in the poor attendance group the number of girls with withdrawn type of behavior problems is amazing! Over one third of the number of behavior problem children discovered were girls in the poor attendance group: It is also significant that one girl out of three in the poor attendance group was submissive and withdrawn to the extent that her behavior was not acceptablel

It is difficult to emphasize these facts sufficiently. The frequency of the submissive type of behavior among girls in the poor attendance group is such that it must be of serious concern. Coupled
with the findings that the children with extremely poor attendance tend to have behavior difficulties, the effects of poor attendance assume real importance.

Chapter IV<br>Summary, Conclusions and Implications

The purposes of this study were five-fold. Serious problems related to children's behavior and school attendance and achievement have been pointed out and in connection with these problems, the purposes of the study have been defined in the form of five questions.

1. Is there a relationship between non-attendance and the frequency of behavior problems?
2. Is there a relationship between non-attendance and poor school achievement?
3. Is a cause-effect relationship apparent in any relationships which may be discovered?
4. Are there major differences in numbers of children with an overly submissive type of behavior problem as compared with those who are too aggressive?
5. Are there obvious differences in numbers of boys and girls whose behavior is socially unacceptable?

In order to answer these questions, an investigation was conducted among the sixth grade class in the city of Longview, Washington. Pertinent data concerning attendance, achievement and intelligence were gathered from permanent records of each child. The extremes of the sixth grade class in terms of school attendance during the school year 1951-52 were then placed in two smaller groups, a good attendance group and a
poor attendance group. Each group was composed of sixty-seven ohildren. The records of these two groups in the areas of attendance, achievement and intelligence were then compared.

The interview method was used in the second phase of the study which concerned socially acceptable behavior in the two attendance groups. The study included children with both the attacking or aggressive type of behavior and those with an overly withdrawing, recessive or submissive type of behavior. Teachers were interviewed in an effort to locate behavior deviations from a previously established norm. The results of these interviews furnished important data for completion of the study.

The following enumeration of facts shows some of the more important results of the study:

1. Three hundred and thirty-six (336) children were enrolled in school for 180 days during the school year 1951-52. The mean attendance for this group was 170.4 days present and 9.6 days absent.
2. The twenty per cent of these 336 children with the best attendance records ranged in attendance from 176.5 days present to 180 days present during the 180 days of school (Group I).
3. The twenty per cent of these children with the poorest attendance records ranged in attendance from 126 days present to 165.5 days present during 180 days of school (Group II). The remaining sixty per cent of the children ranged in attendance from 166 days present to 176 days present during 180 days of school.
4. Group I contained forty-three boys and twenty-four girls
for a ratio of 1.7 to one. Group II contained thirty-seven boys and thirty girls for a ratio of 1.2 to one. The ratio of boys to girls in the total group of 336 children was also 1.2 to one.
5. The mean I. Q. for the total group of 336 children was 102.2. The mean I. Q. for Group I was slightly higher, 103.2. Group II had the lowest mean I. Q., 100.5. All measures of central tendency were higher for the good attendance group than either the low attendance group or the total group.
6. Both attendance groups attained higher mean achievement scores than the mean achievement score of the sixth grade class. In terms of grade and month, the mean scores were: total group 6.3; Group I 6.91; and Group II 6.44.
7. The results of the study of children's behavior showed that one child out of six in the good attendance group had a behavior problem. In the poor attendance group, one child out of four was so considered.
8. There were nine boys and five girls considered to have behavior problems in Group I. In Group II there were six boys and ten girls who had behavior problems.
9. The incidence of withdrawn behavior among girls in the poor attendance group was exceptionally high. These girls accounted for two thirds of the problems in the poor attendance group and over one third of the problems discovered in both groups. These facts must be considered to have high significance.

The results of this study clearly indicate certain conclusions.

These are listed below in the form of answers to the questions posed by this study.

Is there a relationship between non-attendance and the frequency of behavior problems?

The number of behavior problem children in the good attendance group was eleven. There were sixteen behavior problem children in the poor attendance group. Because there are nearly fifty per cent more behavior problem children in the second group than the first, a relationship seems to be indicated. However, because of the small number of behavior problem children involved, the extent of this relationship is difficult to determine.

Is there a relationship between non-attendance and poor school achievement?

