An Investigation into the Relationship between Mobility and Reading Comprehension of Junior High Pupils

Joan Ring Markis

The College at Brockport

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AN INVESTIGATION INTO THE
RELATIONSHIP BETWEEN MOBILITY
AND READING COMPREHENSION OF
JUNIOR HIGH PUPILS

THESIS

Submitted to the Graduate Committee of the
Department of Curriculum and Instruction
Faculty of Education
State University College at Brockport
in Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Education

by
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Abstract

This study investigated the relationship between mobility and achievement in reading comprehension. The cumulative records of 78 junior high students were reviewed to obtain the data needed.

Intelligence test scores for the Otis-Lennon School Ability Test and the achievement subtest score in reading comprehension for the Stanford Achievement Test were obtained from those student records. The cumulative records yielded additional information regarding the types of schools attended (parochial versus public), the grade level at which the transfer occurred (grades 1-3 versus grades 4-8), and sex.

A significant difference was found between the reading comprehension scores of mobile and non-mobile students. No difference was found between reading comprehension scores of mobile pupils and the types of schools attended or the grade level at which the transfers occurred. A significant relationship was found between reading comprehension scores of mobile pupils and IQ, but no relationship was found between reading comprehension scores and sex. This analysis led to the conclusion that in this testing population of junior high students, the non-mobile students scored
higher in the reading comprehension area than those students who had one or more moves between schools. In addition, intelligence was positively related to reading comprehension.
Table of Contents

Chapter I

Statement of the Problem .................................. 1
Purpose ...................................................... 1
Questions .................................................... 1
Need for the Study ......................................... 2
Definition of Terms ......................................... 3
Limitations of the Study .................................... 4
Summary ..................................................... 5

Chapter II

Review of the Literature .................................... 6
Mobility in Schools ......................................... 6
Mobility and Reading Achievement ......................... 8
Mobility and Sociology ..................................... 14
Summary ..................................................... 18

Chapter III

Design of the Study ......................................... 19
Purpose ...................................................... 19
Hypotheses .................................................. 19
Methodology .................................................. 20
Statistical Analysis .......................................... 23
Summary ..................................................... 23
Table of Contents (Cont.)

Chapter IV

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical Analysis</td>
<td>24</td>
</tr>
<tr>
<td>Purpose</td>
<td>24</td>
</tr>
<tr>
<td>Findings from the t-test for Independent Means</td>
<td>25</td>
</tr>
<tr>
<td>Findings from the Point-Biserial Correlation</td>
<td>27</td>
</tr>
<tr>
<td>Findings from the Rank-Difference Correlation (Spearman rho)</td>
<td>28</td>
</tr>
<tr>
<td>Summary</td>
<td>29</td>
</tr>
</tbody>
</table>

Chapter V

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conclusions and Implications</td>
<td>30</td>
</tr>
<tr>
<td>Purpose</td>
<td>30</td>
</tr>
<tr>
<td>Conclusions</td>
<td>30</td>
</tr>
<tr>
<td>Implications for Further Research</td>
<td>31</td>
</tr>
<tr>
<td>Implications for Schools</td>
<td>33</td>
</tr>
<tr>
<td>Summary</td>
<td>34</td>
</tr>
</tbody>
</table>
Chapter 1

Statement of the Problem

Purpose

The primary purpose of this study was to investigate the relationship between mobility and achievement in reading comprehension of junior high pupils attending city parochial schools.

A secondary purpose of this study was to determine if significant relationships existed among the types of schools attended, the grade level at which the transfer occurred, sex and intelligence.

Questions

This study examined the following questions:

1. Is there a significant difference in reading comprehension scores between mobile and non-mobile pupils?

2. Is there a significant difference in reading comprehension scores between mobile pupils who have remained in the parochial school system and those who have transferred from the public school system?

3. Is there a significant difference in reading comprehension scores between mobile pupils who have transferred before grade four or after grade four?
4. Is there a significant relationship between reading comprehension scores of mobile pupils and sex?
5. Is there a significant relationship between reading comprehension scores of mobile pupils and IQ?

