THE EFFECT OF BROKEN HOMES ON THE ACHIEVEMENT OF ONE
GRADE AT HORACE MANN JUNIOR HIGH SCHOOL
WICHITA, KANSAS

A Thesis
Presented to
the Faculty of the Department of Industrial Arts
Kansas State Teachers College of Emporia

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

by
Robert M. Baker
August 1965
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CHAPTER I
THE PROBLEM AND DEFINITIONS OF TERMS USED

Under the most ideal of teaching situations, the education of a child is a meticulous and difficult procedure. Even if ideal conditions for learning were to exist within a classroom, other sources of influence still remain which are beyond the control of the school.

Literature in the field of education seemed to indicate that the home environment and family adjustments affects students' academic achievement. Apparently the attitudes and behavior of parents are often reflected by the children. However, this writer was not convinced that this was the case in the school system in which he was employed; therefore, it seemed that a thorough investigation should be made to determine the truth of this conviction.

Differences in home environment among the students at Horace Mann Junior High School have been apparent to the teachers for a considerable length of time. It was decided that research was necessary to determine whether there was a significant difference in the achievement of students from broken homes as compared to those living with both of their natural parents.
I. THE PROBLEM

Statement of the problem. It was the purpose of this study (1) to determine the number of students from broken homes who were enrolled in the ninth grade at Horace Mann Junior High School, Wichita, Kansas; (2) to measure any difference which might exist in the academic achievement and in the home adjustment of students living with both parents, compared with students living with only one parent or neither parent.

The major hypothesis of this study was that there was no significant difference between the academic achievement of pupils living with both parents and pupils from broken homes.

Importance of the study. Today, more than at any other time in history, educators and society, in general, are critically concerned about the educational theories and practices in the nation. The advent of the Atomic bomb in 1945 and "Sputnik" in 1957 stimulated a concerned and centralized interest in our educational system. Consequently, more effective and inspiring methods and techniques are being sought by educators to curtail the drop-out problem and to encourage advanced study in the various fields.
Many facets of public education have been re-evaluated in an attempt to establish an effective system which would more adequately serve the general population instead of serving only the academically talented as was prevalent before World War II.

The areas investigated included the curriculum, teacher training, teacher salaries, certification, school plant facilities, and last, but certainly not least, the effectiveness of instruction. Since many studies reveal that home adjustment and environment have an effect on academic achievement, there is little doubt that a close inspection of these two areas would reveal a greater need for an individualized type of instruction.

If educators are going to study the problems of home adjustment and environment as they relate to academic achievement, then it seems that a thorough investigation should first be carried out regarding the effect of broken homes upon the academic achievement in the particular locality. For this reason research was begun to determine if broken homes did produce unsatisfactory conditions, in most instances, for successful academic achievement at Horace Mann Junior High School.
Limitations of the study. This study is based on the results of the SRA Pupil Record of Educational Progress 6-9 Test, the Otis Quick-Scoring Mental Ability Test, and interviews with counselors, teachers and administrators. In addition to the two standardised tests and the interviews with staff members, two questionnaires pertaining to home adjustment and the marital status of parents were given to the ninth grade students.

For a comparison between the two groups, the SRA Pupil Record of Educational Progress Test was administered in the fall of 1964. This test was used for measuring the educational growth in the areas of English, mathematics, social studies, and science.

For an additional comparison the Otis Quick-Scoring Mental Ability Tests were given to compare the intelligence quotient of pupils living with both parents to that of pupils living in broken homes. This test was administered in the spring of 1965.

The entire ninth grade class participated in the two questionnaires, but only those students for whom data on both the Otis Quick-Scoring Mental Ability Test and the Pupil Record of Educational Progress Test were used in the comparisons.
Techniques used for the study. The techniques used in this study were as follows: (1) The SRA Pupil Record of Educational Progress Test was administered to the ninth grade class, (2) The Otis Quick-Scoring Mental Ability Test was administered to the same class five months later, (3) two questionnaires were given to the ninth grade class, (4) and personal interviews were conducted with the administration and staff discussing pupil responses to the questionnaires.

II. DEFINITIONS OF TERMS USED

Broken homes. Any home where the student is living with persons other than both the original mother or father.

Home adjustment. The words, home adjustment, as used in this study means the attitude that the student has toward his home environment.

Parent(s). Parent, as used, is either or both the original mother or father with whom the student is living.

National norm. A numerical standard used for the interpretation of test scores and based on scores derived from a nation-wide study or sampling.¹

Achievement. Achievement as used in this study means the academic performance during a given period.

Stanine scores. Stanine scores run from 1 to 9 along the base line of the normal curve, constituting a scale in which the unit is .5 standard deviation and the median is 5.2

SRA Pupil Record of Educational Progress Test. A test battery designed to provide measures of educational development, ability, and intentions.3

Otis Quick-Scoring Mental Ability Test, Beta Test. A test which yields a single score summarizing the eighty items, including word meaning, verbal analogies, scramble sentences, interpretation of proverbs, logical reasoning, number series, arithmetic reasoning, and design analogies.4


CHAPTER II

REVIEW OF THE LITERATURE

A child's development is greatly affected by the environment that is provided by the family into which he is born. The behavior of children at school often reflects the parents' adjustment to each other. Although it may not be advantageous for a child to be brought up in a broken home, it is possible that such a home environment may be more wholesome for a child than one which is psychologically broken by continuous quarreling between the parents.¹

An unnatural environment for a child is often the result of homes that are broken due to death, divorce, or prolonged illnesses. As time passes, an increased and complex environmental condition often occurs when a child is forced to live with a parent who has remarried. A child may have a feeling of intruding and not being wanted if he has to live in a new home, especially where there are other children.²

²Ibid., p. 314.
Skinner gave an excellent description of the early age at which a child may be affected by the emotions of his parents, when he wrote:

Parental emotional attitudes toward a child are felt even in early infancy. As a child passes out of infancy, opportunities for desirable or undesirable adjustment and for parental influence increase.3