No positive relationship between non-attendance and poor school achievement can be determined. The favorable showing of the poor attendance group when compared with the total group would seem to indicate that non-attendance has had no effect on their school work. The question arises: Could the mean achievement level of this group have been raised to the level of achievement shown in the good attendance group had attendance been better? In the absence of an identical control group, however, only conjectures may be made. It would seem that in view of the slightly superior mental abilities of the good attendance group, the poor attendance group would not have achieved on the same level had attendance been equal.

The se findings raise a question concerning the most efficient use . of school time. Is there really any harmful effect of absence? The
findings of this study in the areas of children's behavior would indicate that frequent absences do have a negative effect on the child.

Is a cause-effect relationship apparent in any relationships which were discovered?

A relationship between poor attendance and unacceptable social behavior is indicated. Unfortunately, there seems to be no possible way within the scope of this study to determine which is cause and which is effect or if either is cause or effect. Perhaps a case study investigation into individual cases could determine this more completely.

However, the findings of this study clearly show that poor attendance must be regarded by educators as a danger signal. Poor school attendance and overly submissive behavior go hand in hand. For the child to take his rightful place in the class, he must be accepted by his classmates. Acceptance by the group is much easier if the child is a full-time member of the group.

Are there major differences in numbers of children with an overly submissive type of behavior problem as compared with those who are too aggressive?

While no sweeping generalizations are possible because of an insufficient number of cases, certain facts are recognizable. No cases of aggressive behavior were discovered among girls. This, of course, held down the total number of children in this category. Seventeen children were found to have overly submissive behavior and ten children were too aggressive. The sex differences seemed to be the determining factor which affected the results. It appears safe to assume that in
groups composed of equal numbers of boys and girls, there would always be fewer of the aggressive type of behavior problems.

These facts have important implications for the people who work directly with children. In the past, teachers have recognized the child with overly aggressive behavior as a problem and have tried to aid that child in making an adjustment. However, this study points out that these overly aggressive children are probably outnumbered by overly submissive children who need and deserve help also. Teachers must understand that submission in children is at least as serious as aggressiveness. With an understanding of the seriousness of the problem, teachers can begin to meet the needs of these emotionally maladjusted children.

Are there obvious differences in numbers of boys and girls whose behavior is socially unacceptable?

Sex differences are not pronounced when the total number of behavior deviates is viewed. Fifteen boys and twelve girls were found to have behavior problems. This difference lacks significance. However, when these findings are broken down into types of behavior, a different picture emerges. Ten boys were found to be too aggressive and no girls were so considered. Twelve girls were found to be overly submissive as opposed to only five boys. When the facts are presented in this manner, it may be said that sex differences are apparent.

This implies that a teacher may expect an equal number of boys and girls to need help in making a satisfactory adjustment. Also, the teacher may expect the majority of behavior problem boys to follow an overly aggressive pattern, and nearly all of the behavior problem girls
to be submissive and recessive.

There were several factors which limited the outcome of this research. These limitations are given in an effort to aid in evaluating the project.

Perhaps the largest single limitation was that the attendance records on which the study was based were those of a single year. The assumption that the school year 1951-52 would be typical of attendance in the group might have been in error. A more exact study might have been made had attendance records of several years been consulted.

A second limitation which is difficult to avoid in a study of this extent is the small sample which was studied. This limitation is not as great as might be assumed, however. The findings concerning attendance and achievement generally agree with tho se of other investigators. The findings in the area of aggressive behavior also agree with others in this field. Therefore, it may be said that because these findings are essentially correct, other results of this study will have the same degree of correctness.

The human element which limits all measurement of individual traits also has had its effect in this study. Teachers were asked to give their opinions of children in comparison with certain standards set forth by the investigator. Certainly a standard measuring device prepared by experts in the field would have been more effective had one been available.

Several needs for future research were revealed by this study. The subject of cause-effect relationships between non-attendance and socially unacceptable behavior is one that needs much clarification.

There is a need for further study of the factors that have led to maladjustment in individuals with poor attendance. The possibility of a case-study of individuals with problems including the use of sociograms and data on home backgrounds and parent attitudes should be investigated as a means of arriving at some specific conclusions.

The results of this study seem to clearly indicate that some relationship exists between extremely poor attendance and the frequency of behavior problems. The extent of this relationship needs to be determined. A study of a large group of children with attendance records of 150 days present or less out of 180 days of school could make a valuable contribution.

One final issue which was raised by this research was the question of the ratio of boys to girls in groups with good attendance records. If a difference were to be found in various types of communities, the reasons for this difference could be of prime concern to educators.

