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PUPIL LEADERS AND NON-LEADERS IN A
JUNIOR HIGH SCHOOL

Submitted by

Helen Ruth Knight

(B.S. in Ed., Lowell State Teachers College, 1938)

In partial fulfillment of requirements for
the degree of Master of Education

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First Reader : Dugald S. Arbuckle, Assistant Professor of Education

Second Reader : J. Wendell Yeo, Professor of Education

First Reader : Donald S. Arbuckle, Assistant Professor of Education

Second Reader : J. Wendell Yeo, Professor of Education

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INTRODUCTION

In this, a democratic country, an educated electorate and competent leaders can be our only foundation. Since the inception of democracy, one of the basic problems has been to equip the people with the tools of discriminating choice and to empower those capable of leading, with not only the full use of these abilities, but the opportunity to exercise them to the greatest common good.

Historians can perhaps best supply an analysis of our successes and failures in this field. Even the political layman, however, recognizes that there is much to be done. There are many instances of office holding for reasons other than the common good. Many candidates are elected to office by the people for reasons other than competency. Saddest of all, there is sometimes evidence of a natural leader who does secure political office, but who is hampered by the fact that he has not been given the training and the education necessary to make greatest and fullest use of his powers.

It is not only in the administration of the federal government that we should expect capable leadership and efficient followership, but in every manifestation of democracy in our living, this balance should be evident. Although the federal government is of the greatest importance, competent leaders and followers are necessary for every walk

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of our democratic life. Leaders for state, county, city, town, and community responsibilities are needed. Probably none will disagree with Eichler when he says, "There is a great demand for effective leadership on every level of our complex social and economic structure."^{1/}

Educators have long seen in this demand the need for leadership and followership training. Since attitudes, skills, and ideals are best established when minds are young, this basic problem concerning the very existence of our way of life falls rightly to the schools. It is here that we must build the foundation of a workable democracy in training an enlightened electorate and educated potential leaders.

Student self-government is one answer to this problem. If this program is administered democratically, pupils are given an opportunity to elect their contemporaries to office, or be elected by them to office, and all have a chance to see the results of their work.

It is through this plan that the administration of the Walter S. Parker Junior High School of Reading, Massachusetts, aims to prepare in a measure the young people of Reading to become an efficient part of their community life. The school aims to provide not only adequate education in selection of

^{1/} G.A. Eichler, "Leadership Can Be Taught," Clearing House, XI:280, January, 1937.

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It is the belief of the writer that the school is providing such leadership training and experience for individuals who are superior to the rest of the student body, who are "potential leaders" and who will be equipped to go forward into adult life and become forces of influence in the community.

CHAPTER I
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CHAPTER I
SCOPE OF THE STUDY

The Hypothesis

The need for more and better leadership training cannot be denied. The school which is not attempting to train for effective leadership and efficient followership is not fulfilling its place in democratic society.

The Walter S. Parker Junior High School in Reading, Massachusetts, is attempting to provide leadership and followership training. Through a system of pupil self-government the pupils are given an opportunity to take part in the functions of the school. The pupils who are elected to office receive valuable leadership and training. Those who are not elected to office may have a part in the government through their representatives. All are given training in the technicalities of elections and in the principles of self-government.

CHAPTER I
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It is hoped, however, that those pupils who are elected to office by their fellow pupils are pupils who possess the ability to lead and are the best that the school has to offer.

It is the belief of the writer that these students are superior to their classmates, physically, mentally, academically, and socially, and that they are capable of benefiting by the extensive experience and training they are receiving.

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The Problem

The purpose of the present study is to determine how pupils who have been selected for positions of leadership compare with their fellow pupils.

It is hoped that the following questions will be answered:

Are the student leaders selected for leadership positions in the Walter S. Parker Junior High School superior physically, mentally, scholastically, and socially to their classmates ?

What differences, if any, exist ?

How do girl leaders compare with boy leaders ?

What implications for further leadership and followership training can be seen in the findings ?

Definitions

The term student or pupil leader is here defined as a boy or girl who has been elected by classmates to a position of leadership in the school.

The term position or office of leadership is used to denote a position in the student government which is of sufficient importance to demand some measure of responsibility. For the purposes of this study, student council officers and representatives and class officers have been used, as these positions require responsibility and dependability.

A non-leader is a pupil who has been elected to no student organization office during his stay in the school.

An intermediate child is one who is neither the youngest

nor the oldest in a family of three or more children.

A broken home is one which is broken by death, separation or divorce, and in which the child lives with only one or neither of his original parents.

Extra persons in the pupil's home are those persons who live in the pupil's home, but are not members of the pupil's immediate family.

Number and Selection of Cases

This study is based upon 195 cases. It includes 41 pupils who are classified as leaders, and 154 pupils who are classified as non-leaders.

In the leader group are included the student council president, two student council vice-presidents, the student council secretary, twenty-four student council representatives, three grade presidents, three grade vice-presidents, three grade secretaries, and four grade treasurers. The group is made up of twenty-four boys and seventeen girls.

The non-leader group includes 92 boys and 62 girls and is made up of pupils from the seventh, eighth, and ninth grades.

The composition of the group is as follows:

Leader Group

7th Grade		8th Grade		9th Grade		Total	
Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
5	3	7	9	12	5	24	17

Non-leader Group

45	22	27	25	20	15	92	62
----	----	----	----	----	----	----	----

Since the population of the school numbers 512, it can be readily seen that this is a small sample. The number is limited, however, in order to include just those pupils who have been elected to positions of responsibility and those pupils who have had no school leadership experience.

Sources of Data

A questionnaire was prepared for the purpose of gaining from the pupils such information as it was not possible to get elsewhere. This questionnaire was administered by the writer to all the pupils in the school. The questionnaires of those pupils who had held comparatively unimportant offices were removed from the group and the previously mentioned sample was kept.

School records for the individual pupils were consulted in order to secure accurate information.

Some individual interviews were utilized, but they were few and were used only for the purpose of securing clarity of information or for some similar purpose.

Health ratings, records, and height and weight records were submitted by the school nurse. Her information came from individual pupil health records, based upon the school physician's reports after the yearly examination of each pupil.

Description of the Locale of the Study

Reading is probably a typical middle class town. It has a population of 14,000 and is basically a residential community of little manufacturing and few farms.

CHAPTER II

REVIEW OF RESEARCH AND LITERATURE

Leadership has been defined in many ways. Yet, though the term is variable in definition, the quality is an apparent dynamic force. Jones says:

Leadership is, then, a universal biological phenomenon; it is inevitable and inescapable. There is no question of whether there shall be leaders or not; that was settled when man began. There is rather the question of what kind of leaders we shall have and of how we shall so arrange our social order and organize our educational agencies as to have wise and useful leaders.

CHAPTER II

The answer to this question rests in the hands of the teachers of America.

REVIEW OF RESEARCH AND LITERATURE

Research on leadership can perhaps best be grouped into three classes: that which analyzes leaders and their influence, that which attempts to build new measures for producing leaders, and that which aims to organize some principles or phases of instruction to underlie leadership training.

Analysis of Leaders

The greater part of the research concerns the first problem, analysis, and most investigations of this type have

1/ Arthur J. Jones, Education of Youth for Leadership, McGraw-Hill Book Company, Inc., 1938, p. 1.

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REVIEW OF RESEARCH AND LITERATURE

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^{1/} Arthur J. Jones, Education of Youth for Leadership, McGraw-Hill Book Company, Inc., 1938, p. 7.

been conducted on the secondary school or college level.

Investigators have discovered that leaders tend to have certain physical, mental, and social qualities in common. Although the principle of human variability is in evidence, these tendencies appear to be quite strong.

Age. In the matter of age, research has produced a variety of findings.

From a study involving 143 boys, ranging in age from twelve to seventeen, who were attending a summer camp,

^{2/} Partridge reports:

The most outstanding superiority is found to exist in the matter of age. The ten most outstanding leaders average more than twenty months older than the mean for the entire population of the camp.

In another investigation based upon 226 cases, concerning six groups of Boy Scouts, Partridge also found a high correlation between leadership ability and age.^{3/}

However, Bellingrath, in his study involving the pupils of five high schools, found no significant difference in age between leaders as a group and non-leaders as a group. Statistically significant differences were found though, when girls and boys were considered separately. Boys who were

^{2/} E. De Alton Partridge, Leadership Among Adolescent Boys, Teachers College Contributions to Education, No. 608, New York: Columbia University, 1934, p. 40.

^{3/} E. De Alton Partridge, "Ability in Leadership Among Adolescent Boys," School Review, September, 1932, XL:526-531.

selected for leadership positions were older than boy non-leaders, while girl leaders were found to be younger than girl non-leaders.^{4/}

Brown, in a study of 259 high school leaders, found that boy leaders were slightly older than girl leaders. The study also revealed that the outstanding leaders of the graduating class were younger than the other members.^{5/}

Brown's findings are also borne out by Cass, in a study involving 100 high school leaders and 45 non-leaders,^{6/} and Garrison, in a study of 201 leaders from the senior classes of two high schools.^{7/} Both investigators found the leaders to be younger than the non-leaders.

The difference in findings concerning the age of leaders can probably be explained by examination of the locale of the study. In school studies the age element is somewhat limited.

4/ George C. Bellingrath, Qualities Associated with Leadership in Extracurricular Activities of the High School, Teachers College Contributions to Education, No. 399. New York: Teachers College, Columbia University, 1936, p. 86.

5/ Marion Brown, Leadership among High School Pupils, Teachers College Contributions to Education, No. 559. New York: Teachers College, Columbia University, 1933, p. 88.

6/ Frank H. Cass, "A Comparison between Student Elected High School Leaders and Non-Leaders," unpublished Master's Thesis, University of Washington, 1935, p. 83.

7/ K.C. Garrison, "A Study of Some Factors Related to Leadership in High School," Peabody Journal of Education, XXI:11-17, July, 1933.

Other research, as this chapter will show, bears out the fact that it is usually students of higher intelligence who are selected for leadership positions. It is assumed that the majority of these pupils have not repeated grades, as some members of the rest of the class may have done. This would tend to show leaders to be younger than the rest of the group. When age is not limited, as in out-of-school groups, it is then that Partridge's findings are in evidence.^{8/}

Height and Weight. Investigations seem to indicate that differences in height and weight between leaders and non-leaders exist, but are negligible. Partridge^{9/} and Garrison^{10/} report no significant differences. Bellingrath's investigation indicates that girl leaders are taller and heavier than girl non-leaders.^{11/} Cass reports that both boy and girl leaders excel their non-leader classmates in height and in weight.^{12/}

Sex Differences. The fact that boys have a greater

8/ E. De Alton Partridge, Leadership among Adolescent Boys, Teachers College Contributions to Education, No. 608. New York: Columbia University, 1934, p. 40.

9/ Ibid., p. 92.

10/ Op. cit., p. 17.

11/ Op. cit., p. 56.

12/ Op. cit., p. 83.

chance than girls to attain positions of leadership is confirmed by Bellingrath,^{13/} Mooney,^{14/} and Wetzel. In fact, Wetzel, who conducted an investigation involving fifty-six student leaders in a Trenton, New Jersey, high school, states that the chances are "three to two" that the leader will be a boy.^{15/}

Brown finds that while boys have a greater chance of becoming leaders, and boy leaders excel boy non-leaders, girl leaders tend to excel girl non-leaders more. Brown also reports that boy leaders are older than girl leaders.^{16/}

Health. Two studies have set forth the principle that pupil leaders excel pupil non-leaders in health. Mooney, in a comparative study, concerning thirty-seven leaders and thirty-seven non-leaders, and attempting to control the factors of intelligence, scholarship, age, and sex, found that leaders show a better attendance and health record.^{17/} Cass states that the average high school leader "tends to be above average in health, maturity, and physical energy."^{18/}

^{13/} Op. cit., p. 56.

^{14/} Mrs. Juanita B. Mooney, "A Study of High School Leaders," unpublished Master's Thesis, Washington University, 1937, p. 51.

^{15/} William A. Wetzel, "Characteristics of Pupil Leaders," School Review, XL:532-534, 1932.

^{16/} Brown, op. cit., p. 90.

^{17/} Mooney, op. cit., p. 51.

^{18/} Cass, op. cit., p. 83.

Intelligence. Numerous investigations give basis to the conclusion that leadership is definitely related to intelligence. Mooney,^{19/} Wetzel,^{20/} Partridge,^{21/} and Cass^{22/} all report that leaders excel non-leaders in intelligence. Bellingrath^{23/} and Brown^{24/} report statistically significant differences in intelligence, only in the cases of girl leaders and girl non-leaders, where girl leaders definitely excel. In a study of gifted children Hollingworth says:

the intelligence of the leader is related in a fairly predictable manner, other traits being favorable, to the intelligence of the led. . . . That is, the leader is likely to be more intelligent, but not too much more intelligent than the average of the group led. ^{25/}

^{19/} Mooney, op. cit., p. 51.

^{20/} Wetzel, op. cit., pp. 532-534.

^{21/} Partridge, op. cit., p. 40.

^{22/} Cass, op. cit., p. 83.

^{23/} Bellingrath, op. cit., p. 17.

^{24/} Brown, op. cit., p. 49.

^{25/} Leta S. Hollingworth, Gifted Children. New York: Macmillan Company, 1926, p. 131.

^{27/} Op. cit., p. 131.

^{28/} Myrtle E. Moore, "Factors Related to Participation and Leadership in Extracurricular Activities of the Junior High School," unpublished Master's Thesis, 1933, p. 54.

^{29/} Moore, op. cit., p. 54.