In a report on broken homes as they affected academic achievement, Joseph Crescibeni stated that four children out of ten, in this country, came from homes which were broken due to the death, separation, or institutionalisation of one or both parents. He also related that five million women in this country were bringing up children without the father being an immediate member of the family. In addition to this there were another half-million homes with children in which there was no mother living.4

To gain further information pertaining to how broken homes directly affected academic achievement, statistical study was begun to compare a group of children from families with some form of disorganization with a group which lived with both parents in a home environment that was presumed to be adequate. The results of this study, which were based on


the 1958 Metropolitan Achievement Test, indicated that there was a significant difference in the academic achievement of children from broken homes as compared to children living in homes with both natural parents.\(^5\)

The following conclusions and recommendations were reported by Crescimbeni as a result of the study:

The findings, as revealed by the 1958 Metropolitan Achievement Test administered in this study, illustrate the need for a complete re-organization of the academic program as it affects the children described in this investigation. It must be more flexible to accommodate the child's readjustment following the family tragedy. Also, the teacher and the school administrative staff must take into account additional factors which might include:

1. The improvement of psychological understanding of the nature of family tragedy and its impact upon children at various age levels.
2. The development of a sympathetic "awareness" of problems which confront children who become unfortunate victims of homes with a missing parent.
3. The implementation of improved classroom techniques which will individualize academic expectations from these children after family disruption has occurred.
4. The establishment of an extensive and comprehensive guidance program at an early age by the classroom teacher, as well as other school auxiliary services, which will deal with life problems as well as educational ones.
5. The expansion and continual improvement of school-home relationships for these children.\(^6\)

Another study regarding the influence that broken homes had on school age children in a small industrial city

\(^5\)Ibid., p. 439.
\(^6\)Ibid., p. 441.
in Illinois was undertaken by Martha Crumpton Hardy. In the study, 215 white boys and 174 white girls participated.\textsuperscript{7}

The results of the study were as follows:

The normal family set-up, in which both parents are living in the home was somewhat less frequently noted among the poorly adjusted children than among the total cases without exception for each of the several classifications based on the schools' judgement of satisfactoriness of the child's adjustment; broken homes were the most common among the least satisfactory adjusted cases. While the comparative differences were never large enough to eliminate the possibility of chance, the frequency of desertions, legal separations, and divorces in the home experiences of the maladjusted was twice as great as in that of the well-adjusted children, even when the socio-economic level of these cases was the same.

B. F. Skinner is among those who believe that the I.Q. is greatly affected by home environment. He indicated that the best home environment would contribute a maximum of between ten and thirty I.Q. points, or an average of twenty I.Q. points. Regarding the least cultured or least stimulated environment, Skinner found that the I.Q. may be decreased as much as twenty points. However, he admitted that the two extremes in question occurred only once or twice in a thousand times.\textsuperscript{9}


\textsuperscript{8}Ibid., p. 215.

Frienbercy and Moscovitch, in their study, compared the performance on the Stanford Achievement Test of 133 children who lived in their own homes with the performance of children who were either in foster homes, homes for the socially maladjusted, or orphan home.\footnote{Henry Feinberg and Edward Moscovitch, "Achievement on the Stanford Achievement Test of Children in Difficult Own Home Situations Compared with Children Placed out of the Home," \textit{Journal of Experimental Education}, 26:67, September, 1957.}

The results of the study indicated that the children from the "normal home" group achieved better than the children from maladjusted, foster, or orphan homes, although both groups had approximately the same intelligence. However, when the age factor was considered along with the intelligence factor, the actual achievement of the children in the "normal home" group was not as good as those from the orphan and foster home group, but was above that of the maladjusted group. From this study, it was apparent that the emotional condition rather than the environmental factor, or the general intelligence of children, was the determining factor in the children's performance on the achievement test.\footnote{\textit{Ibid.}, p. 79.}

The conclusions derived from this review of literature seemed to place an emphasis on the fact that broken homes
might have an influence on students. Although the literature reviewed was not always in agreement regarding the extent to which this influence was significant, it indicated that broken homes, in most instances, created emotional problems for students.
CHAPTER III

DIFFERENCES IN HOME ADJUSTMENT

The problem dealt with in this chapter is whether or not there are differences in the home adjustment between students living with both parents and those living in broken homes. A questionnaire, located in Appendix A, was used to measure any differences which existed. Each student in the ninth grade class was given the questionnaire in the spring of 1965.

On the questionnaire, each student indicated the relationship of the person or persons with whom he was living. This information revealed whether or not the student was living in a broken home. At the time the questionnaire was given, there were 190 students in the ninth grade class of which 56 per cent were living with both parents, while 42 per cent were identified as living in broken homes. The sex of the student was also checked on the questionnaire. So that honesty and the freedom of expression could be achieved from the students, they were asked not to sign their names.

The questionnaire was divided into two parts. The first part consisted of twenty questions to which the students gave yes or no answers. The questions covered such
areas as the student's happiness at home, whether or not he felt his family was interested in him, the importance placed on education by his family, whether or not he was delegated responsibility, and whether he was made to feel a part of the family. The second part of the questionnaire contained four open-end questions covering what the student liked and disliked at home, and what the student would like to change about his family. A copy of the questionnaire may be found in the appendix.

This chapter will discuss the differences in the answers to the yes and no questions which were given by students living in broken homes as compared to those living with both parents. The answers given by boys were compared with those given by girls who were living in similar home environments. The differences in the answers that were found in the open-end questions will also be discussed in this chapter. The differences will again be based upon the sex of the student, and whether the student is living in a broken home or with both parents.

To investigate the significance of the differences between the responses to each question among the groups, the chi-square test was applied. At the .05 level of confidence, a difference of 3.84 would be viewed as statistically significant. Although Tables I, II, and III indicated the
number of responses in each group, percentages are given in
the discussion to aid in a clearer interpretation.

Some of the responses to the questions revealed that
there were no differences in some areas between students
from broken homes and students living with both parents.
For example, when asked if they enjoyed doing things and
going places with their family, 91 per cent of the boys who
lived with both parents, and 89 per cent from broken homes
answered yes, while 88 per cent of the girls who lived with
both parents and 89 per cent from broken homes answered yes.
No differences were noted when the students were asked if
their family believed that making good grades were important.
In response, 98 per cent of the boys and 95 per cent of the
girls living with both parents answered yes, while 97 per
cent of the boys and 94 per cent of the girls from broken
homes answered yes.