Need for the Study

Educators in the urban schools have witnessed an increased amount of mobility occurring within their school populations in recent years (Brown, 1979). These mobile students are not only transferring within school districts but often among several districts (Roseman, 1977). In the United States, forty-five percent of all persons five years old and over moved during the 1975-1980 period (Series P-20, No. 368, 1981). In a more recent survey, the rate of mobility has decreased among Americans and yet ninety-one percent of those who moved did so within the same region (Series P-20, No. 377, 1983).

Brown (1979) stated that there is a need for educational researchers to assess the nature and extent of this population exchange in order that many expected problems may be averted.

A review of the literature revealed incomplete evidence to show that there is a significant difference between the reading scores of mobile and non-mobile pupils. Research has been limited in this area and
findings have been neither conclusive nor consistent. In suggesting improvements in the way mobile students were studied, Gilchrist (1970) has observed that research should consider the number of times a child had changed schools. He further recommended that this information should be supplemented with knowledge of the pupil's ability before conclusions were drawn about the achievement of a mobile pupil.

Research which is needed would include such variables as movement history and time of movement as they related to reading achievement.

**Definition of Terms**

The following definitions were used throughout this study:

**Mobile** refers to a pupil who has moved from one school to another. A pupil must have changed schools one or more times between grades one and eight.

**Non-mobile** refers to a pupil who has not changed schools since the beginning of grade one.

**Movement History** refers to the type of schools attended

- **Type A:** The pupil attended only parochial schools.
- **Type B:** The pupil attended at least one parochial school and one public school.

**Time of Movement** is used to identify the grade level during which the moves took place.
Type X: All of the pupil's mobility took place during grades one through three.

Type Y: All of the pupil's mobility took place during grades four through seven.

Type Z: Any combination of Types A and B.

Parochial School is a private school for grades kindergarten through eight with an open enrollment policy. It is operated under the Roman Catholic Diocese of Rochester.

Limitations of the Study

The limitations of this study include, but are not limited to the following:

1. The measurement of reading achievement and intelligence was limited by the nature of the standardized instruments used.

2. The study included a limited number of subjects from two schools. Therefore, its findings may not be applicable to other schools in different situations.

3. This researcher experienced difficulty in gathering the information from students' cumulative records. Every attempt was made to interpret incomplete information about a pupil's movement history and time of movement.
Summary

The relationship between pupil mobility and reading achievement has not been fully researched to date. Available research is not conclusive. But with the increased mobility of American school aged population, educators need to direct their attention to the possible influences mobility may have on a student's achievement.
Chapter II

Review of the Literature

The primary purpose of this study was to investigate the relationship between mobility and achievement in reading comprehension of junior high pupils attending city parochial schools. The literature dealing with mobility in schools, mobility and reading achievement, and mobility and sociology will be reviewed.

Mobility in Schools

In a review of the literature on mobility, it became evident that the mobile students were not as numerous today as in the past decade yet there were a significant number to warrant investigation.

In 1970, 587 teachers from southern Ohio responded to a survey concerning the mobility of elementary school children in their classrooms (Warner, 1970). The results of this study indicated that each teacher had an average of over three students either enter or withdraw from her class during a one year period. It was also found that the type of area surveyed was an important factor. There was a general tendency for classes in larger school districts to have more mobility than those in smaller rural districts. Also, the larger districts had more
internal mobility than did the smaller districts.

The national mobility data from March 1975 to
March 1980 (Series P-20, No. 368, 1981) showed that
forty-five percent of all persons five years old and over
moved during the 1975-80 period. This mobility of school
aged children was found to reflect the high mobility of
their parents. Of those 45.1% who moved, 20.6% moved
within the same standard metropolitan statistical area
(SMSA); 7.2% moved between SMSA; 3% moved into a SMSA
from outside a SMSA; and 3.6% moved from a SMSA to
outside a SMSA.

In a more recent report, the United States government
revealed that data indicated a decline in the rate of
moving among Americans throughout the country (Series
P-20, No. 377, 1983). However, between 1980 and 1981,
ninety-one percent of those Americans who had moved,
did so within the same geographical region.

The fact remains that America is a mobile society
and educators must become more aware of its implications
on students and staff.