Intelligence. Numerous investigations give basis to the conclusion that leadership is definitely related to intelligence. Money, Wetzel, Farbridge, and Gans all report that leaders excel non-leaders in intelligence. Bellinsohn and Brown report statistically significant differences in intelligence, only in the case of girl leaders and girl non-leaders, where girl leaders definitely excel. In a study of gifted children Hollingworth says:

the intelligence of the leader is related in a fairly predictable manner, other traits being favorable, to the intelligence of the led. . . . That is, the leader is likely to be more intelligent, but not too much more intelligent than the average of the group led.

19 Money, op. cit., p. 51.
 20 Wetzel, op. cit., pp. 133-134.
 21 Farbridge, op. cit., p. 40.
 22 Gans, op. cit., p. 88.
 23 Bellinsohn, op. cit., p. 14.
 24 Brown, op. cit., p. 49.
 25 Leta S. Hollingworth, Gifted Children. New York: Macmillan Company, 1926, p. 131.

A study of Finch and Carroll concerning a group of gifted pupils in University High School of Minnesota,^{26/} tends to confirm Hollingworth's conclusions.^{27/} The results showed that in a group of superior children, the leading will tend to be done by the gifted children.

Moore, who conducted an investigation involving the ninth grade pupils of three junior high schools in Washington, D.C., found a positive correlation between intelligence and participation and leadership in extra-curricular activities.^{28/}

The results seem to be unanimous in associating leadership with intelligence. Partridge, who used the Army Alpha Test as his measure of intelligence, says:

There is a surprisingly high correlation between leaders chosen by boys and the scores on the Army Alpha Test. Even when the factor of age is held constant, the score on the Army Alpha Test seems to be the most important predictive instrument of popularity as a leader.^{29/}

26/ Frank H. Finch and Herbert A. Carroll, "Gifted Children as High School Leaders," The Pedagogical Seminary and Journal of Genetic Psychology, XLI:476-482, 1932.

27/ Op. cit., p. 131.

28/ Myrtle E. Moore, "Factors Related to Participation and Leadership in Extracurricular Activities of the Junior High School," unpublished Master's Thesis, 1933, p. 54.

29/ Moore, op. cit., p. 92.

Scholarship. Many investigators report a decidedly significant difference in student leaders and non-leaders in the matter of scholarship. Bellingrath finds that only girl leaders excel their non-leader classmates in scholarship. ^{30/} Wetzl, ^{31/} Brown, ^{32/} and Moore ^{33/} report that relatively high scholarship is one of the characteristics of student leaders. Mooney's findings show that "pupil leaders tend to excel in intelligence and scholarship . . ." ^{34/} Cass' study also bears out these findings. He concludes that student leaders have higher scholarship ratings and he reports a statistically significant difference. ^{35/} Garrison's investigation also reveals a high correlation between scholarship and leadership. ^{36/}

Other Factors. Many other definite characteristics have been noted by investigators.

^{30/} Bellingrath, op. cit., p.56.

^{31/} Wetzl, op. cit., pp. 532-534.

^{32/} Brown, op. cit., p. 53.

^{33/} Moore, op. cit., p. 54.

^{34/} Mooney, op. cit., p. 51.

^{35/} Cass, op. cit., p. 83.

^{36/} Garrison, op. cit., pp. 11-17.

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³⁰ Bellinger, op. cit., p. 55.
³¹ Wetzel, op. cit., pp. 532-534.
³² Brown, op. cit., p. 53.
³³ Moore, op. cit., p. 54.
³⁴ Money, op. cit., p. 51.
³⁵ Case, op. cit., p. 55.
³⁶ Garrison, op. cit., pp. 11-17.

Mooney reports that pupil leaders make a better general appearance.^{37/}

Mooney^{38/} and Cass^{39/} both report wider experiences and wider participation in extra-mural activities on the part of student leaders.

Rather regular church attendance on the part of student leaders has been noted by Cass.^{40/}

From his study, Wetzel concludes that pupil leaders show strong character traits, and are conscious of them. However, when Wetzel compared the self-ratings of these pupils with ratings of the same pupils by their teachers there was a surprisingly high correlation, indicating that these pupils do not overrate themselves.^{41/}

Garrison links leadership and admiration, basing this on the results of the study which showed that pupils tend to select as leaders those pupils whom they admittedly admire.^{42/}

^{37/} Mooney, op. cit., p. 51.

^{38/} Ibid., p. 51.

^{39/} Cass, op. cit., p. 85.

^{40/} Ibid., p. 85.

^{41/} Wetzel, op. cit., pp. 532-534.

^{42/} Garrison, op. cit., p. 17.

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Garrison links leadership and admiration, basing this on the results of the study which showed that pupils tend to select as leaders those pupils whom they admittably admire.⁴¹

37 / Mooney, op. cit., p. 51.
 38 / Ibid., p. 51.
 39 / Case, op. cit., p. 55.
 40 / Ibid., p. 55.
 41 / Wetzel, op. cit., pp. 232-234.
 42 / Garrison, op. cit., p. 14.

From his study Cass concludes that: "The native born student has a slightly better chance than the foreign born to become a leader, due largely to language difficulties." ^{43/}

Mooney notes "the predominance of the only child in the leader group." ^{44/}

Garrison reports a small but positive correlation between fathers' occupations and leadership. ^{45/} Mooney's investigations also showed that the leader fathers had a slightly higher occupational level than the non-leader fathers. The same study showed that the leader fathers had an average of almost two years more education, and, that both parents of pupil leaders had more intense and diversified interests and activities than the parents of non-leaders. ^{46/}

Two investigations have shown a positive correlation between home background and leadership. Bellingrath concludes that leaders come from better homes than do non-leaders. ^{47/} Mooney notes that leader home and neighborhood ratings are higher than the ratings of non-leader environments. ^{48/}

^{43/} Cass, op. cit., p. 84.

^{44/} Mooney, op. cit., p. 80.

^{45/} Garrison, op. cit., p. 17.

^{46/} Mooney, op. cit., p. 64.

^{47/} Bellingrath, op. cit., p. 56.

^{48/} Mooney, op. cit., p. 81.

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⁴⁴ Mooney, op. cit., p. 80.
⁴⁵ Garrison, op. cit., p. 17.
⁴⁶ Mooney, op. cit., p. 64.
⁴⁷ Bellingrath, op. cit., p. 56.
⁴⁸ Mooney, op. cit., p. 81.

Mooney's investigation shows:

There is little difference in the solidarity of the home, but a decided difference in the privacy of the family life, as judged by the fact that a large number of persons other than members of the immediate family live in the non-leader homes, while this condition was found in no leader home. 49/

Predetermination of Leaders

Little has been done in the field of building an instrument for predetermining leaders, although many investigators report indications of a need for such an instrument. Partridge reports the need for some measure to identify leaders early, and a hope to convert his findings into something of the sort. He says that leaders should be given some special consideration and training after they have been identified. He adds that this might develop a "valid and reliable method of predicting which individuals are potential leaders."^{50/}

Hill, in a comprehensive study of the phases of leadership and leadership guidance, states that there is a need of tests to determine potential leaders. He hopes that his and other material will provide the basis for building an instrument "to determine how potential leaders may be early discovered, counselled, educated, trained and so placed that society may have the benefit of better leaders in its efforts

49/ Ibid., p. 80.

50/ Partridge, op. cit., p. 91.

to progress toward enduring solutions of societal problems.^{51/}

Jones, after reviewing the investigations into the field of leadership and completing a study which traced the characteristics of outstanding leaders back into their early lives, states:

We may conclude, then, that we should select as potential leaders and accord very special consideration to the young people in the high school who (1) rank high in intelligence tests, (2) have strong emotional drives, (3) have high scholastic rank, (4) have marked persistence in work in which they are interested, and (5) have confidence in their own abilities. If, in addition, they come from homes where the environment is especially stimulating to them, and if they have decided social ideals of lawfulness and social-mindedness, the probability of their future leadership is considerably increased. 52/

Leadership Training

Tead says,

Training for leadership is a genuine possibility and has been proved a positive benefit. It can be furthered by the individual leader through personal study. It can be greatly strengthened by the support of an organized program under inspiring and pedagogically competent direction. 53/

That there is a need for such training has been a finding

51/ George Q. Hill, "Leadership Guidance for Public Secondary Schools," unpublished Master's Thesis, Boston University, 1946, p. 1.

52/ Arthur J. Jones, Education of Youth for Leadership. New York: McGraw-Hill Book Company, 1938, p. 24.

53/ Ordway Tead, The Art of Leadership. New York: McGraw-Hill Book Company, 1935, p. 298.

of many investigators. Herlihy, in an attempt to determine whether sixth grade children knew the socially correct responses to situations involving leadership or initiative, found that pupils did not know the correct responses and, "that there is a definite need for training in the qualities tested."^{54/}

Brown reports the need of a program of leadership guidance which would take individual differences into consideration, would provide leadership training, make for group progress and educate for effective followership.^{55/}

Partridge concludes that "there should be ample opportunity for group experience to operate and for individuals who have qualities of potential leadership to exercise these qualities in a way which will equip them to be of better service to humanity."

He also adds, "Properly motivated adolescent groups can be made very rich in social experience of this kind."^{56/}

In a study concerning the persistence of leadership, Courtenay concluded that:

Nevertheless, on the basis of the information gathered in this study, the writer feels justified in concluding that the leadership evidenced in early years has a

^{54/}Jane M. Herlihy, "A Study of Some Phases of Initiative and Leadership of Sixth Grade Children," unpublished Master's Thesis, Boston University, 1947, p. 43.

^{55/} Brown, op. cit., pp. 157-162.

^{56/} Partridge, op. cit., p. 91.

definite tendency to persist; that the qualities which made members of the leader group outstanding figures in the high school world continued to make them prominent on the college campus and active in the stimulation and the direction of community affairs.

However, she also finds that there is a tendency for school leaders to show a slight lag in leadership in adult life, while non-leaders tend to grow slightly.^{57/} It may be suggested that more adequate and intensive training might prevent this lag.

Halsey's volume which grew out of a series of experimental conferences in leadership in a business corporation shows that the business world is taking a serious interest in this problem. The book is a comprehensive course in leadership with suggestions for self-teaching. Halsey reports, "These attributes of leadership can be developed by training."^{58/}

^{59/} White has reported concerning a leadership class in use in the Parker High School in Chicago. The group meets every day and studies such subjects as the elements of leadership, parliamentary procedure, the history and purposes of

^{57/} Mary E. Courtenay, "The Persistence of Leadership," The School Review, Vol. XLVI: 97-107, 1938.

^{58/} George D. Halsey, How to be a Leader. New York: Harper and Brothers, 1938, pp. 41-56.

^{59/} Robert White, Jr., "A Class in Leadership," The School Review, Vol. XLVI:448-452, June, 1938.

American education, and the structure of political organization. The course is a requirement for eligibility for any student office. Two other phases of the class work are attending the meetings of the school legislation body and holding formal cabinet meetings. The pupils check their qualities against those known elements of leadership and are helped to see the way towards strengthening their weaknesses and re-emphasizing their strengths. White reports positive results and states that leadership growth is definitely indicated.

Summary of Research

Investigators have found that leadership is positively related to many physical, mental, and social traits.

Pupil leaders have been found to be younger than non-leaders in a school situation. Research tends to indicate, though, that in out-of-school situations the leader will probably be older than the rest of his group.

There is a good chance that the pupil leader will be at least slightly taller than non-leader classmates, although some investigators report no statistically significant differences.

Research shows that boys have a greater chance than do girls of attaining positions of leadership.

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Investigators have found that leadership is positively related to many physical, mental, and social traits. Youth leaders have been found to be younger than non-leaders in a school situation. Research tends to indicate, though, that in out-of-school situations the leader will probably be older than the rest of his group. There is a good chance that the pupil leader will be at least slightly taller than non-leader classmates, although some investigators report no statistically significant differences. Research shows that boys have a greater chance than do girls of attaining positions of leadership. Investigations indicate that the student leader will probably excel the student non-leader in health.

That the pupil leader will be higher in intelligence, but not too much higher, than the rest of his group and will excel his group in scholarship has also been borne out by research.

Better appearance, wider experiences, and participation in extra-mural activities, and strong character traits are reported as characteristics of pupil leaders.

Better home and neighborhood background and a higher occupational level of leader fathers have been reported.

Partridge concludes:

"Adolescent leaders seem to be all-round superior individuals as compared with their associates." ^{60/}

The need for some reliable measure to predetermine leadership has been reported by many educators and investigators. None has apparently been built as yet, but a sincere attempt to convert findings into something of the sort has been indicated.

The necessity for wider and more intensive leadership training has been definitely indicated by much research. Successful training has been reported, though the finding still persists that we need more and better training for potential leaders for all phases of democratic living.

60/ Partridge, op. cit., p. 92.

CHAPTER III

THE PHYSICAL CHARACTERISTICS OF PUPIL LEADERS AND NON-LEADERS

For the purpose of gaining a picture of the physical characteristics of pupil leaders and non-leaders, the pupils in this survey were selected in respect to age, height, weight, and health.

Age

Since the 195 pupils in this study represented an average ranging from the seventh, eighth, and ninth grades, in the matter of age, the particular grade groups were studied separately. With an overweighing of seventh grade pupils in the non-leader group, a

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With research having produced a variety of findings concerning the comparative age of leaders and non-leaders, it is interesting to note that the present study produced no significant findings in this matter. The weight of research tends to show that in a school situation the pupil leader will be slightly younger than the pupil non-leader. The present study bore out the same findings, but by a difference so small as to be almost negligible.