When asked if they enjoyed family activities, only
10 per cent of the boys and 12 per cent of the girls living
with both parents said no, while 16 per cent of the boys
and 17 per cent of the girls from broken homes said no.
However, 2 per cent of the boys and 5 per cent of the girls
living with both parents said no when asked if their family
believed that getting an education was important for future
success. To this same question the boys from broken homes
were unanimous in answering yes, while among the girls 13
### Table I

**Comparison of Replies to Questionnaire "A" by Girls Living with Both Parents and Girls From Broken Homes**

<table>
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<tr>
<th>Question No.</th>
<th>Observed Responses</th>
<th>Expected Responses</th>
<th>Chi-Square</th>
<th>Significance²</th>
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1. Numbers correspond to those in Questionnaire "A" in the appendix.
2. With 1 df, a Chi-square value of 3.84 or more is considered to be significant at the .05 level.
TABLE III

COMPARISON OF REPLIES TO QUESTIONNAIRE "A"
BY BOYS LIVING WITH BOTH PARENTS
AND BOYS FROM BROKEN HOMES

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<th>Question No.</th>
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<th>Chi-Square</th>
<th>Significance</th>
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<td>24     14</td>
<td>38     20</td>
<td>25     13</td>
</tr>
<tr>
<td>19</td>
<td>55     3</td>
<td>37     1</td>
<td>56     2</td>
<td>36     2</td>
</tr>
<tr>
<td>20</td>
<td>57     1</td>
<td>38     0</td>
<td>57     1</td>
<td>38     0</td>
</tr>
</tbody>
</table>

1 Numbers correspond to those in Questionnaire "A" in the appendix.
2 With 1 df, a Chi-square value of 3.84 or more is considered to be significant at the .05 level.
per cent answered no. In part, this may explain the differences in achievement between the girls and boys which will be discussed in Chapter IV.

The answers to many questions indicated that, although differences in some areas did not exist between students living with both parents and those from broken homes, they did exist between the sexes as a whole. Consequently, on several questions, the responses by the boys living with both parents were nearly identical to those from broken homes. However, the answers given by the girls differed a great deal. For example, when asked if their family approved of their friends, 13 per cent of the boys from broken homes and 14 per cent of those living with both parents answered no, while only 9 per cent of the girls from broken homes and 32 per cent living with both parents answered no. The responses to this question among the girls proved to be statistically significant as may be observed on Table I. When asked if they found it easy to express themselves to their family, 33 per cent of the boys living with both parents and 37 per cent living in broken homes indicated no, while 45 per cent of the girls living with both parents and 34 per cent from broken homes answered no. When asked if their family encouraged them to make some decisions for themselves, 95 per cent of the boys from both groups said yes. The girls responses were different, with 89 per
cent of the girls from broken homes answering yes, while only 65 per cent living with both parents indicated that they were encouraged to make some decisions for themselves.

In answering some of the questions, the boys living with both parents and the girls living with both parents responded similarly. Also, responses of the boys from broken homes and the girls from broken homes were approximately the same. However, there was a noticeable difference in comparing the total population of students from broken homes with that of students living with both parents. For example, 90 per cent of the boys and girls who were living with both parents responded yes when asked if they were given responsibilities at home, while 9 per cent of the boys and 99 per cent of the girls from broken homes said yes.

In other ways students living with both parents and students from broken homes reacted and felt differently. Feeling at ease to reveal personal problems to parents was thought to be an important consideration in judging home adjustment. It was found that 24 per cent of the boys and 47 per cent of the girls living with both parents did not find it easy to reveal personal problems to their parents. This seemed quite alarming when it further was indicated that 31 per cent of the girls and 42 per cent of the boys from broken homes said that they, too, found it difficult to talk about personal problems with their parents.
Although students living in broken homes seemed to react differently to some of the questions when compared with the reactions of students living with both parents, only one question, "My family spends time doing things with me?" proved to be statistically significant at the .05 level of confidence.

The feeling of belonging is a basic need of human beings. The importance of this statement could not be overlooked in measuring home adjustment. Consequently, one of the questions on the questionnaire was, "Does my family make me feel like I belong." The response was 90 per cent yes by the boys living with both parents and 92 per cent yes by the boys from broken homes. The responses from the girls were the same with 83 per cent from each group answering yes.

The responses to this question were startling when compared with the answers to some of the other questions. For example, when asked if they found it difficult to get along with their family, 17 per cent of the boys and 35 per cent of the girls living with both parents said yes, while a decidedly higher 76 per cent of the boys and 29 per cent of the girls from broken homes said yes. In discussing this question with the boys from broken homes, they related that there was no time to do the things they enjoyed, because they had to help work at home, take care of brothers and sisters, or do outside work to help with the family expenses.
On the other hand, only 24 per cent of the girls from broken homes answered no, in comparison with negative replies from 35 per cent of the girls living with both parents. A feeling of helplessness could sometimes be sensed on the part of the boys from broken homes. Although they felt they could not get along with their family, they ranked first in answering yes when asked if they were happy at home. In responding to this question, 97 per cent of the boys and 86 per cent of the girls from broken homes answered yes, while only 91 per cent of the boys and 85 per cent of the girls living with both parents answered yes.

The way in which the four groups identified themselves with their environment was one area of home adjustment measured. It was found that the boys identified with their environment more easily than the girls. For example, when asked if their family was friendly toward them and interested in them, 93 per cent of the boys living with both parents and 92 per cent of the boys from broken homes said yes, while only 83 per cent of the girls who lived with both parents and 89 per cent of the girls from broken homes said yes. The same results occurred when the students were asked if their family planned activities which were interesting to them. The positive responses were as follows: 69 per cent of the boys and 48 per cent of the girls living with both parents, and 66 per cent of the boys and 53 per cent of the
girls from broken homes answered yes. In addition when asked if they usually found enough things to interest them at home, 37 per cent of the boys living with both parents and 29 per cent of the boys from broken homes answered no, while 45 per cent of the girls living in broken homes and 36 per cent of the girls living with both parents answered no. This difference in the relative adjustment to their environment is a factor which should be kept in mind as a possible cause of the difference in achievement between boys and girls which will be discussed in Chapter IV.