In conclusion, it should be said that this thesis has been written for the purpose of recording and interpreting facts which were discovered in a study of non-attendance, school achievement and social behavior. There should be no doubt in the minds of educators of the seriousness of these problems. Every possible step must be taken to insure an adequate understanding of these issues and their effects on the school performance of children.

## Bibliography

Books
Commission of Teacher Education, American Counoil of Education, Helping Teachers Understand Children, New York, 1945.

Del Solar, Charlotte, Parents and Teachers View the Child, Bureau of Publications, Teachers College, Columbia University, New York, 1949.

Denworth, Katherine M., "Effect of Length of Sohool Attendance Upon Mental and Educational Ages," 27th Yearbook of National Society for the Study of Education, Vol. II, 1928.

Griffiths, William, Behavior Difficulties of Children, University of Minnesota Press, 1952.

Heilman, J. D., "The Relative Influence Upon Educational Achievement of Some Hereditary and Environmental Factors", 27th Yearbook of National Society for the Study of Education, Vol. II, 1928.

Horney, Karen, The Neurotic Personality of Our Time, Norton and Co., New York, 1937.

Jones, V., "Character Development in Children--An Objective Approach", In L. Carmichael, Editor, Manual of Child Psychology, John Wiley and Sons, New York, 1946.

Monroe, Paul, Editor, Gyclopedia of Educational Research, MacMillan Company, New York, 1950.

Obrien, F. P., "The Conditional Value of a Longer School Year in One Teacher Schools", 27 th Yearbook of National Society for Study of Education, Vol. II, 1928.

Zeigler, Carl W., School Attendance as a Factor in School Progress, Teachers College, Columbia University, Contributions to Eduoation, No. 297, 1928.

## Periodical Literature

Butler, Charles H., "School Achievement and Attendance", School Review, XXXIII, 1925, pp. 450-2.

Butler, Charles H., "Relation of Achievement to Intelligence in One High School", School Review, XLIV, 1936, pp. 288-90.

Crider, Blake, "Effects of Absence on Scholarship", School and Society, XXX, 1929, pp. 27-8.

DeHaan, Robert F. and Robert J. Havighurst, "The Potentially Maladjus ted Child", Educational Digest, November 1952, pp. ll-15.

Feingold, Gustave A., "Scholarship, Attendance and Deportment", School and Society, XXVII, 1928, pp. 333-5.

Finch, F. H. and C. L. Nemzek, "Attendance and Achievement in Secondary Schools", Journal Eduaational Research, October, 1940, pp. 125-6.

Haggerty, M. E., "The Incidence of Undesirable Behavior in Public School Children", Journal of Educational Research, 12 (No. 2), 1925, pp. 102-22.

Odell, C. W., "Effect of Attendance on School Achievement", Journal of Educational Research, VIII, 1923, pp. 422-32.

Snyder, L. M., "The Problem Child in the Jersey City Elementary Schools", Journal of Educational Sociology, VII, 1934, pp. 343-52.

Sparks, Jack Norman, "Teachers Attitudes Toward Behavior Problems", Journal of Educational Psychology, May, 1952, pp. 284-91.

Tonsor, Charles A., "The Kid Who Drive You Nuts", Clearing House, February, 1953, pp. 328-31.

Upton, S. M. and C. F. Chassel, "Measuring Habits of Good Citizenship", Teachers College Record, XX, 1919, pp. 36-65.

Wetzel, H. A., "School Attendance and Scholarship", School Review, XXXVI, 1928, pp. 118-20.


[^0]:    1. Wiokman, E. K., Teachers and Behavior Problems, The Commonwealth Fand, New York, 1938, p. 16.
[^1]:    1. Butler, Charles H., "School Achievement and Attendence", School Review, XXXIII (1925), pp. 450-2.
    2. Butler, Charles H., "Relation of Achievement to Attendance in One High School", School Review, XLIV (1936), pp. 288-90.
    3. Crider, Blake, "Effects of Absence on Scholarship", School and Society XXX (1929), pp. 27-8.
[^2]:    I. Haggerty, M. E., "The Incidence of Undesirable Behavior in Public School Children", Journal of Education Research, 12: 102-22, 1925.
    2. Jones, V. "Character Development in Children--An Objective Approach", Carmichael, Le, Editor, Manual of Child Psychology, New York, John Wiley and Sons, 1946, p. 722.

[^3]:    1. Monroe, Op Cit., p. 920., "Non Attendance has little effect on achievement as expressed by marks." Other studies have reported different findings as reviewed in Chapter II.