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TABLE I
AGE OF SEVENTH GRADE LEADERS AND NON-LEADERS

Age Range	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-leaders
15-0 - 15-5	0	0	1	0	0	1
14-6 - 14-11	0	0	4	0	0	4
14-0 - 14-5	0	0	6	2	0	8
13-6 - 13-11	0	0	4	0	0	4
13-0 - 13-5	1	0	15	5	1	20
12-6 - 12-11	2	3	8	12	5	20
12-0 - 12-5	2	0	6	3	2	9
Total Number of Cases	5	3	45	22	8	67
Mean Age	12 -7*	12-9	13-4	12-10	12-8	13-1

* 12-7 indicates twelve years, seven months.

Table I shows the age range and mean ages of the seventh grade leaders and non-leaders. The leaders averaged five months younger than the non-leaders, with the boy leaders nine months younger than the non-leader boys and the leader girls one month younger than their girl classmates. Boy leaders were younger than girl leaders by two months.

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Age Range	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
12-0 - 12-5	0	0	1	0	1
12-6 - 12-11	2	3	8	12	20
12-0 - 12-5	2	0	2	2	6
Total Number of Cases	4	3	11	14	18
Mean Age	12-7*	12-9	12-4	12-10	12-1

* 12-7 indicates twelve years, seven months.

Table I shows the age range and mean ages of the seventh grade leaders and non-leaders. The leaders averaged five months younger than the non-leaders, with the boy leaders nine months younger than the non-leader boys and the leader girls one month younger than their girl classmates. Boy leaders were younger than girl leaders by two months.

TABLE II
AGE OF EIGHTH GRADE LEADERS AND NON-LEADERS

Age Range	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-leaders
16-0 - 16-5	0	0	2	0	0	2
15-6 - 15-11	0	0	3	0	0	3
15-0 - 15-5	0	0	1	1	0	2
14-6 - 14-11	0	2	5	0	2	5
14-0 - 14-5	0	0	6	6	0	12
13-6 - 13-11	6	5	8	11	11	19
13-0 - 13-5	1	2	2	7	3	9
Total Number of Cases	7	9	27	24	16	51
Mean Age	13-7	13-9	14-11	13-9	13-8	14-5

In Table II the age range and the mean ages of the eighth grade leaders and non-leaders are shown. Here again, leaders were younger than non-leaders, in this case by nine months. Boy leaders were sixteen months younger than boy non-leaders, but girl leaders and girl non-leaders had the same mean age. Boy leaders were again younger than girl leaders, and with a like difference, two months.

Height and Weight

Again because of the inequality of grade sampling, height and weight were studied in the separate grade groups.

TABLE II
AGE OF EIGHTH GRADE LEADERS AND NON-LEADERS

Age Range	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
13-0 - 13-5	1	2	2	7	3
13-6 - 13-11	6	5	8	11	19
14-0 - 14-5	0	0	6	6	12
14-6 - 14-11	0	2	0	2	2
15-0 - 15-5	0	0	1	1	2
15-6 - 15-11	0	0	0	0	0
16-0 - 16-5	0	0	0	0	0
Total Number of Cases	7	9	27	24	61
Mean age	13-7	13-9	14-11	13-9	14-2

In Table II the age range and the mean ages of the eighth grade leaders and non-leaders are shown. Here again, leaders were younger than non-leaders, in this case by nine months. Boy leaders were sixteen months younger than boy non-leaders, but girl leaders and girl non-leaders had the same mean age. Boy leaders were again younger than girl leaders, and with a like difference, two months.

TABLE III
AGE OF NINTH GRADE LEADERS AND NON-LEADERS

Age Range	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
16-6 - 16-11	1	0	1	0	1	1
16-0 - 16-5	0	0	2	1	0	3
15-6 - 15-11	1	0	0	1	1	1
15-0 - 15-5	3	2	3	4	5	7
14-6 - 14-11	3	3	13	4	6	17
14-0 - 14-5	4	0	1	5	4	6
Total Number of Cases	12	5	20	15	17	35
Mean Age	14-11	14-9	15-0	14-10	14-11	14-11

Ninth grade age findings, as shown by Table III, seem to show a reversal of the findings for the other two grades. Leaders and non-leaders had the same mean age. This time, boy leaders were older than girl leaders by two months. Boy non-leaders were older than girl non-leaders, but by only two months.

Although these findings show considerable variety, it is probably safe to conclude that the pupil leader was younger than his classmates and that the boy leader was slightly younger than the girl leader.

Height and Weight

Again because of the inequality of grade sampling, height and weight were studied in the separate grade groups.

Accurate height and weight ratings for this part of the survey were supplied by the school physical education department.

Although differences were small, the figures tend to show that leaders were shorter in height and lighter in weight than their classmates. This finding is in keeping with the findings about age, since a pupil who is slightly younger than the rest of his group will probably also be slightly shorter and lighter.

TABLE IV

HEIGHT AND WEIGHT OF SEVENTH GRADE LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total Number of Cases	5	3	44	22	8	66
Height Ranges in Inches	57-62	60-62	52-69	56-64	57-62	52-69
Mean Height	59.20	61.33	61.32	60.23	60.00	60.95
Weight Range in Pounds	87-110	76-105	60-191	70-132	76-110	60-191
Mean Weight	95.00	92.66	105.36	95.22	94.13	101.98

Table IV shows the height and weight records for seventh grade. Here non-leaders averaged less than one inch taller than leaders. Boy leaders were 2.12 inches shorter than boy non-leaders, while leaders were 1.10 inches shorter than girl non-leaders. Boy non-leaders exceeded girl non-leaders by

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Total Number of Cases	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
5	3	2	44	22	66
Height Ranges in Inches	57-62	60-65	52-59	58-64	57-65
Mean Height	59.20	61.32	61.82	60.23	60.00
Weight Ranges in Pounds	87-110	78-105	60-121	70-132	73-110
Mean Weight	92.00	92.66	102.32	92.22	94.18

Table IV shows the height and weight records for seventh grade. Here non-leaders averaged less than one inch taller than leaders. Boy leaders were 2.12 inches shorter than boy non-leaders, while leaders were 1.10 inches shorter than girl non-leaders. Boy non-leaders exceeded girl non-leaders by

1.09 inches. It is interesting to note that in the seventh grade, girl leaders were slightly taller than boy leaders.

In weight, seventh grade leaders were 7.85 pounds lighter than non-leaders. Boy leaders were over ten pounds lighter than their boy classmates, while girl leaders were 2.56 pounds lighter than their girl classmates. Boy non-leaders were ten inches taller than girl non-leaders. In spite of the fact that boy leaders were shorter than girl leaders, they outweighed the girls by 2.34 pounds.

TABLE V

HEIGHT AND WEIGHT OF EIGHTH GRADE LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total Number of Cases	7	9	27	25	16	52
Height Range in Inches	61-70	61-65	58-70	57-67	61-70	57-70
Mean Height	65.00	63.00	64.88	62.72	63.44	63.85
Weight Range in Pounds	97-129	89-122	77-188	80-160	89-129	77-188
Mean Weight	111.57	103.11	124.88	110.72	106.81	118.08

That eighth grade non-leaders were also less than one inch taller than eighth grade leaders can be seen in Table V. Boy non-leaders were less than one inch taller than leader boys, while conversely girl leaders were taller than their classmates, but by less than an inch. Boy non-leaders were

1.09 inches. It is interesting to note that in the seventh grade, girl leaders were slightly taller than boy leaders. In weight, seventh grade leaders were 7.88 pounds lighter than non-leaders. Boy leaders were over ten pounds lighter than their boy classmates, while girl leaders were 2.86 pounds lighter than their girl classmates. Boy non-leaders were ten inches taller than girl non-leaders. In spite of the fact that boy leaders were shorter than girl leaders, they out-weighted the girls by 2.86 pounds.

TABLE V
HEIGHT AND WEIGHT OF EIGHTH GRADE LEADERS AND NON-LEADERS

Total Number of Cases	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
Mean Weight in Pounds	111.87	102.11	124.88	110.78	118.08
Weight Range in Pounds	97-122	89-122	77-122	80-120	77-122
Mean Height in Inches	62.00	62.00	64.88	62.72	62.86
Height Range in Inches	61-70	61-62	58-70	67-67	61-70
Total Number of Cases	7	2	27	16	52

That eighth grade non-leaders were also less than one inch taller than eighth grade leaders can be seen in Table V. Boy non-leaders were less than one inch taller than leader boys, while conversely girl leaders were taller than their classmates, but by less than an inch. Boy non-leaders were

2.16 inches taller than girl non-leaders. Boy leaders averaged exactly one inch taller than girl leaders.

In weight, eighth grade leader pupils were again excelled by their classmates, this time by 11.27 pounds. Non-leader boys outweighed leader boys by 13.31 pounds. Although girl leaders were taller than their girl classmates, they were lighter than the non-leader girls, with a 7.61 pound difference. Boy non-leaders outweighed girl non-leaders by 14.16 pounds. Boy leaders averaged 8.46 pounds heavier than girl leaders.

TABLE VI

HEIGHT AND WEIGHT OF NINTH GRADE LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total Number of Cases	12	5	20	15	17	35
Height Range in Inches	60-68	59-63	59-69	61-65	59-68	59-69
Mean Height	64.08	62.20	63.50	62.80	63.53	63.20
Weight Range in Pounds	94-158	82-132	93-191	94-207	82-158	93-207
Mean Weight	118.00	110.04	117.50	122.07	115.76	118.94

Table VI gives ninth grade heights and weights and shows that in this respect differences between the leader group and the non-leader group were small. In this grade the leaders were taller than the non-leaders, but by less than one inch.

2.16 inches taller than girl non-leaders. Boy leaders averaged exactly one inch taller than girl leaders. In weight, eighth grade leader pupils were again exceeded by their classmates, this time by 11.27 pounds. Non-leader boys outweighed leader boys by 13.21 pounds. Although girl leaders were taller than their girl classmates, they were lighter than the non-leader girls, with a 7.21 pound difference. Boy non-leaders outweighed girl non-leaders by 14.16 pounds. Boy leaders averaged 8.46 pounds heavier than girl leaders.

TABLE VI
HEIGHT AND WEIGHT OF NINTH GRADE LEADERS AND NON-LEADERS

Total Number of Cases	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
12	5	7	15	17	32
Height Range in Inches	50-68	52-68	51-68	52-68	50-68
Mean Height	64.08	62.20	62.50	62.63	62.20
Weight Range in Pounds	94-158	92-132	92-121	82-128	92-157
Mean Weight	118.00	110.04	117.50	112.97	118.94

Table VI gives ninth grade heights and weights and shows that in this respect differences between the leader group and the non-leader group were small. In this grade the leaders were taller than the non-leaders, but by less than one inch.

Similarly, considered in separate sex groupings, girl leaders were less than one inch taller than their non-leader classmates. Boy non-leaders were less than one inch taller than girl non-leaders. Boy leaders were 1.88 inches taller than girl leaders.

Ninth grade non-leaders outweighed ninth grade leaders by 3.18 pounds. Boy leaders outweighed boy non-leaders by less than a pound, while conversely, girl leaders were outweighed by their girl classmates by 12.03 pounds. Boy leaders were nearly eight pounds heavier than girl leaders.

In studying the complete height and weight picture for leaders and non-leaders it would appear that the pupil leader was slightly shorter and lighter than his non-leader classmate.

Health

Health ratings used in this study were submitted by the school nurse and were based upon the school physician's yearly examination of the pupils' general health. Since this did not take into consideration all handicaps and defects, such restrictions have been considered separately.

The health ratings used were: excellent, good, fair, and poor. In order to find mean ratings for the separate groups each rating was assigned a numerical value as follows:

excellent	3
good	2
fair	1
poor	0

TABLE VII
HEALTH RATINGS OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total No. of Cases	24.00	17.00	88.00	61.00	41.00	149.00
Mean Health Rating	2.04	1.82	1.92	1.87	1.95	1.89

Based upon these numerical values, Table VII was set up. It can be seen by this table that the leaders excelled the non-leaders in general health, but by a negligible difference. Although boy leaders excelled their boy class-mates, girl leaders did not excel the non-leader girls. Boy leaders excelled the girl leaders by .22, a small margin, but the largest one shown by the table.

Because of the inadequacy of a one-word rating for a pupil's general health, a list of defects of different kinds was drawn up. The information included in this list was also supplied by the school nurse and it came from the school physician's records. As can be seen in Table VIII, the health defects were listed under separate headings and the number of defects was listed as well as the number of pupils with defects.

TABLE VII
HEALTH RATINGS OF PUPIL LEADERS AND NON-LEADERS

Total No. of Cases	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
24.00	17.00	88.00	61.00	43.00	148.00
Mean Health Rating	2.04	1.82	1.92	1.87	1.89

Based upon these numerical values, Table VII was set up. It can be seen by this table that the leaders exceeded the non-leaders in general health, but by a negligible difference. Although boy leaders exceeded their boy class-mates, girl leaders did not excel the non-leader girls. Boy leaders exceeded the girl leaders by .22, a small margin, but the largest one shown by the table.

Because of the inadequacy of a one-word rating for a pupil's general health, a list of defects of different kinds was drawn up. The description included in this list was also supplied by the school nurse and it came from the school physician's records. As can be seen in Table VIII, the health defects were listed under separate headings and the number of defects was listed as well as the number of pupils with defects.