Finally, one more area of home adjustment of great importance was investigated. It was desired to learn if there were any differences in the four groups as to their feeling of togetherness with their families. The students were asked if their family spent time doing things with them. The positive responses were as follows: 61 per cent of the boys and 54 per cent of the girls from broken homes answered yes, while 78 per cent of the boys and 63 per cent of the girls living with both parents answered yes. When asked if they were interested in family togetherness, only 7 per cent of the boys living with both parents answered no, but 20 per cent of the girls gave a negative answer. The boys and girls from broken homes were very close with 13 per cent of the boys and 11 per cent of the girls answering no. When asked if they usually found enough things to
interest them at home, the girls seemed to be more contented with home activities because 71 per cent from broken homes and 63 per cent living with both parents answered yes, while only 55 per cent of the boys from broken homes and 62 per cent of the boys living with both parents answered yes. When asked if they were given the opportunity to develop their interests and hobbies at home, 91 per cent of the boys living with both parents answered yes, while 75 per cent of the girls in the same category gave a positive answer. To this same question 79 per cent of the boys and 83 per cent of the girls from broken homes answered yes. When asked if they felt free to discuss school problems with their family, the responses of 14 per cent of the boys living with both parents and 18 per cent of the boys from broken homes were negative. Among the girls, 25 per cent living with both parents and 20 per cent from broken homes answered no. When asked if their family knew their teachers, the responses were stunning. An astounding 55 per cent of the boys and 65 per cent of the girls living with both parents indicated a negative answer. Conversely, only 29 per cent of the boys and 49 per cent of the girls from broken homes answered no to this question.

Because the students were restricted to yes and no answers, it was felt that they were not given the opportunity to accurately express their feelings. Therefore, the
### TABLE IV

PER CENT OF AFFIRMATIVE AND NEGATIVE ANSWERS
GIVEN BY STUDENTS TO THE QUESTIONS ASKED
IN QUESTIONNAIRE "A"

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Both Parents</th>
<th>Broken Homes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td></td>
<td>Yes %</td>
<td>No %</td>
</tr>
<tr>
<td>1</td>
<td>91</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
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<tr>
<td>3</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>76</td>
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<tr>
<td>6</td>
<td>78</td>
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<tr>
<td>7</td>
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<td>8</td>
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<tr>
<td>9</td>
<td>90</td>
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<td>10</td>
<td>62</td>
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<td>11</td>
<td>91</td>
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<td>12</td>
<td>86</td>
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<td>13</td>
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<td>14</td>
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<tr>
<td>20</td>
<td>98</td>
<td>2</td>
</tr>
</tbody>
</table>
second part of the questionnaire was composed of open-end completion questions. The purpose of this part of the questionnaire was to allow the students more freedom of expression. In responding to this part of the questionnaire it was found that many students wrote very little in the space provided while many others expressed their feelings quite fluently and emphatically.

The results of the completion questions were compiled into the following four basic groups: 1. The boys living with both parents. 2. The girls living with both parents. 3. The boys from broken homes. 4. The girls from broken homes. The responses from each group were then generalized.

In general, the boys living with both parents seemed to be most concerned about the restrictions placed upon them by their family. Some of their complaints were about the time allotted to return home after school was dismissed, the evening curfew that was set by their parents, and the places they were not allowed to frequent. The boys who lived with both parents complained about their parents more than the other three groups. About one out of five of the boys living with both parents mentioned that they either wanted their parents to teach them to drive or to buy them a car. Over half of this same group of boys said the thing they liked best about their family was the way they did things together. The majority also said that they would like to
change nothing about their family, while only one out of ten said they would like their family to take more of an interest in sports and new hobbies. In response to the question, "What I like least about my family," the majority of the answers were, "The arguments we have." Several of the boys revealed that they wanted their parents to visit and get to know the parents of their friends.

In general, the girls living with both parents were the most contented group of the four. About three-fourths of them said they would change nothing at all about their family. Those who did complain mentioned almost the same things that the boys living with both parents had. The most obvious difference between the responses of these two groups was that very few girls complained about their parents. Surprisingly, a large number of them listed their parents as what they liked best about their family. After giving this response, the majority of these girls continued to explain what they liked best about their parents.

There was one other noticeable difference between the two groups of students who were living with both parents. Many of the girls seemed to express themselves more clearly and also seemed to discuss more important subjects. Their advantage in maturity over the boys was readily indicated.

A few of the responses given by the girls living with both parents are as follows:
"I like the way we do things together, talk things over, help each other, and how well we get along."

"I like my family because we are always going places together, doing musical things together such as playing instruments, etc."

"My family has a great sense of humor and everyone can take a joke and can take a ribbing without being offended. My parents are interested in our grades, and they help us in any way possible."

"I like the way my family is planning my future, talking to me about college, and what I should be in the future years."

The girls who complained mentioned such things as:

"I would like my family to take more of an interest in school activities and meet my teachers."

"I would like my family to go places and do things that we kids are interested in instead of only what they like."

The boys from broken homes seemed to find many things about which to complain. They did not seem to be contented at home, or to be very much concerned about the same things that bothered the boys living with both parents. They revealed more concern about how they were getting along with their parents. Some of their comments were as follows:
"What I like about my family is being able to do things for them and being needed."

"Well the thing I like about my mother is that she understands me and tries to help me."

The following are some of their complaints:

"They are always picking on me because I am the oldest and they say I should take care of the rest of them."

"I would like for us to get along a little better, most of the time we are fighting."

"My family is always fussing."

"I don't like the place we have to live."

Finally, the response of one boy from a broken home to the last question: What I would change about my family if I could. "No one is interested in me and I have to take all the responsibility for the rest of the kids."

In general, the girls were interested in their personal problems and the feeling of their family about them. The following are some of the comments made by this group of girls.

"I would like to have my family take more of an interest in my personal problems."