One variable which may influence future enrollment
patterns is the birth rate. Elementary school enrollment
in 1980 (27.4 million) was about one-fifth below the 1970
figure. This decline of about 6.5 million students
enrolled in elementary schools during the decade was entirely the result of the decline in elementary school age population. Since 1977, however, the number of births has been climbing slowly (Series P-20, No. 362, 1981). Educators need to make themselves aware of these changing population statistics and design their programs appropriately.

**Mobility and Reading Achievement**

This section summarizes those studies which investigated the relationship between mobility and achievement in reading. Findings in this area were not conclusive.

In the Anderson, Indiana public schools, Gallagher (1965) studied 749 sixth graders in his investigation of the influence of mobility on the academic achievement of pupils. Age, race, sex, IQ, social class and achievement data were collected for each pupil and the number of schools attended by individual pupils was investigated. Gallagher found a significant negative relationship between the number of schools attended by pupils and their success in reading achievement. That is, as the number of schools attended increased, reading achievement decreased among those pupils studied.

The relationship between pupil achievement in reading and mobility variables was studied by Perrodin
and Snipes (1966) in a county school system in central Georgia. The mobility variables studied in a group of 483 sixth graders were the number of moves, recency of move and distance of move. The analysis of variance statistical technique was used to analyze the mean differences between the variables of mobility, personal characteristics and achievement.

Perrodin and Snipes concluded from their findings:
(1) the number of moves made by pupils did not appear to influence reading achievement, (2) reading vocabulary scores were higher for pupils who entered the present school system from outside Georgia, (3) retention, age and IQ seemed to be positively associated variables in the area of reading. Pupils who scored higher on the achievement tests were those who were older, those who had been promoted regularly and those who had higher IQ scores.

In a re-analysis of the information found in the Perrodin and Snipes study, Snipes (1966) made the following conclusions: (1) the number of moves pupils make does not appear to have a detrimental effect on achievement in reading. Rather, moving appears to strengthen achievement in this specific variable, (2) the results seem to indicate that pupils who have had some experience in various schools
tend to score higher on tests of reading achievement, (3) no specific areas of reading achievement (reading vocabulary or comprehension) appear to be favored in moving. However, differences in scores are more pronounced in the area of reading comprehension than in reading vocabulary.

Pupil mobility among 2,072 sixth graders in South Bend, Indiana was studied by Gilchrist (1970). Significantly less achievement in word knowledge was found among the mobile children when compared to the non-mobile children. However, this investigation indicated that when the influences of ability, sex and socio-economic background were controlled statistically, reading achievement was not related significantly to mobility. Gilchrist suggested that for future research, information about the number of times a child has changed schools should be supplemented with knowledge of his ability and socio-economic background. Only after such information is gathered can conclusions be drawn about the performance of a mobile child.

Research was conducted to study reading differences between children of Air Force personnel who had frequently changed their place of residence and pupils who had maintained consistent residence in an Ohio school district.
Reading variables included pupils' achievement in vocabulary and comprehension on standardized tests. Mobility variables included the number of schools attended by each child. Cramer and Dorsey (1970) reported that of the 366 sixth graders studied, mobility had no adverse effect. They found that mobility may have contributed to reading proficiency, for the scores of the mobile children were slightly, though not significantly, higher than the scores of the non-mobile children.

Like Gilchrist (1970), Cramer and Dorsey (1970) suggested investigating other aspects of the child not included in their studies. Future researchers should consider the child's personality, his home environment and the child's locus of control.

In a study conducted by Black (1972), 265 sixth graders enrolled in the Columbus, Ohio public school system were used to investigate the relationship between pupil mobility and reading achievement. Black secured achievement test scores, IQ scores, and pupil mobility and sex data by reviewing the cumulative personal records of the sixth graders. It was found that the reading achievement of mobile pupils was not significantly different from stationary pupils. Another conclusion
made was that reading achievement was not influenced by the types of schools previously attended, the number of times the pupil was enrolled in a particular school or the grade level during which the school transfers took place. There was also no significant interaction between mobility and sex.

Black and Bargar (1975) investigated 208 sixth graders in Columbus, Ohio and made the same conclusions Black had previously made. These findings implied that the mobile pupils were capable of overcoming such influences prior to the sixth grade. Black and Bargar explained that this phenomenon may be partially explained by the presence of remedial teachers in the schools or the similarity among reading curricula in different schools.