TABLE VIII
HEALTH DEFECTS OF PUPIL LEADERS AND NON-LEADERS

Defects	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Heart	2	0	1	2	2	3
Nerves	0	0	3	1	0	4
Nutrition	0	1	0	2	1	2
Emotions	0	0	4	1	0	5
Glands	0	0	1	0	0	1
Ears	0	1	4	0	1	4
Eyes	1	2	5	3	3	8
Nose	0	0	0	1	0	1
Teeth	0	0	0	3	0	3
Legs	0	0	1	0	0	1
Throat	0	0	0	2	0	2
Chest	0	0	1	0	0	1
Total No. of Defects	3	4	20	15	7	35
Total No. of pupils in survey	23	17	92	62	41	154
Total No. of pupils with health defects	2	2	16	11	4	27
Per cent of pupils with health defects	8.70	11.76	17.39	17.74	9.76	17.53

TABLE VIII
HEALTH DEFECTS OF PUPIL READERS AND NON-READERS

Defects	Readers		Non-Readers		Total
	Boys	Girls	Boys	Girls	
Heart	2	0	1	2	3
Nerves	0	0	2	1	4
Nutrition	0	1	0	2	3
Emotions	0	0	4	1	5
Glands	0	0	1	0	1
Hair	0	1	4	0	4
Eyes	1	2	3	3	8
Nose	0	0	0	1	1
Teeth	0	0	0	3	3
Legs	0	0	1	0	1
Throat	0	0	0	2	2
Chest	0	0	1	0	1
Total No. of Defects	3	4	20	15	38
Total No. of pupils in survey	23	17	32	32	124
Total No. of pupils with health defects	3	2	12	11	28
Per cent of pupils with health defects	8.70	11.76	14.33	17.74	22.58

It can readily be seen that this table shows a decidedly higher comparative health standing on the part of the pupil leaders. Both boy and girl leaders average fewer defects and together they average higher than the non-leaders. Again the boy leaders excelled the girls, but by a small margin.

It seems safe to conclude that, although pupil leaders excelled pupil non-leaders only slightly in general health, as a group they had fewer health defects and a smaller percentage of their group had such defects.

Summary

1. According to the evidence in this chapter, the student leaders in this survey were shown to be slightly younger, shorter, and lighter, but by a very small margin.

2. Their general health was only slightly better than that of the pupil non-leaders, but they averaged considerably fewer health defects than non-leaders.

3. Boy leaders excelled girl leaders in all characteristics measured.

CHAPTER IV
INTELLIGENCE AND SCHOLARSHIP OF PUPIL LEADERS AND NON-LEADERS
Intelligence

Few will deny that effective leadership can come only from intelligent leaders. That followers realize it and act upon it has been borne out by much research. Especially non-science pupils look to the intelligent members of their group for guidance and leadership. Research has associated intelligence with leadership probably more significantly than it has associated any other single factor.

For the purposes of this survey, the intelligence quotients listed came from the files of the Test Director of the school. They were all the results of the Vernon-Wechsler Test

CHAPTER IV
INTELLIGENCE AND SCHOLARSHIP OF PUPIL LEADERS AND NON-LEADERS

Table II shows the range of the intelligence quotients of the 196 pupils included in this study and the mean intelligence quotient for the separate groups.

It can be readily seen that in mean intelligence quotient the leader group excelled the non-leader group by 15.45 points. The boy leaders excelled the boy non-leaders by 21.95 points, a notable difference. The girl leaders were not so superior to their girl classmates, as they averaged 18.33 higher. It is interesting to note the similarity of the mean intelligence

CHAPTER IV

INTELLIGENCE AND SCHOLARSHIP OF PUPIL LEADERS AND NON-LEADERS

Intelligence

Few will deny that effective leadership can come only from intelligent leaders. That followers realize it and act upon it has been borne out by much research. Socially conscious pupils look to the intelligent members of their group for guidance and leadership. Research has associated intelligence with leadership probably more significantly than it has associated any other single factor.

For the purposes of this survey, the intelligence quotients listed came from the files of the test director of the school. They were all the results of the Terman-McNemar Test of Mental Ability, Forms C and D. Eighth and ninth grade pupils had Form D and seventh grade pupils had Form C.

Table IX shows the range of the intelligence quotients of the 195 pupils included in this study and the mean intelligence quotient for the separate groups.

It can be readily seen that in mean intelligence quotient the leader group excelled the non-leader group by 15.48 points. The boy leaders excelled the boy non-leaders by 21.93 points, a notable difference. The girl leaders were not so superior to their girl classmates, as they averaged 13.23 higher. It is interesting to note the similarity of the mean intelligence

TABLE IX
INTELLIGENCE QUOTIENTS OF PUPIL LEADERS AND NON-LEADERS

Range of Intelligence Quotients	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
150-159	1	0	0	0	1	0
140-149	2	0	1	0	2	1
130-139	3	3	6	1	6	7
120-129	10	4	7	9	14	16
110-119	5	5	22	11	10	33
100-109	0	2	17	15	2	32
90-99	0	1	16	14	1	30
80-89	0	1	11	6	1	17
70-79	1	1	10	2	2	12
60-69	0	0	2	0	0	2
Total No. of Cases	22	17	92	58	39	150
Mean I.Q.	124.08	115.38	102.15	105.85	120.51	105.03

quotients of the two non-leader groups. The girls excelled the boys by 3.70. Boy leaders again excelled girl leaders by a wide margin, 8.70 points.

It is interesting to note the range of intelligence quotients of the two groups. There were four members of the leader group who were definitely below average in intelligence. There were also in the non-leader group twenty-four pupils who might readily be classed as being superior in intelligence. The intelligence of these pupils was

TABLE IX

INTELLIGENCE QUOTIENTS OF PUPIL LEADERS AND NON-LEADERS

Range of Intelligence Quotients	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
150-189	1	0	0	0	1
140-149	2	0	1	0	3
130-139	3	2	6	1	6
120-129	10	4	7	2	14
110-119	5	5	22	11	10
100-109	0	2	17	15	2
90-99	0	1	13	14	1
80-89	0	1	11	6	1
70-79	1	1	10	2	2
60-69	0	0	2	0	0
Total No. of Cases	22	14	92	58	39
Mean I. Q.	124.98	113.33	102.15	102.82	120.51

It is interesting to note the range of intelligence quotients of the two groups. There were four members of the leader group who were definitely below average in intelligence. There were also in the non-leader group twenty-four pupils who might readily be classed as being superior in intelligence. The intelligence of these pupils was by a wide margin, 8.76 points.

Boy leaders again excelled girl leaders the boys by 2.70. The girls excelled the non-leader groups. The girls excelled

apparently not being used by the student body since they were not electing these students to student government offices.

In reviewing the findings concerning intelligence, the conclusion that pupil leaders were definitely superior to pupil non-leaders appears to be justified.

Scholarship

The study of the scholarship of the pupil leaders and non-leaders was based upon their marks in their three major subjects, English, mathematics, and social studies. These three subjects were chosen because they were the only subjects listed as major subjects and were the only ones which were common to all the pupils in the survey.

The scholarship mark used for each pupil was his mark for the total year 1947-1948 in each of the three subjects mentioned.

In order to find average scholarship ranks for the particular groups, a numerical value was assigned to each letter rank as follows:

A	4 points
B	3 points
C	2 points
D	1 point
F	0 points

Thus, a twelve point rating would signify an all A record, an eleven point rating would indicate a record containing two A's, and a B, and so on.

Using these numerical values, Table X was prepared. It is the purpose of this table to show the average number of scholarship points earned by each pupil group in the study.

TABLE X

SCHOLASTIC RECORD OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Mean No. of Scholarship Points	9.04	8.58	5.50	6.66	8.85	5.96

It can readily be seen that pupil leaders who averaged nearly an all B record exceeded pupil non-leaders who had slightly less than an all C record by nearly three points. Boy leaders averaged better than an all B record and had 3.54 more points in scholarship than boy non-leaders. Girl leaders had an average of slightly less than an all B record and surpassed girl non-leaders by nearly two points. It is interesting to note that girl non-leaders excelled boy non-leaders, while boy leaders excelled girl leaders.

Table X indicates a definite superiority in scholarship on the part of student leaders.

With the scholarship superiority of the leader group definitely revealed, the scholarship ratings were broken down into separate subjects in order to gain possible teaching implications.

TABLE X
SCHOLASTIC RECORD OF PUPIL LEADERS AND NON-LEADERS

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
Mean No. of Scholarship Points	9.04	8.88	8.50	8.66	8.88
	24	14	32	41	154

It can readily be seen that pupil leaders who averaged nearly an all B record exceeded pupil non-leaders who had slightly less than an all C record by nearly three points. Boy leaders averaged better than an all B record and had 8.84 more points in scholarship than boy non-leaders. Girl leaders had an average of slightly less than an all B record and surpassed girl non-leaders by nearly two points. It is interesting to note that girl non-leaders excelled boy non-leaders, while boy leaders excelled girl leaders. Table X indicates a definite superiority in scholarship on the part of student leaders. With the scholarship superiority of the leader group definitely revealed, the scholarship ratings were broken down into separate subjects in order to gain possible teaching implications.

TABLE XI
ENGLISH MARKS OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Mean English Mark	2.88	3.06	1.70	2.56	2.95	2.05

Table XI shows the average English marks of the leader and non-leader groups. The same numerical equivalents used in Table X have been utilized. The same ratio of superiority appears to have been carried out here. The total leader group averaged slightly less than a B mark and surpassed the non-leader group who had slightly better than a C rank. Boy and girl leaders as separate groups exceeded their classmates. It is interesting to note that in English, girl leaders averaged better than a B rating and excelled boy leaders who averaged slightly less than a B rating.

SOCIAL STUDIES MARKS OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Mean Social Studies Mark	2.04	2.04	2.00	2.27	2.00	2.11

TABLE XI
ENGLISH MARKS OF PUPIL LEADERS AND NON-LEADERS

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
Mean English Mark	2.88	3.06	1.70	2.56	2.95
	24	14	92	62	154

Table XI shows the average English marks of the leader and non-leader groups. The same numerical equivalents used in Table X have been utilized. The same ratio of superiority appears to have been carried out here. The total leader group averaged slightly less than a B mark and surpassed the non-leader group who had slightly better than a C mark. Boy and girl leaders as separate groups exceeded their classmates. It is interesting to note that in English, girl leaders averaged better than a B rating and excelled boy leaders who averaged slightly less than a B rating.

TABLE XII
 MATHEMATICS MARKS OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Average Mathematics Mark	3.13	2.59	1.79	1.87	2.90	1.82

Table XII shows average mathematics marks of pupil leaders and non-leaders. Again leaders averaged a slightly less than B rating and excelled non-leaders who had a slightly less than a C rating. Boy leaders had a better than B rating and greatly excelled boy non-leaders who averaged a slightly less than C rating. The girl leaders group with a rank of approximately midway between B and C exceeded the girl non-leader group which averaged slightly less than C. In mathematics, boy leaders exceeded girl leaders.

TABLE XIII
 SOCIAL STUDIES MARKS OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Mean Social Studies Mark	3.04	2.94	2.00	2.27	3.00	2.11

TABLE XII

MATHEMATICS MARKS OF PUPIL LEADERS AND NON-LEADERS

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
24	14	10	22	12	34
Average Mathematics Mark	2.13	2.59	1.72	1.87	2.30
					1.82

Table XII shows average mathematics marks of pupil leaders and non-leaders. Again leaders averaged a slightly less than B rating and excelled non-leaders who had a slightly less than C rating. Boy leaders had a better than B rating and greatly excelled boy non-leaders who averaged a slightly less than C rating. The girl leaders group with a rank of approximately midway between B and C exceeded the girl non-leader group which averaged slightly less than C. In mathematics, boy leaders exceeded girl leaders.

TABLE XIII

SOCIAL STUDIES MARKS OF PUPIL LEADERS AND NON-LEADERS

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
24	14	10	22	12	34
Mean Social Studies Mark	2.04	2.94	2.00	2.27	2.00
					2.11

Average marks of pupil leaders and non-leaders in social studies are shown in Table XIII. The pupil leader group had a B rank and again excelled the non-leader group which had slightly better than a C average. Boy leaders averaged better than a B rating and outranked boy non-leaders who had a C rating. Girl leaders excelled girl non-leaders, but by only .67, less than one rank. Again boy leaders surpassed girl leaders.

Summary

1. Pupil leaders in this study were definitely superior to non-leaders in intelligence.
2. Pupil leaders definitely surpassed pupil non-leaders in scholarship.
3. Although pupil leaders had a higher rank in social studies than in other subjects, pupil non-leaders were also higher in this subject than in other subjects.
4. Although pupil leaders ranked lowest in mathematics, non-leaders did likewise.
5. In spite of the fact that pupil leaders received their lowest marks in mathematics, they surpassed the non-leaders more in mathematics than in any other subject.
6. Girl non-leaders exceeded boy non-leaders in all subjects and in general scholarship.
7. Boy leaders excelled girl leaders in general scholarship, in mathematics, in social studies, but were surpassed by girl leaders in English.

CHAPTER V

ENVIRONMENTAL AND SOCIAL CHARACTERISTICS OF PUPIL LEADERS AND NON-LEADERS

Environmental Factors

In studying the environmental characteristics of the pupils in this survey there was an attempt to answer the following questions:

1. What percentage of pupil leaders came from broken homes ?
2. What percentage of mothers of pupil leaders and non-leaders worked as to leave pupils

CHAPTER V

ENVIRONMENTAL AND SOCIAL CHARACTERISTICS OF PUPIL LEADERS AND NON-LEADERS

3. How many percentage of the pupil leaders and non-leaders were foreign born ?
4. What percentage of the parents of pupil leaders and non-leaders were foreign born ?
5. How many and what percentage of the pupil leaders and non-leaders came from homes in which a foreign language was spoken ?
6. What family position among their siblings did pupil leaders and non-leaders hold ?
7. What percentage of the leader and non-leader pupils had attended kindergarten ?