From the responses to the open-end questions, one thing stood out quite vividly about the girls from broken homes. They had very definite feelings about their family. Many of them said that their families were always arguing.
A few went so far as to name the parent or step-parent they liked or disliked the most.

The responses to the open-end questions indicated that many girls were deeply troubled. Yet these responses also revealed that some of the girls from broken homes seemed to recognize the need for both family and self-improvement within their home environment. The following are some responses to illustrate this:

"I would like my family to take more of an interest in the things of life which I will need later. I would like to be easy to like."

"I would like for my family to take more interest in the way they dress."

"What I would like to change in my family are the times I have been selfish and didn't understand their problems."

"I would like to live in a better neighborhood where everyone is friendly."

"I would like to have my family trust me."

The responses, in general, indicated that the girls from broken homes were the least well adjusted and most troubled of the four groups. Several typical examples are as follows:
"The thing I like least about my family is the way we treat each other. Sometimes we don't act like we like each other."

"If I could change my family I would have my mother and father to live together again."

Finally, one statement which seemed to sum it up for the girls from broken homes is, "I would like for my family to love and need me."
CHAPTER IV

DIFFERENCES IN ACHIEVEMENT

The purpose of this chapter was to report the achievement of the three groups of students and any differences which might exist. Comparisons were made on the basis of the Pupil Record of Educational Progress Test administered to the ninth grade class in the fall of 1964. This test was a battery of tests which consisted of the following sub-tests: (1) English, (2) Mathematics, (3) Social Studies, and (4) Science. The scores were reported in terms of stanines. The $t$ test was employed to measure the significance of any differences in the stanine composite scores and percentiles on the Pupil Record of Educational Progress Test and the Otis Quick-scoring Mental Ability Test for the following groups:

1. Boys living with both parents compared with boys from broken homes as shown on Table V.
2. Girls living with both parents compared with girls from broken homes as shown on Table VI.
3. Boys and girls living with both parents compared with boys and girls from broken homes as shown on Table VII.
The scores of the four groups were compiled, showing the stanine, and the composite of the boys living with both parents, girls living with both parents, boys from broken homes, and the girls from broken homes. The results of these scores were then shown to the counselor, the principal, and a number of teachers. These staff members were then individually interviewed to determine the reason for differences existing among the four groups of students. Because most of the staff members who were interviewed had many years of experience in teaching students from broken homes and students living with both parents the information that was received from them was considered to be valuable.

An important purpose of the interviews was to provide a way in which the information obtained would have useful results. It was hoped that a greater awareness of the home problems of the students would arise from staff discussions following these interviews.

When comparing the students from broken homes and the students living with both parents, they were assumed to be alike in every characteristic other than general intelligence. Since the intelligence of the students had a bearing upon achievement, the Otis Quick-Scoring Mental Ability Test was administered to all the students in each of the four groups. The intelligence quotient (I.Q.) was derived from the results of the Otis test. For purpose of comparison,
a graphic presentation of the mean I.Q.'s is shown in Figure 1.

The mean I.Q. of the boys from broken homes was 94.47, while the boys living with both parents averaged 99.43. The \( t \) test produced a value of 1.68 which was not significant at the .05 level. The girls from broken homes averaged 91.16 in I.Q. while the girls living with both parents averaged 97.62. The value of \( t \) was 2.26 which was statistically significant at the .05 level of confidence.

A comparison could be made between the two boys' groups and the two girls' groups. The boys in general could be expected to average slightly better in achievement due to a higher average I.Q. difference of about 2.56 points. This was surprising since the girls should have had greater maturity advantage at this age.

The entire ninth grade class participated in answering questionnaires, but only those students for whom data was available on both the Otis Quick-Scoring Mental Ability Test and the Pupil Record of Educational Progress Test were used in the comparisons. As shown in Figure 1, there was data available for fifty-eight boys living with both parents, thirty-eight boys from broken homes, forty girls living with both parents, and thirty-five girls from broken homes.
TABLE V

COMPARISON OF PERFORMANCE ON THE PUPIL RECORD OF EDUCATIONAL PROGRESS TEST AND THE OTIS QUICK-SCORING MENTAL ABILITY TEST BY STUDENTS LIVING WITH BOTH PARENTS AND THOSE LIVING IN BROKEN HOMES

<table>
<thead>
<tr>
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<th>Both Parents</th>
<th>Broken Homes</th>
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<th>Significance</th>
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<td>Mean</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>PREP&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
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<tr>
<td>Otis&lt;sup&gt;3&lt;/sup&gt;</td>
<td>99.43</td>
<td>94.47</td>
<td>12.12</td>
<td>13.37</td>
</tr>
</tbody>
</table>

<sup>1</sup>Stanine as shown on the PREP test.

<sup>2</sup>Percentile as shown on the PREP test.

<sup>3</sup>IQ as shown on the OTIS Quick-Scoring Mental Ability Test.

<sup>4</sup>With 170 df, a t test value of 1.99 or more is considered to be significant at the .05 level.

<sup>5</sup>Comparison of boys living with both parents and boys from broken homes.
**TABLE VI**

COMPARISON OF PERFORMANCE ON THE PUPIL RECORD
OF EDUCATIONAL PROGRESS TEST AND THE OTIS
QUICK-SCORING MENTAL ABILITY TEST BY
STUDENTS LIVING WITH BOTH PARENTS
AND THOSE LIVING IN BROKEN HOMES

<table>
<thead>
<tr>
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<th>(t)</th>
<th>Significance(^4)</th>
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<td>SD</td>
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<td></td>
<td>SD</td>
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<td>SD</td>
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</tr>
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<td>Otis(^3)</td>
<td>Mean</td>
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<td>Mean</td>
<td>92.86</td>
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<tr>
<td></td>
<td>SD</td>
<td>12.45</td>
<td>SD</td>
<td>12.61</td>
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</table>

\(^1\)Stanine as shown on the PREP test.

\(^2\)Percentile as shown on the PREP test.

\(^3\)IQ as shown on the OTIS Quick-Scoring Mental Ability Test.

\(^4\)With 170 df, a \(t\) test value of 1.96 or more is considered to be significant at the .05 level.