In an attempt to become accountable for the educational responsibilities in the Atlanta public schools, several factors were evaluated by Taylor and Turner (1972). One of the factors, mobility, was investigated in relationship to reading achievement and self concept. Of the five elementary schools studied in the report, three schools found that those pupils who remained in one school throughout the school year scored significantly higher than those
pupils who left before the end of the school year. The remaining two schools found that mobility did not significantly influence achievement.

In 1973, a study was conducted in New York City public schools to ascertain if there was a difference in reading achievement between fifth grade pupils who had been in the same school since third grade as compared with those fifth grade pupils who entered the school at any time after third grade. This study compared 13,289 pupils from Title I districts with 11,748 pupils from non-Title I districts. The results of the Title I districts showed the non-mobile group was reading eight months below grade norm, whereas the mobile group was reading 1.5 years below grade norm, a mean difference of seven school months. In the non-Title I districts, the non-mobile group was reading four months above norm, whereas the mobile group was reading seven months below grade norm, a mean difference of 1.1 school years. The mean differences were statistically significant at less than .01 level of significance for both sets of districts (Abramson, 1974).

In a followup study conducted the next year, Abramson (1975) compared those students who stayed in the same elementary school to those students who were sent to
intermediate schools in grade six. Abramson's study revealed that both mobile and non-mobile sixth graders who remained in their elementary schools were superior in reading achievement when compared with their sixth grade counterparts who attended intermediate schools.

Kaplan (1978) concluded from his study that there was no reason to believe that transfer from one school to another between grades one and five caused low scores in reading achievement. He reported that in the second grade, the mobile group's mean score was one month below the non-mobile group in reading achievement. In the fifth grade, the mobile group's mean was five months below the non-mobile group in reading achievement. There was no statistically significant difference at any grade level and the reading achievement scores of the mobile group apparently did not influence the reading achievement score overall averages to any significant degree.

**Mobility and Sociology**

When looking at mobility of school children, educators must realize that many factors other than achievement need to be considered.

A child entering a new school environment will go through a social adjustment period - a time to find
his niche with teachers and peers. In a study conducted by Falik (1969), high and low mobility groups were compared on three measures of adjustment to school: (1) academic achievement; (2) teacher ratings of pupil behavior; and (3) peer ratings of social reputation in the classroom. The results of this study indicated that mobility was not a significant factor in the adjustments of the children in the study. In a Swedish study (Ekstrand, 1977), it was found that social adjustment suffered both from a child being completely stationary or being moved around too much. This study suggested that one or two moves actually seem to lead to greater social acceptance.

While interviewing parents of mobile students, Falik found most of these parents felt they had actively developed coping strategies to deal with the mobility and generally saw themselves as successful. However, not all parents viewed their mobility so positively. Because children's adjustments are often greatly affected by their parents' attitudes, further research should include a study of parental attitudes concerning mobility (Whalen & Fried, 1973). Another factor which may influence social adjustment and should be considered in future studies is family size.
Junior high students are one group of mobile students not generally reviewed in the literature. Ward (1982) conducted an investigation in cooperation with the National Institute of Education into the transition of students leaving sixth grade self-contained elementary settings and entering departmentalized structures in seventh grade junior high schools. Ward found that the departmentalized organization provided students an opportunity to become accustomed to interacting with several different teachers during the day. In the self-contained classrooms the students were provided with greater challenges in terms of structural diversity. That is, students were involved with several different grouping arrangements, a variety of responsibilities for control of work completion, and collaborative group project endeavors.

The students who were studied in the departmentalized structures needed to adjust to the content of instruction. For the most part, instruction emphasized fact-recall and fill-in-the-blank exercises. Only the high ability reading groups in the English classes were required to complete more complex learning tasks.
In a study investigating the relationship between institutional factors and reading achievement, Aver, Docter & Lahr (1978) found that the movement of children from school to school had an effect upon achievement and this effect was apparently related to how many and/or how frequently children move. Another factor which played an important part in determining the influence of mobility was the structure of the classroom and environment in which learning takes place. Furthermore, the stability of membership of the classroom was one of the necessary conditions of attaining optimal achievement performance from the class as a whole and perhaps for many members of the class.