CHAPTER V

ENVIRONMENTAL AND SOCIAL CHARACTERISTICS OF PUPIL LEADERS AND NON-LEADERS

Environmental Factors

In studying the environmental characteristics of the pupils in this survey there was an attempt to answer the following questions.

1. What percentage of pupil leaders came from broken homes ?
2. What percentage of mothers of pupil leaders and non-leaders worked at such a time as to leave pupils alone before or after school ?
3. How many and what percentage of the pupil leaders and non-leaders were foreign born ?
4. What percentage of the parents of pupil leaders and non-leaders were foreign born ?
5. How many and what percentage of the pupil leaders and non-leaders came from homes in which a foreign language was spoken ?
6. What family position among their siblings did pupil leaders and non-leaders hold ?
7. What percentage of the leader and non-leader pupils had attended kindergarten ?

8. In how many different towns had leader and non-leader pupils attended school ?
9. On what occupational level were the fathers of pupil leaders and non-leaders ?
10. What was the average number of rooms in the homes of the leader and non-leader pupils ?
11. How many persons other than members of the immediate family lived in the pupil leader and non-leader homes ?
12. How many and what percentage of the pupil leaders and non-leaders attended weekly religious education classes ?

Solidarity of the Home. It will be recalled that a broken home is defined as a home in which the pupil lives with neither one or with only one of his original parents. Table XIV shows the number and percentage of pupils of the leader and non-leader groups who came from broken homes.

girls. A greater percentage of non-leader girls than non-leader boys came from broken homes. Although the percentage of broken homes was relatively high in all cases except that of the leader girls, differences are slight. It would seem that solidarity of the home is not an important factor in leadership.

8. In how many different towns had leader and

non-leader pupils attended school?

9. On what occupational level were the fathers

of pupil leaders and non-leaders?

10. What was the average number of rooms in the

homes of the leader and non-leader pupils?

11. How many persons other than members of the

immediate family lived in the pupil leader and non-leader

homes?

12. How many and what percentage of the pupil

leaders and non-leaders attended weekly religious education

classes?

Solidarity of the Home. It will be recalled that a

broken home is defined as a home in which the pupil lives

with neither one or with only one of his original parents.

Table XIV shows the number and percentage of pupils of the

leader and non-leader groups who came from broken homes.

TABLE XIV

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS
WHO CAME FROM BROKEN HOMES

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Number of Pupils Who Came from Broken Homes	6	1	12	10	7	22
Percent.of Pupils Who Came from Broken Homes	25.00	5.88	13.04	16.12	17.07	14.28

It will be observed in studying Table XIV that a larger percentage of leader pupils than non-leader pupils came from broken homes, although the difference is small. Leader boys showed a higher percentage of broken homes than did leader girls. A greater percentage of non-leader girls than non-leader boys came from broken homes. Although the percentage of broken homes was relatively high in all cases except that of the leader girls, differences are slight. It would seem that solidarity of the home is not an important factor in leadership.

TABLE XIV

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS WHO CAME FROM BROKEN HOMES

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
Number of Pupils Who Came from Broken Homes	6	1	10	5	22
Percent of Pupils Who Came from Broken Homes	22.00	5.88	18.04	16.12	14.28

It will be observed in studying Table XIV that a larger percentage of leader pupils than non-leader pupils came from broken homes, although the difference is small. Leader boys showed a higher percentage of broken homes than did leader girls. A greater percentage of non-leader girls than non-leader boys came from broken homes. Although the percentage of broken homes was relatively high in all cases except that of the leader girls, differences are slight. It would seem that solidarity of the home is not an important factor in leadership.

Mothers Working. In studying this environmental factor there was an effort to determine whether or not the mother was likely to be in the home when the pupil left for school and when he returned from school.

Table XV shows the number and percentage of mothers of the pupils in this study (a) who did not work and so would probably be at home immediately before and after school, (b) who worked but would be home either immediately before or after school or whose working hours were irregular possibly necessitating such an occurrence, and (c) who worked and would not be at home either immediately before or after school. If pupils stated definitely that their mothers worked, but if the pupils either could not or did not state the hours, those cases were considered under (b).

at the Time	3	1	11	6	4	12
Percent. of Pupils Whose Mothers Were at Some Part of the Time	13.04	2.85	11.36	11.11	10.00	13.84
Number of Pupils Whose Mothers Were Not at Home	2	0	4	4	2	8
Percent. of Pupils Whose Mothers Were Not at Home	2.45	0	4.34	4.45	2.00	5.19

Table XV portrays rather obviously that the problem of employed mothers of pupils is not a serious one in the town in which this study was made. The surprisingly uniform

TABLE XV
NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS
WHOSE MOTHERS WERE WORKING

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total No. of Pupils in Survey	23	17	92	62	40	154
Number of Pupils Whose Mothers Were at Home	18	16	77	50	34	127
Percent. of Pupils Whose Mothers Were at Home	78.26	94.11	83.68	80.64	85.00	82.47
Number of Pupils Whose Mothers Were at Home Part of the Time	3	1	11	8	4	19
Percent. of Pupils Whose Mothers Were at Home Part of the Time	13.04	5.88	11.96	11.11	10.00	12.34
Number of Pupils Whose Mothers Were Not at Home	2	0	4	4	2	8
Percent. of Pupils Whose Mothers Were Not at Home	8.69	0	4.34	6.45	5.00	5.19

Table XV portrays rather obviously that the problem of employed mothers of pupils is not a serious one in the town in which this study was made. The surprisingly uniform

TABLE XV

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS WHOSE MOTHERS WERE WORKING

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
124	32	17	32	40	124
Number of Pupils Whose Mothers Were at Home	18	16	17	34	127
Percent of Pupils Whose Mothers Were at Home	78.26	94.11	52.88	85.00	82.47
Number of Pupils Whose Mothers Were at Home Part of the Time	2	1	11	4	18
Percent of Pupils Whose Mothers Were at Home Part of the Time	12.04	5.88	11.95	10.00	12.34
Number of Pupils Whose Mothers Were Not at Home	2	0	4	2	8
Percent of Pupils Whose Mothers Were Not at Home	6.29	0	4.34	5.00	6.19

Table XV portrays rather obviously that the problem of employed mothers of pupils is not a serious one in the town in which this study was made. The surprisingly uniform

results tend to indicate that although few mothers worked, the question of having an employed mother was not an important factor in leadership. There was almost no difference between the separate groups as far as this matter was concerned. Leaders and non-leaders had very similar ratings, non-leader boys had a slightly lower percentage of working mothers than did non-leader girls and leader girls had a slightly lower percentage of working mothers than did leader boys.

Foreign Born Pupils. The finding concerning foreign birth of pupils in this study was not significant, as only one pupil, a leader, was foreign born. This made the leader percentage of foreign born pupils 2.44 as opposed to 0 for the non-leaders. However, as figures are so small and foreign birth apparently is not an important issue in the town, no conclusions can be drawn as to foreign birth as a factor in leadership.

Foreign Born Parents. Table XVI shows the number and percentage of pupil leaders and non-leaders whose parents were foreign born. Although numbers are not so small, findings are again insignificant. A slightly higher percentage of non-leaders had both parents native born. A slightly higher percentage of leaders had one foreign born parent. The percentage of leaders and non-leaders who had both parents foreign born was surprisingly similar. With all

results tend to indicate that although few mothers worked, the question of having an employed mother was not an important factor in leadership. There was almost no difference between the separate groups as far as this matter was concerned. Leaders and non-leaders had very similar ratings, non-leader boys had a slightly lower percentage of working mothers than did non-leader girls and leader girls had a slightly lower percentage of working mothers than did leader boys.

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Foreign Born Parents. Table XVI shows the number and percentage of pupil leaders and non-leaders whose parents were foreign born. Although numbers are not so small, findings are again insignificant. A slightly higher percentage of non-leaders had both parents native born. A slightly higher percentage of leaders had one foreign born parent. The percentage of leaders and non-leaders who had both parents foreign born was approximately similar. With all

TABLE XVI

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS
WHO HAD FOREIGN BORN PARENTS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
No. of Pupils Who Had Both Parents Na- tive Born	17	11	70	46	28	116
Percent. of Pupils Who Had Both Parents Na- tive Born	70.83	64.70	76.08	74.19	68.29	75.32
No. of Pupils Who Had One Foreign Born Parent	4	6	17	10	10	27
Percent. of Pupils Who Had One Foreign Born Parent	16.66	35.29	18.47	16.12	21.95	17.53
No. of Pupils Both Whose Parents Were Foreign Born	3	0	5	6	3	11
Percent. of Pupils Both Whose Parents Were Foreign Born	12.50	0	5.43	9.67	7.31	7.14

TABLE XVI

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS WHO HAD FOREIGN BORN PARENTS

Total	Non-leaders		Leaders		Total No. of Pupils in Survey
	Boys	Girls	Boys	Girls	
134	41	62	32	14	100
116	28	48	70	11	100
75.32	68.29	74.19	76.08	64.70	70.32
27	10	10	14	4	100
17.62	21.95	16.12	18.47	38.32	18.62
11	3	6	5	0	100
7.14	7.31	2.87	5.43	0	12.80

figures in this question so close, the only conclusion which can be drawn is that foreign birth of parents is not an important factor in leadership in this junior high school.

Foreign Language.

TABLE XVII

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS
WHOSE PARENTS SPOKE A FOREIGN LANGUAGE

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
No. of Pupils Whose Parents Spoke a For- eign Language	2	3	11	4	5	15
Percent. of Pupils Whose Parents Spoke a Foreign Language	8.33	17.64	11.95	6.45	12.19	9.74

Table XVII shows the number of pupil leaders and non-leaders whose parents spoke a foreign language. Here again, figures are small and results are not particularly significant. One conclusion is that having foreign speaking parents apparently presented no barrier to leadership. With a slightly higher percentage of leader pupils coming from homes in which a foreign language was spoken, it may be concluded that pupils from homes of this type have at least an equal chance with other pupils of becoming leaders.

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Foreign Language.

TABLE XVII

NUMBERS AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS WHOSE PARENTS SPOKE A FOREIGN LANGUAGE

Total No. of Pupils in Survey	Leaders		Non-Leaders		Total
	Boys	Girls	Boys	Girls	
24	17	7	22	12	34
No. of Pupils Whose Parents Spoke a Foreign Language	2	3	11	4	17
Percent of Pupils Whose Parents Spoke a Foreign Language	8.33	17.64	11.98	6.45	12.19
					9.74

Table XVII shows the number of pupil leaders and non-leaders whose parents spoke a foreign language. Here again, figures are small and results are not particularly significant. One conclusion is that having foreign speaking parents apparently presented no barrier to leadership. With a slightly higher percentage of leader pupils coming from homes in which a foreign language was spoken, it may be concluded that pupils from homes of this type have at least an equal chance with other pupils of becoming leaders.

Position in Family. Since research has reported the predominance of the only child in the leader group, an attempt was made to determine whether or not this was a factor in the leadership of the pupils involved in this study. Table XVIII shows the position in his family of each pupil in the survey. The second figure in the column at the left side of the table tells the number of children there were in each family. The figure to the left of the dash tells the child's position in his family. Thus, a child who is listed as 2-3 is the second child in a family of three children. In this table only those categories which were needed were listed.

Table XVIII shows an interesting range of family size. Perhaps one of the most notable facts to be revealed by this table is the almost total lack of the leader pupils in the large family ratings. This would tend to indicate that few pupil leaders came from large families.

Table XIX shows the number and percentage of leader and non-leader pupils who were in the different family positions. Here it is indicated that the only child did not dominate in the leader group. In fact, the only child category had the smallest percentage of leader pupils in it. The intermediate group had the largest percentage, 34.15. In this group were included the pupils who were neither oldest, youngest, nor alone in their families. Other groups were close, however, with the oldest group having the next highest percentage. In the non-leader group the highest percentage was in the youngest

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performance of the only child in the leader group, an attempt was made to determine whether or not this was a factor in the leadership of the pupils involved in this study. Table XVIII shows the position in his family of each pupil in the survey. The second figure in the column at the left side of the table tells the number of children there were in each family. The figure to the left of the dash tells the child's position in his family. Thus, a child who is listed as 2-2 is the second child in a family of three children. In this table only those categories which were needed were listed. Table XVII shows an interesting range of family size. Perhaps one of the most notable facts to be revealed by this table is the almost total lack of the leader pupils in the large family ratings. This would tend to indicate that few pupil leaders came from large families.