\(^5\)Comparison of girls living with both parents and girls from broken homes.
### TABLE VII

**COMPARISON OF PERFORMANCE ON THE PUPIL RECORD OF EDUCATIONAL PROGRESS TEST AND THE OTIS QUICK-SCORING MENTAL ABILITY TEST BY STUDENTS LIVING WITH BOTH PARENTS AND THOSE LIVING IN BROKEN HOMES**

<table>
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<th>Broken Homes&lt;sup&gt;5&lt;/sup&gt;</th>
<th>t</th>
<th>Significance&lt;sup&gt;4&lt;/sup&gt;</th>
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<td>PREP&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Mean 4.176 SD 2.211</td>
<td>Mean 3.81 SD 1.702</td>
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<td>None</td>
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<tr>
<td>PREP&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Mean 37.26 SD 28.12</td>
<td>Mean 31.44 SD 26.11</td>
<td>.933</td>
<td>None</td>
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<td>Otis&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Mean 97.62 SD 13.00</td>
<td>Mean 91.16 SD 11.66</td>
<td>2.26</td>
<td>Significant</td>
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</tbody>
</table>

<sup>1</sup>Stanine as shown on the PREP test.

<sup>2</sup>Percentile as shown on the PREP test.

<sup>3</sup>IQ as shown on the OTIS Quick-Scoring Mental Ability Test.

<sup>4</sup>With 170 df, a t test value of 1.99 or more is considered to be significant at the .05 level.

<sup>5</sup>Comparison of boys and girls living with both parents and boys and girls living in broken homes.
FIGURE 1

AVERAGE I.Q.'s OBTAINED FROM OTIS QUICK-SCORING MENTAL ABILITY TEST ON FOUR GROUPS
The results of the Pupil Record of Educational Progress Test will be presented first as it applies to subject areas in the school, and, later, general conclusions will be drawn. When all five areas shown in Table VIII are considered together, the boys who lived with both parents had achieved an average score which was .9 of a stanine higher than that which was achieved by the boys who were living in broken homes. The smallest difference was revealed in reading. The boys living with both parents were .1 of a stanine higher than the boys from broken homes. The largest difference was 1.7 which was indicated on the science test. The science teachers who were interviewed related that they had not been aware of the differences between the two groups.

It was noted that the composite score for the girls who lived with both parents was .2 of a stanine higher than for the girls who lived in broken homes. In mathematics the stanine score was the same for both groups of girls. The smallest difference was .2 of a stanine in English, while the largest difference was .7 of a stanine in science. Thus we see that the girls from broken homes have failed to keep abreast of the girls living with both parents in the field of science. When one of the science teachers, Fred Romersim, was interviewed, he said, "I believe the girls living with both parents do not encounter as many problems as do the
<table>
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<tr>
<th>Groups</th>
<th>Sub-Tests</th>
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<th></th>
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<td><strong>1 Reading</strong></td>
<td><strong>2 English</strong></td>
<td><strong>3 Math.</strong></td>
<td><strong>4 Science</strong></td>
<td><strong>5 Social Studies</strong></td>
<td><strong>Composite</strong></td>
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<td>4.7</td>
<td>5.7</td>
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<tr>
<td>Boys Broken Homes</td>
<td>4.6</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3.9</td>
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<tr>
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<td>4.1</td>
<td>4.5</td>
<td>4</td>
<td>4.5</td>
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<td>Girls Broken Homes</td>
<td>3.7</td>
<td>4.3</td>
<td>4</td>
<td>3.8</td>
<td>4</td>
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</tbody>
</table>
girls who live in broken homes. The girls from broken homes seem to have their minds on things other than science. Fortunately, although differences in the achievement between these two groups do exist, most of the girls from broken homes do have an average or better than average understanding of the fundamentals of science.\textsuperscript{1}

The results of the English sub-test indicated that both the boys and the girls who lived with both parents were higher in this area. The boys from broken homes ranked .1 of a stanine lower than those who lived with both parents, while the girls from broken homes were .2 of a stanine lower than those who lived with both parents. According to one English teacher, "The way the language is used in the home is usually reflected by the student at school. If the parents use proper grammar and read a great deal, the student also will speak properly and read well."\textsuperscript{2}

In the field of social studies, the boys who lived with both parents again were high. They scored .6 of a stanine higher than the boys who lived in broken homes. However, both groups of boys scored as high as or higher

\textsuperscript{1}Fred Romereim, Science Instructor, Horace Mann Junior High School, in a personal interview, May 3, 1965. Permission to quote secured.

\textsuperscript{2}Robert Trissal, English Instructor, Horace Mann Junior High School, in a personal interview, May 4, 1965. Permission to quote secured.
than both groups of girls. This was also the only sub-test in which the girls from broken homes scored higher than the girls who lived with both parents. The girls living with both parents scored .2 of a stanine lower than the girls from broken homes.

Most of the social studies teachers who were interviewed stated that they felt that the boys liked social studies better than the girls. This, in part, could have accounted for the boys scoring higher than the girls in this one area. Mr. Cleo Ray, one of the social studies teachers, suggested a possible reason for this difference by stating, "Most of the boys are extremely interested in what happened or is happening in different parts of our country and the world. They enjoy reading about these happenings, looking up information concerning life in ancient times, and locating places on the map which have or have had historical meaning."3 Regarding the academic achievement of the girls in the field of social studies, Mrs. Verdis Gullett related, "The girls seem to be more interested in what is happening today at the national or local level than they are about the world and the past. Since social studies is greatly concerned with both the

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past and the world, it is no wonder that it is difficult to get girls interested in the subject. 4

Observing the girls' groups together, it should be noted that in Reading they were 1.5 stanine below the boys. The counselor, when confronted with the results replied, "This is undoubtedly a unique situation. Perhaps the higher I.Q. of the boys, which is unusual, accounts for this difference." 5

One point was obvious when the over-all results of the comparison of stanine scores were viewed. According to the composite stanine scores, the students from broken homes seemed to be at a greater disadvantage than were the students who lived with both parents. It also should be kept in mind that the average I.Q. of the students from broken homes was lower than students living with both parents. The t test difference between the two groups was 3.02 which was significant at the .05 level of confidence. The boys from broken homes scored lower in all five of the sub-test areas than the boys who lived with both parents. The girls from broken homes also averaged lower in all


5 Willard Wortman, Junior High School Counselor, Horace Mann Junior High School, in a personal interview, May 7, 1965. Permission to quote secured.
sub-test scores except one, social studies, than did those
who lived with both parents.