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TABLE XVIII

POSITION IN FAMILY OF PUPIL LEADERS AND NON-LEADERS

Position in Family	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Girls	Boys
1 - 1	5	0	12	3	5	15
1 - 2	5	4	14	6	9	20
1 - 3	0	0	7	3	0	10
1 - 4	0	1	2	6	1	8
1 - 5	0	1	1	2	1	3
1 - 6	1	0	2	0	1	2
2 - 2	5	2	16	11	7	27
2 - 3	4	3	6	3	7	9
2 - 4	1	0	3	3	1	6
2 - 5	0	0	1	0	1	1
2 - 6	0	1	0	0	1	0
3 - 3	0	1	9	5	1	14
3 - 4	0	2	4	3	2	7
3 - 5	0	0	0	1	0	1
3 - 6	0	0	1	1	0	2
3 - 7	0	0	0	1	0	1
3 - 10	1	0	0	0	1	0
4 - 4	2	0	4	2	2	6
4 - 5	0	1	1	1	1	2
4 - 6	0	0	0	1	0	1
4 - 7	0	0	0	1	0	1
4 - 8	0	0	0	1	0	1
5 - 5	0	0	4	1	0	5
5 - 6	0	0	1	1	0	2
5 - 7	0	0	1	1	0	2
5 - 8	0	0	0	1	0	1
5 - 9	0	1	0	0	1	0
6 - 6	0	0	0	2	0	2
6 - 9	0	0	0	1	0	1
6 - 10	0	0	1	0	0	1
7 - 7	0	0	1	0	0	1
9 - 9	0	0	0	1	0	1
11 - 11	0	0	1	0	0	1
Total	24	17	92	62	41	154

TABLE XVII

POSITION IN FAMILY OF PUPIL LEADERS AND NON-LEADERS

Total	Non-leaders		Leaders		Position in family
	Girls	Boys	Girls	Boys	
15	8	12	0	2	1 - 1
20	9	14	4	2	1 - 2
10	0	7	0	0	1 - 3
8	1	2	1	0	1 - 4
8	1	1	1	0	1 - 5
2	1	2	0	1	1 - 6
2	1	2	0	1	2 - 1
2	1	1	2	4	2 - 2
2	1	3	0	1	2 - 3
1	1	1	0	0	2 - 4
1	1	0	1	0	2 - 5
1	1	0	1	0	2 - 6
1	1	0	1	0	2 - 7
1	1	0	1	0	2 - 8
1	1	0	1	0	2 - 9
1	1	0	1	0	2 - 10
1	1	0	1	0	3 - 1
1	1	0	1	0	3 - 2
1	1	0	1	0	3 - 3
1	1	0	1	0	3 - 4
1	1	0	1	0	3 - 5
1	1	0	1	0	3 - 6
1	1	0	1	0	3 - 7
1	1	0	1	0	3 - 8
1	1	0	1	0	3 - 9
1	1	0	1	0	3 - 10
1	1	0	1	0	4 - 1
1	1	0	1	0	4 - 2
1	1	0	1	0	4 - 3
1	1	0	1	0	4 - 4
1	1	0	1	0	4 - 5
1	1	0	1	0	4 - 6
1	1	0	1	0	4 - 7
1	1	0	1	0	4 - 8
1	1	0	1	0	4 - 9
1	1	0	1	0	4 - 10
1	1	0	1	0	5 - 1
1	1	0	1	0	5 - 2
1	1	0	1	0	5 - 3
1	1	0	1	0	5 - 4
1	1	0	1	0	5 - 5
1	1	0	1	0	5 - 6
1	1	0	1	0	5 - 7
1	1	0	1	0	5 - 8
1	1	0	1	0	5 - 9
1	1	0	1	0	5 - 10
1	1	0	1	0	6 - 1
1	1	0	1	0	6 - 2
1	1	0	1	0	6 - 3
1	1	0	1	0	6 - 4
1	1	0	1	0	6 - 5
1	1	0	1	0	6 - 6
1	1	0	1	0	6 - 7
1	1	0	1	0	6 - 8
1	1	0	1	0	6 - 9
1	1	0	1	0	6 - 10
1	1	0	1	0	7 - 1
1	1	0	1	0	7 - 2
1	1	0	1	0	7 - 3
1	1	0	1	0	7 - 4
1	1	0	1	0	7 - 5
1	1	0	1	0	7 - 6
1	1	0	1	0	7 - 7
1	1	0	1	0	7 - 8
1	1	0	1	0	7 - 9
1	1	0	1	0	7 - 10
1	1	0	1	0	8 - 1
1	1	0	1	0	8 - 2
1	1	0	1	0	8 - 3
1	1	0	1	0	8 - 4
1	1	0	1	0	8 - 5
1	1	0	1	0	8 - 6
1	1	0	1	0	8 - 7
1	1	0	1	0	8 - 8
1	1	0	1	0	8 - 9
1	1	0	1	0	8 - 10
1	1	0	1	0	9 - 1
1	1	0	1	0	9 - 2
1	1	0	1	0	9 - 3
1	1	0	1	0	9 - 4
1	1	0	1	0	9 - 5
1	1	0	1	0	9 - 6
1	1	0	1	0	9 - 7
1	1	0	1	0	9 - 8
1	1	0	1	0	9 - 9
1	1	0	1	0	9 - 10
1	1	0	1	0	10 - 1
1	1	0	1	0	10 - 2
1	1	0	1	0	10 - 3
1	1	0	1	0	10 - 4
1	1	0	1	0	10 - 5
1	1	0	1	0	10 - 6
1	1	0	1	0	10 - 7
1	1	0	1	0	10 - 8
1	1	0	1	0	10 - 9
1	1	0	1	0	10 - 10
1	1	0	1	0	11 - 1
1	1	0	1	0	11 - 2
1	1	0	1	0	11 - 3
1	1	0	1	0	11 - 4
1	1	0	1	0	11 - 5
1	1	0	1	0	11 - 6
1	1	0	1	0	11 - 7
1	1	0	1	0	11 - 8
1	1	0	1	0	11 - 9
1	1	0	1	0	11 - 10
1	1	0	1	0	12 - 1
1	1	0	1	0	12 - 2
1	1	0	1	0	12 - 3
1	1	0	1	0	12 - 4
1	1	0	1	0	12 - 5
1	1	0	1	0	12 - 6
1	1	0	1	0	12 - 7
1	1	0	1	0	12 - 8
1	1	0	1	0	12 - 9
1	1	0	1	0	12 - 10
1	1	0	1	0	13 - 1
1	1	0	1	0	13 - 2
1	1	0	1	0	13 - 3
1	1	0	1	0	13 - 4
1	1	0	1	0	13 - 5
1	1	0	1	0	13 - 6
1	1	0	1	0	13 - 7
1	1	0	1	0	13 - 8
1	1	0	1	0	13 - 9
1	1	0	1	0	13 - 10
1	1	0	1	0	14 - 1
1	1	0	1	0	14 - 2
1	1	0	1	0	14 - 3
1	1	0	1	0	14 - 4
1	1	0	1	0	14 - 5
1	1	0	1	0	14 - 6
1	1	0	1	0	14 - 7
1	1	0	1	0	14 - 8
1	1	0	1	0	14 - 9
1	1	0	1	0	14 - 10
1	1	0	1	0	15 - 1
1	1	0	1	0	15 - 2
1	1	0	1	0	15 - 3
1	1	0	1	0	15 - 4
1	1	0	1	0	15 - 5
1	1	0	1	0	15 - 6
1	1	0	1	0	15 - 7
1	1	0	1	0	15 - 8
1	1	0	1	0	15 - 9
1	1	0	1	0	15 - 10
1	1	0	1	0	16 - 1
1	1	0	1	0	16 - 2
1	1	0	1	0	16 - 3
1	1	0	1	0	16 - 4
1	1	0	1	0	16 - 5
1	1	0	1	0	16 - 6
1	1	0	1	0	16 - 7
1	1	0	1	0	16 - 8
1	1	0	1	0	16 - 9
1	1	0	1	0	16 - 10
1	1	0	1	0	17 - 1
1	1	0	1	0	17 - 2
1	1	0	1	0	17 - 3
1	1	0	1	0	17 - 4
1	1	0	1	0	17 - 5
1	1	0	1	0	17 - 6
1	1	0	1	0	17 - 7
1	1	0	1	0	17 - 8
1	1	0	1	0	17 - 9
1	1	0	1	0	17 - 10
1	1	0	1	0	18 - 1
1	1	0	1	0	18 - 2
1	1	0	1	0	18 - 3
1	1	0	1	0	18 - 4
1	1	0	1	0	18 - 5
1	1	0	1	0	18 - 6
1	1	0	1	0	18 - 7
1	1	0	1	0	18 - 8
1	1	0	1	0	18 - 9
1	1	0	1	0	18 - 10
1	1	0	1	0	19 - 1
1	1	0	1	0	19 - 2
1	1	0	1	0	19 - 3
1	1	0	1	0	19 - 4
1	1	0	1	0	19 - 5
1	1	0	1	0	19 - 6
1	1	0	1	0	19 - 7
1	1	0	1	0	19 - 8
1	1	0	1	0	19 - 9
1	1	0	1	0	19 - 10
1	1	0	1	0	20 - 1
1	1	0	1	0	20 - 2
1	1	0	1	0	20 - 3
1	1	0	1	0	20 - 4
1	1	0	1	0	20 - 5
1	1	0	1	0	20 - 6
1	1	0	1	0	20 - 7
1	1	0	1	0	20 - 8
1	1	0	1	0	20 - 9
1	1	0	1	0	20 - 10
1	1	0	1	0	21 - 1
1	1	0	1	0	21 - 2
1	1	0	1	0	21 - 3
1	1	0	1	0	21 - 4
1	1	0	1	0	21 - 5
1	1	0	1	0	21 - 6
1	1	0	1	0	21 - 7
1	1	0	1	0	21 - 8
1	1	0	1	0	21 - 9
1	1	0	1	0	21 - 10
1	1	0	1	0	22 - 1
1	1	0	1	0	22 - 2
1	1	0	1	0	22 - 3
1	1	0	1	0	22 - 4
1	1	0	1	0	22 - 5
1	1	0	1	0	22 - 6
1	1	0	1	0	22 - 7
1	1	0	1	0	22 - 8
1	1	0	1	0	22 - 9
1	1	0	1	0	22 - 10
1	1	0	1	0	23 - 1
1	1	0	1	0	23 - 2
1	1	0	1	0	23 - 3
1	1	0	1	0	23 - 4
1	1	0	1	0	23 - 5
1	1	0	1	0	23 - 6
1	1	0	1	0	23 - 7
1	1	0	1	0	23 - 8
1	1	0	1	0	23 - 9
1	1	0	1	0	23 - 10
1	1	0	1	0	24 - 1
1	1	0	1	0	24 - 2
1	1	0	1	0	24 - 3
1	1	0	1	0	24 - 4
1	1	0	1	0	24 - 5
1	1	0	1	0	24 - 6
1	1	0	1	0	24 - 7
1	1	0	1	0	24 - 8
1	1	0	1	0	24 - 9
1	1	0	1	0	24 - 10
1	1	0	1	0	25 - 1
1	1	0	1	0	25 - 2
1	1	0	1	0	25 - 3
1	1	0	1	0	25 - 4
1	1	0	1	0	25 - 5
1	1	0	1	0	25 - 6
1	1	0	1	0	25 - 7
1	1	0	1	0	25 - 8
1	1	0	1	0	25 - 9
1	1	0	1	0	25 - 10
1	1	0	1	0	26 - 1
1	1	0	1	0	26 - 2
1	1	0	1	0	26 - 3
1	1	0	1	0	26 - 4
1	1	0	1	0	26 - 5
1	1	0	1	0	26 - 6
1	1	0	1	0	26 - 7
1	1	0	1	0	26 - 8
1	1	0	1	0	26 - 9
1	1	0	1	0	26 - 10
1	1	0	1	0	27 - 1
1	1	0	1	0	27 - 2
1	1	0	1	0	27 - 3
1	1	0	1	0	27 - 4
1	1	0	1	0	27 - 5
1	1	0	1	0	27 - 6
1	1	0	1	0	27 - 7
1	1	0	1	0	27 - 8
1	1	0	1	0	27 - 9
1	1	0	1	0	27 - 10
1	1	0	1	0	28 - 1
1	1	0	1	0	28 - 2
1	1	0	1	0	28 - 3
1	1	0	1	0	28 - 4
1	1	0	1		

TABLE XIX

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND
NON-LEADERS IN THE DIFFERENT FAMILY POSITIONS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Only Child Number	5	0	12	3	5	15
Percent.	20.83	0.00	13.04	4.83	12.20	9.74
Older or Oldest Number	6	6	26	17	12	43
Percent.	25.00	35.29	28.26	27.42	29.27	27.42
Younger or Youngest Number	7	3	35	22	10	57
Percent.	29.17	17.65	38.04	35.48	24.39	37.01
Intermediate Number	6	8	19	20	14	39
Percent.	25.00	47.06	20.65	32.26	34.15	25.32
Kindergarten	54.17	47.06	28.26	32.47	31.22	32.47

The number and percentage of pupils who had attended kindergarten is shown in Table XX. These findings indicate a considerable difference between the leader and non-leader groups. Over half the leader group had attended kindergarten while only 32.47 per cent of the non-leader group had attended. A higher percentage of boys than girls was evident in both

TABLE XIX

NUMBER AND PERCENTAGE OF PUPIL LEADERS AND NON-LEADERS IN THE DIFFERENT FAMILY POSITIONS

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
134	24	17	82	41	134
Percent.	20.88	0.00	13.04	13.20	9.74
Number	6	6	17	12	41
Percent.	25.00	33.33	28.26	29.27	27.48
Younger or Youngest	7	3	22	10	37
Percent.	29.17	17.65	33.04	26.39	37.01
Intermediate	6	8	20	14	39
Percent.	25.00	47.06	30.65	34.15	28.38
Older or Oldest	6	6	17	12	41
Percent.	25.00	33.33	28.26	29.27	27.48
Number	5	0	12	5	18
Percent.	20.88	0.00	13.04	13.20	9.74
Only Child	5	0	12	5	18
Percent.	20.88	0.00	13.04	13.20	9.74

group.

It may be concluded after studying Table XIX that few leaders were from the only child group, a large percentage were the oldest or the youngest in their families, but the largest percentage were intermediate children.

Kindergarten Attendance.