It was considered necessary to investigate the
reasons for both the boys and the girls from broken homes
scoring lower on the Otis Quick-Scoring Mental Ability Test
and the Pupil Record of Educational Progress Test. Since
it is important for educators to know why this problem
existed, this subject was of prime importance in the
interviews.

Educators at Horace Mann Junior High School were
interviewed for the purpose of obtaining their opinions
concerning the problem of students from broken homes
scoring lower on both the Otis test and the Pupil Record of
Educational Progress Test. When interviewed, the educators
were asked this question. "Why do you think that both girls
and boys from broken homes scored lower on the I.Q. and the
achievement tests than those who lived with both parents?"
The answers to this question were as follows:

"Students from broken homes seem to have more
emotional problems than do other students."6

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6Donald Mayberry, Mathematics Instructor, Horace
Mann Junior High School, in a personal interview, May 10,
1965. Permission to quote secured.
"Students from broken homes often do not have a feeling of security." 7

"When both parents are not in the home, it is possible that there is not enough emphasis placed on academic achievement." 8

As was shown in Chapter III, the groups also differed in some areas of their home adjustment. This should be kept in mind when considering the over-all results of the four groups. Both the boys and the girls from broken homes were less well adjusted than the boys and the girls who lived with both parents. When school principals and teachers question why students from broken homes did not generally achieve as well as those who lived with both parents, they should remember the statement that one girl from a broken home made: "I would like my family to love and need me."

7 Raymond Cox, Vice Principal, Horace Mann Junior High School, in a personal interview, May 11, 1965. Permission to quote secured.

8 Chandler Hatfield, Principal, Horace Mann Junior High School, in a personal interview, May 12, 1965. Permission to quote secured.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

The main purpose of this study was to determine the number of students from broken homes who were enrolled in the ninth grade at Horace Mann Junior High School, Wichita, Kansas, and to measure any differences which might exist in the academic achievement and in the home adjustment between students who lived with both parents, and students who lived with only one parent or neither parent. While other studies had indicated that broken homes had an influence on the academic achievement of students, no evidence existed to indicate whether or not broken homes caused emotional problems which actually hampered the academic achievement.

The entire ninth grade class of 190 students participated in this study. To determine whether the students were living in broken homes or living with both parents, a questionnaire which pertained to the marital status of the parents was given to each student. On the questionnaire, each student indicated the relationship of the person or persons with whom he was living. After the questionnaires were completed, it was observed that 36 per
cent of the students were living with both parents, while 42 per cent were identified as living in broken homes. The sex of the student was also checked on the questionnaire. So that honesty and the freedom of expression could be achieved from the students, they were asked not to sign their names.

When comparing the students from broken homes and the students living with both parents, they were assumed to be alike in every area other than general intelligence and sex. Since the intelligence of the students had a bearing upon achievement, the Otis Quick-Scoring Mental Ability Test was administered to all of the students in each of the groups. The intelligence quotient (I.Q.) was derived from the results of the Otis test.

The mean I.Q. of the boys from broken homes was 94.47, while the boys living with both parents averaged 99.43. The t test difference between the two boys' groups was 1.88 which was negligible at the .05 level of significance. The girls from broken homes averaged 91.16 in I.Q. while the girls living with both parents averaged 97.62. This revealed a t test difference of 2.26 between the girls' groups which was statistically significant at the .05 level of confidence. Students living with both parents had an average I.Q. score of 96.69, while those from broken homes averaged 92.86. When the boys and girls from broken homes
were compared with those who lived with both parents, the t

test difference was 3.02 which was statistically significant

at the .05 level of confidence.

In academic achievement, as measured by the Pupil

Record of Educational Progress Test, the boys who lived with

both parents scored higher in all five categories as well as

on the Otis Quick-Scoring Mental Ability Test. The differen-
ces were not great enough, with the exception of the Otis

Quick-Scoring Mental Ability Test, to draw any significant

conclusions from this study. However, the consistency of

five out of five higher scores on the sub-tests and on the

intelligence test indicated that broken homes may have had

a slight effect on the academic achievement among the boys

but not enough to be statistically significant at .05 level

of confidence.

The same tests that were used to measure the academic

achievement of the boys were also given to the girls. The

results of the tests revealed that the girls who lived with

both parents scored higher in all of the areas except one,

mathematics, than the girls from broken homes. It should

also be noted that the girls who lived with both parents

scored statistically higher at the .05 level of significance

on the Otis Quick-Scoring Mental Ability Test than the girls

from broken homes. The differences among the girls on the

Pupil Record of Educational Progress Test were not great
enough to draw any statistically significant conclusions at the .05 level of confidence.

Other observations which were evident from this study revealed that the girls who lived with both parents scored higher on both tests than the boys who lived in broken homes. The boys who lived with both parents scored higher on the tests than the girls who lived with both parents, the boys from broken homes, and the girls from broken homes. Still no statistically significant differences could be found among the groups except on the Otis Quick-Scoring Mental Ability test.

A questionnaire was given for the purpose of measuring the relative home adjustment of each of the groups which were involved in the study. A summary of the results of this questionnaire for each group is shown in Table IV which is found in Chapter III. When a comparison of the responses to the twenty yes or no questions was made between the boys living with both parents and those from broken homes, no significant differences were found. However, when a similar comparison was made between the girls, one question, "My family approves of my friends?" proved statistically significant at .05 level of confidence. In addition, when the total population of boys and girls from broken homes was compared with those living with both parents, again there was only one question which proved statistically
significant at the .05 level. The question was, "My family
spends time doing things with me?"

It was also found in Chapter III that the boys living
with both parents seemed to have an average adjustment to
their home environment. This group contained the largest
percentage of students who did not find it difficult to get
along with their family. They also had the largest per-
centage who gave a positive answer to the question, "My
family makes me feel like I belong." Some other questions
in which this group had the highest percentage of positive
answers were as follows:

"My family spends time doing things with me."