TABLE XX
NUMBER AND PERCENTAGE OF PUPIL LEADERS WHO HAD
ATTENDED KINDERGARTEN

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Total No. Who Had Attended Kinder- garten	13	8	34	16	21	50
Percentage Who Had Attended Kinder- garten	54.17	47.06	36.96	32.47	51.22	32.47

The number and percentage of pupils who had attended kindergarten is shown in Table XX. Here findings indicate a considerable difference between the leader and non-leader groups. Over half the leader group had attended kindergarten while only 32.47 per cent of the non-leader group had attended. A higher percentage of boys than girls was evident in both

Group.

It may be concluded after studying Table XIX that few leaders were from the only child group, a large percentage were the oldest or the youngest in their families, but the largest percentage were intermediate children.

Kindergarten Attendance.

TABLE XX

NUMBER AND PERCENTAGE OF PUPIL LEADERS WHO HAD ATTENDED KINDERGARTEN

Total No. of Pupils in Survey	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
154	24	14	32	41	154
Total No. Who Had Attended Kindergarten	13	8	16	21	58
Percentage Who Had Attended Kindergarten	54.17	47.06	33.96	51.22	38.47

The number and percentage of pupils who had attended kindergarten is shown in Table XX. Here findings indicate a considerable difference between the leader and non-leader groups. Over half the leader group had attended kindergarten while only 38.47 per cent of the non-leader group had attended. A higher percentage of boys than girls was evident in both

the leader and non-leader groups. Whether the success attached to kindergarten attendance is indicative of its preparing the pupil socially and scholastically for later schooling, or whether it is merely indicative of good home environment and parents who are anxious to help children to progress, is a matter for consideration.

Number of Towns in Which Pupil Leaders and Non-leaders Had Attended School.

TABLE XXI

NUMBER OF TOWNS IN WHICH PUPIL LEADERS AND NON-LEADERS HAD ATTENDED SCHOOL

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
Total No. of Towns in Which Pupils Had Attended School	33	28	165	95	61	260
Mean Number of Towns in Which Pupils Had Attended School	1.38	1.65	1.58	1.53	1.49	1.60

In an effort to discover something concerning the stability of the leader and non-leader families, Table XXI was drawn up. It shows the mean number of towns in which the pupils of each group had attended school. Since the

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Number of Towns in Which Pupil Leaders and Non-leaders

Had Attended School.

TABLE XXI

NUMBERS OF TOWNS IN WHICH PUPIL LEADERS AND NON-LEADERS HAD ATTENDED SCHOOL

Total	Non-leaders		Non-leaders		Leaders		Total No. of Pupils in Survey
	Leaders	Non-leaders	Boys	Girls	Boys	Girls	
184	41	32	14	22	24	14	Total No. of Towns in Which Pupils Had Attended School
280	51	38	28	152	38	28	Mean Number of Towns in Which Pupils Had Attended School
1.50	1.49	1.52	1.55	1.59	1.38	1.38	

In an effort to discover something concerning the stability of the leader and non-leader families, Table XXI was drawn up. It shows the mean number of towns in which the pupils of each group had attended school. Since the

school the pupil was attending at the time of the survey was included, each group started with a mean of 1.00. The table is not particularly revealing, since the means were much the same. The girl leader group had the greatest mean of school changes, while the boy leader group averaged the smallest number of school changes. Moving from school to school had apparently little or no effect upon the status of the pupil leaders in this survey.

Occupations of Fathers. Table XXII shows the number and percentage of the leader and non-leader fathers who were in the different occupational groups. It indicates that the occupational group with the largest number of leader fathers in it was the office-sales group, with skilled labor next and followed closely by the managerial and professional groups. The greatest number of non-leader fathers was in the skilled labor group. The office-sales group ranked next, with non-leader fathers and semi-skilled labor was third. This possibly indicates a lower occupational level than that of the leader fathers. It is probably safe to conclude that the leaders' fathers tended to come from the upper three occupational levels and that the non-leader fathers had a tendency to show a slightly lower occupational level.

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TABLE XXII

OCCUPATIONS OF FATHERS OF PUPIL LEADERS AND NON-LEADERS

Occupational Group	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Professional						
Number	4	3	6	5	7	11
Percent.	16.67	17.65	6.52	8.06	17.07	7.14
Managerial						
Number	3	4	7	2	7	9
Percent.	12.50	23.53	7.61	3.32	17.07	5.84
Office-Sales						
Number	7	6	25	10	13	35
Percent.	29.17	35.29	27.17	16.13	31.71	22.73
Skilled Labor						
Number	6	2	29	23	8	52
Percent.	25.00	11.76	31.52	37.10	19.51	33.77
Semiskilled Labor						
Number	0	0	13	11	0	24
Percent.	0	0	14.12	17.74	0	15.58
Unskilled Labor						
Number	2	2	11	8	4	19
Percent.	8.33	11.76	11.96	12.90	9.76	13.34
Other and Unknown						
Number	2	0	1	3	2	4
Percent.	8.33	0	1.09	4.84	4.88	2.60

Number of Rooms in Homes. Table XXIIa reveals another factor in the home situation of the pupil leaders and non-leaders. It shows the mean number of rooms in the leader and non-leader homes. The leaders averaged one more room than the non-leaders. The boy leaders averaged nearly a room and

TABLE XXII

OCCUPATIONS OF FATHERS OF PUPIL LEADERS AND NON-LEADERS

Occupational Group	Leaders		Non-leaders		Total
	Boys	Girls	Boys	Girls	
Professional	4	3	5	7	11
Number	18.67	17.65	8.08	17.07	7.14
Percent	3	4	2	7	9
Number	12.50	22.53	7.61	3.32	17.07
Percent	7	8	10	12	35
Number	22.17	22.22	27.17	21.71	22.73
Percent	8	2	23	8	22
Number	25.00	11.75	21.52	19.51	22.77
Percent	0	0	13	0	24
Number	0	0	14.12	17.74	12.58
Percent	2	2	11	4	19
Number	8.32	11.75	11.92	9.75	12.24
Percent	0	0	1	2	4
Number	8.32	0	1.02	4.82	2.50
Percent					

Number of Rooms in Homes. Table XXII reveals another factor in the home situation of the pupil leaders and non-leaders. It shows the mean number of rooms in the leader and non-leader homes. The leaders averaged one more room than the non-leaders. The boy leaders averaged nearly a room and

a half more than the boy non-leaders. The leader girls surpassed their girl classmates but by a mean of only half a room. The boy leaders averaged one room more than did the girl leaders.

Extra Persons in the Home. It will be remembered that extra persons in the pupil home are those persons who live in the pupil home but who are not immediate members of the pupil's family.

TABLE XXII A

THE MEAN NUMBER OF ROOMS IN THE HOMES OF THE PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total No. of Pupils in Survey	23	17	90	62	40	152
Total No. of Rooms	199	129	659	442	328	1101
Mean No. of Rooms	8.65	7.59	7.32	7.13	8.20	7.24

Table XXIII shows the mean number of extra persons who were living in the pupil leader and non-leader homes. The figures do not show marked difference. There were apparently not many extra persons living in either the leader or the non-leader homes. The girl leaders averaged the smallest number, while boy leaders averaged the largest.

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 passed their girl classmates but by a margin of only half a
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 girl leaders.

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 extra persons in the pupil home are those persons who live in
 the pupil home but who are not immediate members of the pupil's
 family.

TABLE XIII A
 THE MEAN NUMBER OF ROOMS IN THE HOMES OF THE PUPIL
 LEADERS AND NON-LEADERS

Total Non- Leaders	Non-leaders		Leaders		Total No. of Pupils in Survey
	Girls	Boys	Girls	Boys	
158	40	82	17	28	Total No. of Rooms
1101	328	442	129	199	Mean No. of Rooms
7.24	8.20	7.18	7.82	6.85	

Table XIII shows the mean number of extra persons who
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 figures do not show marked difference. There were apparently
 not many extra persons living in either the leader or the non-
 leader homes. The girl leaders averaged the smallest number,
 while boy leaders averaged the largest.

TABLE XXIII
NUMBER OF EXTRA PERSONS IN THE PUPIL LEADER AND
NON-LEADER HOMES

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non- Leaders
Total No. of Pupils in Survey	23	17	89	61	40	150
Total No. of Extra Persons in the Homes	12	4	41	36	16	77
Mean No. of Extra Persons in the Homes	.52	.24	.46	.59	.40	.51

Together their mean was slightly less than the non-leader mean. The number of extra persons living in the pupil homes appeared to have no bearing on leadership in this junior high school.

Religious Education. Because of the vagueness of the terms "church member" and "regular attendance" the question of religious training was studied by determining pupil leader and non-leader attendance at weekly religious education classes. Pupils were given the opportunity weekly during school time to attend religious instruction classes in their own churches. Two boys whose church did not provide religious training in the allotted time were not included in this part of the survey. It is possible that there may have been other such cases which did not become known to the writer and the technique used may therefore be open to some criticism.

TABLE XXIV

ATTENDANCE AT RELIGIOUS EDUCATION CLASSES BY PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total No. of Pupils in Survey	23	17	91	62	40	153
No. Who Attended Religious Education	8	5	32	31	13	63
Percentage Who Attended Religious Education	34.78	29.41	35.16	50.00	32.50	41.18

Table XXIV shows the number and the percentage of pupil leaders and non-leaders who attended religious education classes. Pupil leaders in average and in separate sex groups are exceeded in attendance at religious instruction classes by non-leaders. One explanation for this may be that club meetings of different types were held at the school by those pupils who did not attend religious classes. These possibly offered considerable competition to the religious instruction classes and might have particularly attracted pupils of the leader type. However, the conclusion must be drawn that a smaller percentage of pupil leaders than non-leaders in this study attended religious instruction classes.

Social Characteristics

In order to gain some insight into the social characteristics of the pupil leaders and non-leaders there has been an attempt to answer the following questions:

1. To how many extra-mural clubs did pupil leaders and non-leaders belong ?
2. What were the hobbies and interests of the pupil leaders and non-leaders ?
3. What were the reading preferences of the pupil leaders and non-leaders ?
4. What were the movie preferences of pupil leaders and non-leaders ?
5. How often did pupil leaders and non-leaders attend the movies ?

Club Membership.

TABLE XXV

CLUB MEMBERSHIP OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total No. of Pupils in Survey	24	17	92	62	41	154
No. Who Belonged to No Clubs	9	8	40	21	17	61
Percent. Who Belonged to No Clubs	37.50	47.06	43.48	33.87	41.46	39.66
Mean No. Clubs	.96	.70	.79	1.06	.85	.83

Social Characteristics

- In order to gain some insight into the social characteristics of the pupil leaders and non-leaders there has been an attempt to answer the following questions:
1. To how many extra-curricular clubs did pupil leaders and non-leaders belong?
 2. What were the hobbies and interests of the pupil leaders and non-leaders?
 3. What were the reading preferences of the pupil leaders and non-leaders?
 4. What were the movie preferences of pupil leaders and non-leaders?
 5. How often did pupil leaders and non-leaders attend the movies?

Club Membership

TABLE XIV

CLUB MEMBERSHIP OF PUPIL LEADERS AND NON-LEADERS

Total No. of Pupils in Survey	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
134	41	41	32	32	73	73
61	17	17	21	21	38	38
Percent. Who Referred to No Clubs	37.50	47.06	43.75	32.87	40.54	39.86
Mean No. Clubs	.96	.70	.78	1.06	.87	.88

Table XXV shows the amount of club participation by leaders and non-leaders. It reveals a surprising uniformity. The percentage of non-participants in both groups was equal. There was a higher percentage of non-participants in the girl leader group than in any other group. There was a lower percentage in the girl non-leader group than in any other group. The percentage of non-participants in the boy non-leader group was slightly higher than in the boy leader group. However, the record of non-participation in clubs was very similar for the two groups as a whole.

In mean number of clubs per pupil the record again showed surprising similarity, with the leader group averaging .84 and the non-leader group .83. Non-leader girls averaged more clubs than other groups, while leader girls averaged less clubs than did other groups. Leader boys exceeded non-leader boys slightly.

It would appear that in club participation pupil leaders and non-leaders in this study were about equal.

Hobbies and Interests. Table XXVI shows the hobbies and interests reported by the pupil leaders and non-leaders. They have been listed according to the number of votes or "mentions" each one received.

Again the results indicated similarity. The top ranking hobbies in particular appeared similar. Both boys' groups

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TABLE XXVI

HOBBIES AND INTERESTS OF PUPIL LEADERS AND NON-LEADERS

Boy Leaders		Girl Leaders	
Hobby or Interest	No. of Votes	Hobby or Interest	No. of Votes
Sports	24	Sports	13
Collecting	11	Collecting	9
Construction	5	Music	6
Photography	5	Drawing	3
Learning	4	Social	3
Social	3	Photography	2
Drawing	2	Reading	2
Music	2	Sewing	2
Movies	2	Animals	1
Radio	2	Construction	1
Boy Non-Leaders		Girl Non-Leaders	
Sports	55	Sports	41
Collecting	35	Collecting	32
Construction	31	Reading	19
Learning	11	Sewing	19
Photography	11	Music	13
Music	10	Cooking	10
Animals	7	Social	10
Radio	6	Photography	7
Reading	6	Animals	6
Social	4	Construction	4

There was no attempt to compute the mean number of interests and hobbies mentioned, as it appeared to the writer that many pupils had simply listed the many interests in which they were mildly interested, while other pupils conscientiously tried to keep the list to only those hobbies and interests in which they were keenly interested and on which they spent considerable time.

Again the results indicated similarity. The top ranking hobbies in particular appeared similar. Both boys' groups

TABLE XXVI

HOBBIES AND INTERESTS OF PUPIL TEACHERS AND NON-LEADERS

Girl Leaders		Boy Leaders	
No. of Votes	Hobby or Interest	No. of Votes	Hobby or Interest
13	Sports	24	Sports
9	Collecting	11	Collecting
8	Music	8	Construction
8	Drawing	5	Photography
8	Social	4	Learning
8	Photography	3	Social
8	Reading	3	Drawing
8	Sewing	3	Music
1	Animals	3	Movies
1	Construction	3	Radio
Girl Non-leaders		Boy Non-leaders	
41	Sports	88	Sports
32	Collecting	38	Collecting
19	Reading	31	Construction
19	Sewing	11	Learning
13	Music	11	Photography
10	Cooking	10	Music
10	Social	7	Animals
7	Photography	6	Radio
6	Animals	6	Reading
4	Construction	4	Social

There was no attempt to compute the mean number of interests and hobbies mentioned, as it appeared to the writer that many pupils had simply listed the many interests in which they were mildly interested, while other pupils conscientiously tried to keep the list to only those hobbies and interests in which they were keenly interested and on which they spent considerable time.

Again the results indicated similarity. The top ranking hobbies in particular appeared similar. Both boys' groups

and both girls' groups appeared to participate in activities which were much the same. One interesting fact is the complete lack of mention of reading as an interest on the part of boy leaders and the low rating given to reading by the girl leaders, while girl non-leaders listed it third in importance. However, the amount and range of reported hobbies and interests appeared quite similar. The conclusion may be drawn that in range of hobbies and interests pupil leaders and non-leaders tended to appear similar.

Reading Interests. TABLE XXVII

READING PREFERENCES OF PUPIL LEADERS AND NON-LEADERS

Boy Leaders Type	No. of Votes	Girl Leaders Type	No. of Votes
Sports	19	Adventure	14
Adventure	17	Animal	5
Detective	10	Sports	4
Science	5	Detective	2
Animal	3	Love	2
Western	3	School	2
History	2	Biography	1
Biography	1	College	1
Handicrafts	1	Comedy	1
Technical	1	Classics	1
Boy Non-leaders		Girl Non-leaders	
Adventure	48	Adventure	30
Sports	40	Love	21
Animal	23	Animal	17
Science	20	Detective	13
Western	20	Sports	8
Detective	18	Western	7
Airplane	2	School	6
Love	2	Science	3
Sea	2	Comedy	2
Transportation	2	Family	2

Again there was no attempt to find the mean number of reading interests but merely to list those mentioned in order to show range of interest. Here also results showed surprising likeness. The range of interests for all groups appeared to be equally wide. It is interesting to note the high rating given to sports stories by the leader boys and the rather low rating given to them by non-leader boys. However, in other types the two lists appeared quite similar. Although several higher types, such as classics, biography, and technical, were mentioned by leader groups, the numbers were so small that these could not be considered significant. It would seem that in range of reading interests pupil leaders and non-leaders in this survey appeared similar.

Movie Preferences.

TABLE XXVIII

MOVIE PREFERENCES OF PUPIL LEADERS AND NON-LEADERS

Boy Leaders Type	No. of Votes	Girl Leaders Type	No. of Votes
Detective	11	Musical	9
Adventure	8	Adventure	3
Comedy	8	Animal	3
Sports	7	Comedy	3
Western	3	Detective	1
Crime	1	Drama	1
Historical	1	Historical	1
Science	1	Sports	1
War	1	Teen Age	1

TABLE XXVIII (concluded)

Boy Non-Leaders Type	No. of Votes	Girl Non-Leaders Type	No. of Votes
Adventure	27	Love	14
Western	24	Musical	13
Detective	23	Adventure	12
Comedy	17	Detective	12
Animal	5	Animal	10
Science	5	Comedy	9
Sports	5	Western	9
Cartoons	4	Drama	2
Love	3	Sports	2
Pirate	3	Cartoons	1

Table XXVIII shows the movie preferences of pupil leaders and non-leaders. Although the lists show a few slight differences, results tended again to show considerable similarity in range. Although leader groups again mentioned several higher types of preferences, such as, science and history, numbers were again negligible. Leaders and non-leaders tend to show similarity in range of movie preferences.

Movie Attendance.

TABLE XXIX

MOVIE ATTENDANCE OF PUPIL LEADERS AND NON-LEADERS

	Leaders		Non-leaders		Total	
	Boys	Girls	Boys	Girls	Leaders	Non-Leaders
Total No. of Pupils in Survey	21	18	92	58	39	150
Mean Monthly Movie Attendance	3.86	3.68	3.58	3.76	3.77	3.64

Table XXIX shows the mean monthly movie attendance of pupil leaders and non-leaders. Boy leaders averaged nearly four movie attendances a month and had the highest rating. Boy non-leaders with only a slightly lower mean ranked next. Girl leaders were third, but the difference between their mean and that of the non-leader girls was negligible. Although figures were very close, leaders tended to report a slightly higher movie attendance. It may be suggested that this might be because of the slightly higher occupational level of the leader fathers.

Summary

1. Coming from a broken home apparently presented no barrier to leadership, as a slightly higher percentage of leaders came from broken homes.
2. Pupil leaders and non-leaders had approximately the same percentage of employed mothers.
3. Having foreign-born parents was not a preventive factor in leadership.
4. Coming from a home in which a foreign language was spoken was not a preventive factor in leadership.
5. Few leader pupils came from large families.
6. The greater number of leader pupils were intermediate children in their families.
7. There were few of the only child leaders in the leader group, but both oldest and youngest children appeared quite often in the group.

9. A history of moving from school to school apparently had little effect on leadership, as pupil leaders and non-leaders were about equal in this experience.

10. The fathers of pupil leaders tended to come from a slightly higher occupational level than did fathers of non-leaders.

11. Leader pupils came from slightly larger homes than did non-leaders.

12. The number of extra persons living in the pupil homes apparently had no effect on pupil leadership.

13. Pupil leaders tended to have a considerably lower attendance at religious education classes than did non-leaders.

14. Pupil leaders and non-leaders showed the same percentage of extra-mural club membership.

15. In hobbies and interests, reading preferences and movie preferences, pupil leaders and non-leaders showed similar tastes.

16. Pupil leaders tended to attend movies slightly more often than pupil non-leaders.

CHAPTER VI

SUMMARY AND IMPLICATIONS

Review of Hypothesis and Problem

It will be recalled that the basic assumption of the writer was that the leader pupils in this study were superior to the non-leader pupils in physical, mental, scholastic, and social characteristics.

The purpose of the present study was to determine how pupils who had been selected for positions of leadership compared with their fellow pupils.

The survey was conducted in the Walter G. Parker Junior High School in Leasing, **CHAPTER VI**

SUMMARY AND IMPLICATIONS

Pupil leaders were those pupils who had been elected by their classmates to some student governmental office which demanded some measure of responsibility. In this case, student council and class officers were considered as such.

Pupil non-leaders were those pupils who had been elected to no student organization office during their stay in the school.

The study was based upon a survey of 41 pupil leaders and 164 pupil non-leaders.

Information was secured through the use of a questionnaire and of pupils' health, intelligence and scholarship records and a few individual interviews.

CHAPTER VI

SUMMARY AND IMPLICATIONS

Review of Hypothesis and Problem

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The purpose of the present study was to determine how pupils who had been selected for positions of leadership compared with their fellow pupils.

The survey was conducted in the Walter S. Parker Junior High School in Reading, Massachusetts.

Pupil leaders were those pupils who had been elected by their classmates to some student governmental office which demanded some measure of responsibility. In this case, student council and class offices were considered as such.

Pupil non-leaders were those pupils who had been elected to no student organization office during their stay in the school.

The study was based upon a survey of 41 pupil leaders and 154 pupil non-leaders.

Information was secured through the use of a questionnaire and of pupils' health, intelligence and scholarship records and a few individual interviews.

The physical, mental, scholastic, and social characteristics of the leader and non-leader pupils were studied and compared. The physical factors considered were age, height, weight and health. The intelligence quotients and scholarship records of the two groups were studied and compared. Solidarity of the home, number of working mothers, number of foreign-born pupils and parents, number of foreign-speaking homes, position in family, kindergarten attendance, number of town and school changes, occupations of fathers, number of extra persons in the home and attendance at religious education classes were all studied in an effort to determine environmental characteristics. In considering other social characteristics, club membership, hobbies and interests, reading interests, movie preferences and movie attendance were studied.

Limitations of the Study

The material presented in this study is purely local in character in that it deals with one school and with a comparatively limited sample. Since it is not based upon statistically treated evidence, it is useful only in indicating tendencies or clues. Further statistical treatment of data would enable greater use and wider application of findings.

Summary of Findings

1. Leaders were slightly younger than non-leaders.
2. Leaders tended to be shorter and to weigh less than non-leaders.

3. Although leader pupils were found to have only slightly better health ratings, they were found to average considerably fewer health defects.
4. Pupil leaders were found to be more intelligent than non-leaders.
5. Pupil leaders had better scholarship ranks than did non-leaders.
6. Pupil leaders were found to excel the non-leader pupils nearly equally in English, mathematics, and social studies.
7. A slightly higher percentage of leaders than non-leaders came from broken homes.
8. There was little difference in the mean number of employed mothers in the leader and in the non-leader groups.
9. There was little difference in the mean number of foreign-born and foreign-speaking parents of pupil leaders and non-leaders.
10. Few leaders came from large families.
11. There were few leader pupils who were from the "only child" group.
12. The larger portion of the leaders came from the intermediate child group, the oldest child group, or the youngest child group in that order.
13. A much higher percentage of leaders than non-leaders had attended kindergarten.

14. There was little difference in the mean number of town and school changes of pupil leaders and non-leaders.
15. Leader fathers had a slightly higher occupational level than did non-leader fathers.
16. Leader pupils came from homes with more rooms than those of non-leader pupils.
17. There was little difference in the mean number of extra persons in the homes of pupil leaders and non-leaders.
18. A lower percentage of leader pupils than non-leader pupils attended religious education classes.
19. There was little difference in the mean number of extra-mural clubs participated in by leaders and non-leaders.
20. Pupil leaders and non-leaders tended to show a similar range of hobbies, interests, and reading and movie preferences.
21. Leader pupils attended the movies slightly more often than did non-leader pupils.
22. The important factors in the leadership of the pupils studied appeared to be age, height, weight, intelligence, scholarship, kindergarten attendance, fathers' occupations and size of the home.

23. Leader boys were found to be younger, taller, and heavier than girl leaders. They had better general health and fewer health defects. They were higher in intelligence and in scholarship, excelling in mathematics and in social studies, in particular. Their home environment did not tend to be so good as that of the girl leaders, since many more boys came from broken homes or had mothers who were employed. Slightly more boy leaders had foreign-born parents, but fewer came from foreign-language homes.

Implications

1. Pupils elected to serve as student council members and class officers in the Walter S. Parker Junior High School appeared to be definitely superior to those pupils who had held no offices. This study tends to indicate that the student body of the Walter S. Parker Junior High School was capable of electing superior pupils to serve and to lead.
2. There were some important characteristics in which pupil leaders were surpassed by the non-leader group. Solidarity of the home is commonly associated with leadership, yet the pupil leaders of this junior high school had a slightly higher mean of broken homes than did the non-leaders. Research has also associated regular attendance at religious instruction with leadership, but a lower percentage of pupil leaders than

non-leaders in this study regularly attended religious instruction classes. More study on these two findings might reveal the causative factors behind these seeming reversals of commonly accepted leadership characteristics.

3. Although pupil leaders appeared to be a well selected group, it seemed that, since non-leaders also ranked high in some of the characteristics measured, there may have been superior pupils in this group. If such be the case, it may be suggested that some method of employing this wasted leadership ability might be used. Calling the high qualifications of these pupils to the attention of the student body, urging able but retiring students to take part, and leading the whole group to a higher sense of leadership and follower-ship duty might all be accomplished without destroying the democratic spirit of student government, if done in the manner of guiding rather than forcing.

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Questionnaire Form No. 1000

Name _____

Address _____

Grade _____

Where were you born ?

Did you go to kindergarten ?

In what school have you attended school ?

Are your brothers born you ?

Are your sisters still alive ?

What are their ages ?

APPENDIX

Did your father have any other children ?

Are your mother still alive ?

What are their ages ?

What is your father's job ?

In what country was he born ?

In what country was your mother born ?

Do your parents frequently speak any other language than English ?

What language do they speak at home ?

Is your father living ?

Is your mother living ?

Are your original parents divorced or separated ?

Do you live with your own mother ?

Do you live with your own father ?

Questionnaire Used in Study

Name _____

Office _____

Grade _____

Where were you born ?

Did you go to kindergarten ?

In what towns have you attended school ?

How many brothers have you ?

How many are still alive ?

What are their ages ?

How many sisters have you ?

How many are still alive ?

What are their ages ?

What is your father's job ?

In what country was he born ?

In what country was your mother born ?

Do your parents frequently speak any other language than English ?

What language do they speak at home ?

Is your father living ?

Is your mother living ?

Are your original parents divorced or separated ?

Do you live with your own mother ?

Do you live with your own father ?

Name all the individuals with whom you live.

Does your mother work other than acting as housewife ?

If so, what type of work does she do ?

What are the hours of her work ?

How many rooms are there in your house ?

Name the clubs you belong to:

List your hobbies:

List any other interests you may have:

Check the type of story which you prefer to read:

Science Adventure Western Sports

Love Detective Animal School

Other (name them)

How often do you attend the movies ?

Which type of movies do you like best ?

Blank ledger table with columns and rows.

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