"My family plans activities which are interesting
to me."

"I enjoy family activities."

Although the boys living with both parents seemed to
be well adjusted to their home environment, they were
worried about personal problems at home. Some of their
complaints were about the time they were allotted to return
home after school was dismissed, the evening curfew that was
set by their parents, and the places they were allowed to
frequent. Although the boys living with both parents had
complaints about their family, the majority also said that
there was nothing about their family that they would like
to change.
The boys from broken homes did not seem to be as well
adjusted to their home environment as the boys living with
both parents. They seemed to find many things about which
to complain. They did not seem to be contented at home, or
to be very much concerned about the same things that
bothered the boys living with both parents. They revealed
more concern about how they were getting along with their
parents. Some of their comments were as follows:

"What I like about my family is being able to do
things for them and being needed."

"Well the thing I like about my mother is that she
understands me and tries to help me."

"I would like for us to get along a little better.
Most of the time we are fighting."

"My family is always fighting."

"I don't like the place we have to live."

Finally, the response of one boy from a broken home
to the last question: What I would change about my family
if I could. "No one is interested in me and I have to take
all the responsibility for the rest of the kids."

In general, the girls living with both parents were
the most contented group of the four. About three-fourths
of them said they would change nothing at all about their
family. Those who did complain mentioned almost the same
things that the boys living with both parents had. The most
obvious difference between the responses of these two groups was that very few girls complained about their parents. Surprisingly, a large number of them listed their parents as what they liked best about their family.

From the responses to the open-end questions, one thing stood out quite vividly about the girls from broken homes. They had definite feelings about their family. The responses to the open-end questions indicated that many girls were deeply troubled. Yet these responses also revealed that some of the girls from broken homes seemed to recognize the need for both family and self-improvement within their home environment. The following are some responses to illustrate this.

"What I would like to change in my family are the times I have been selfish and didn't understand their problems."

"I would like to have my family trust me."

"I would like for my family to take more interest in the way they dress."

"I would like my family to take more of an interest in the things of life which I will need later."

However, the responses indicated that, in general, the girls from broken homes were the least well-adjusted and most troubled of the four groups. Several typical examples are as follows:
"If I could change my family I would have my mother and father to live together again."

"The things I like best about my family is the way we treat each other."

The girls living in broken homes seemed to have a feeling of not being needed.

II. CONCLUSIONS

The results of the data presented in this study have led to several general conclusions relating to students who lived in broken homes and who attended Horace Mann Junior High School in Wichita, Kansas.

1. Forty-two percent of the students in the Horace Mann Junior High School area were living in broken homes.

2. Students from broken homes made slightly lower I.Q. scores than students living with both parents.

3. A better understanding by the faculty concerning the home environment of the students was very much needed.

4. Students living with both parents indicated a statistically significant higher average I.Q. score than those from broken homes.

5. The home environment of the students in the Horace Mann School area was such that approximately one-third could not discuss personal problems with their parents.
6. The curriculum of Horace Mann Junior High School seems to need a slight revision to help improve the academic achievement of the students from broken homes.

7. Although students from broken homes had significantly lower I.Q. scores, their achievement was not significantly lower than those students living with both parents.

III. RECOMMENDATIONS

On the basis of the data obtained from this study, the following recommendations are presented:

1. The administration, counselors, and teachers should keep themselves abreast of the problems which arise among the students in regard to the effects of broken homes.

2. The teachers should recognize special need of students from broken homes as well as those living with both parents. For example, the need for individual instruction should be investigated.

3. The teachers should become more familiar with the home environment of their students. Any helpful information should be kept on file so that the teacher can be of greater service to the students.

4. Communication between the teacher and counselor should be well coordinated to include problems which deal with the home environment.
6. A research study be made to evaluate the effectiveness of the curriculum.

7. More research should be done to determine the effect of broken homes upon students at the junior high school level.
BIBLIOGRAPHY


PERSONAL INTERVIEWS


Cox, Raymond. Vice Principal, Horace Mann Junior High School, Wichita, Kansas, May 11, 1965.

Hatfield, Chandler. Principal, Horace Mann Junior High School, Wichita, Kansas, May 12, 1965.
Ninth Grade Questionnaire A

BOY______ GIRL______

(Do not Sign Your Name)

1. I am happy at home. Yes No
2. I find it difficult to get along with my family. Yes No
3. My family makes me feel like I belong. Yes No
4. My family is friendly toward me and interested in me. Yes No
5. I feel free to talk to my family about my personal problems. Yes No
6. My family spends time doing things with me. Yes No
7. My family plans activities which are interesting to me. Yes No
8. I am interested in family togetherness. Yes No
9. I enjoy family activities. Yes No
10. I find enough things to interest me at home. Yes No
11. I enjoy doing things and going places with my family. Yes No
12. My family approves of my friends. Yes No
13. My family gives me the opportunity to develop interests and hobbies at home. Yes No
14. My family encourages me to make some decisions for myself. Yes No
15. I am given responsibilities at home. Yes No
16. My family knows my teachers. Yes No
17. I can discuss school problems with my family. Yes No
18. I find it easy to express myself to my family. Yes No
19. My family believes that making good grades is important. Yes No

20. My family believes that getting an education is a very important part of my future. Yes No

COMPLETE THE FOLLOWING

21. What I like best about my family:

22. What I like least about my family:

23. What I would like my family to take more of an interest in:

24. What I would change about my family if I could:
Ninth Grade Questionnaire B

Name_________________________________ Sex___

1. Please indicate the person or persons with whom you are living by checking one of the following:
   _____ Mother and Step-father
   _____ Father and Step-mother
   _____ Mother
   _____ Father
   _____ Relative
   _____ Both parents
   _____ Other

2. Did you take the "Pupil Record of Educational Progress Test, at this school, given in October? ______

3. Did you take the "Pupil Record of Educational Progress Test at another Wichita school this year? ______

(Do not write below dotted line)

PREP _______

Otis _______

Class Grades _______