In a study attempting to determine if any differences in academic achievement existed between high and low mobility students, intelligence was considered. The statistical data indicated that high mobility students of high intelligence had higher achievement scores than low mobility students of high intelligence; and high mobility students of low intelligence obtained lower achievement scores than low mobility students of low intelligence (Whalen & Fried, 1973).

There is no doubt that the American society will continue to be a highly mobile one. Counselors, teachers,
and administrators should familiarize themselves with the problems faced by their mobile students and be ready to help those who find more difficulty in adjusting to new school settings.

**Summary.**

In conclusion, it is evident from these findings that the results of studies completed on mobility are not conclusive.

Gallagher (1965), and Abramson (1974, 1975) have found significant differences do exist between the reading achievement of mobile and non-mobile pupils. In the studies of Perrodin and Snipes (1966), Gilchrist (1970), Cramer and Dorsey (1970), Black (1972), Black and Balgar (1975) and Kaplan (1978) there was nothing to indicate that mobility has a negative influence upon reading achievement.

Even within the Taylor and Turner (1972) study, inconsistent results were reported with three of the five schools seeing a significant difference in reading achievement between mobile and non-mobile groups. The remaining two schools found that mobility did not significantly influence achievement.
Chapter III

Design of the Study

Purpose

The primary purpose of this study was to investigate the relationship between mobility and achievement in reading comprehension of junior high pupils attending city parochial schools.

A secondary purpose of this study was to determine if significant relationships existed among the types of schools attended, the grade level at which the transfer occurred, sex, and intelligence.

Hypotheses

The null hypotheses tested in this study were:

1. There is no significant difference in reading comprehension scores between mobile and non-mobile pupils.

2. There is no significant difference in reading comprehension scores between mobile pupils who have remained in the parochial school system and those who have transferred from the public school system.

3. There is no significant difference in reading comprehension scores between mobile pupils who have transferred before grade four or after grade four.
4. There is no significant relationship between reading comprehension scores of mobile pupils and sex.

5. There is no significant relationship between reading comprehension scores of mobile pupils and IQ.

Methodology

Subjects

The subjects involved in this study were seventy-eight seventh and eighth grade students attending two parochial schools. These schools are located in a middle to low socioeconomic inner city environment in western New York State.

These students were chosen for this study because the United States government (Series P-20, No. 368, 1981) reported that most mobility occurs within standard metropolitan statistical areas (SMSA).

Instruments

To obtain all the necessary information, this researcher was permitted access to the subjects' cumulative records held in the school offices. It was found that in many instances, scores of the mobile students and data pertaining to their movement history were not complete or were not included in the records forwarded from previously attended schools. Every attempt was made to gather complete and accurate information from
these files.

The Stanford Achievement Test (SAT) was given to the subjects of this study to measure reading comprehension skills. In addition to this measurement of comprehension skills, the battery includes measures of vocabulary, listening comprehension, spelling, language, mathematics, science, and social science. For the purpose of this study, scores from the reading comprehension subtest were used. According to the SAT manual (Madden & Gardner, 1973) two approaches to the measurement of comprehension skills are included in this subtest: (1) comprehension as it relates to the type of material read (textual, functional and recreational reading); and (2) comprehension as it relates to the particular questions asked. The questions that follow each passage are designed to tap literal and inferential comprehension skills.

The Otis-Lennon School Ability Test (O-LSAT) was given to the subjects of this study to obtain an IQ score. As described in the test manual (Otis & Lennon, 1982), this test was designed to provide an accurate measure of the abilities needed to obtain the desired cognitive outcomes of formal education (p. 4).

The SAT and O-LSAT were used in this study because both are group tests which make them efficient ways to
obtain the scores needed to complete this investigation. In the community where this study was conducted, the SAT and O-LSAT are given district-wide and therefore were a common factor in the records of most of the students who participated.

These tests also have an acceptable reliability for the age groups in question. Reliability for the reading comprehension subtest on the SAT, using the Spearman Brown Formula is .95 (Madden & Gardner, 1973). Reliability for the O-LSAT, using the same formula is .94 for grades six and seven.

**Procedure**

The SAT and O-LSAT were administered to the four groups of students (two sixth grade classes and two seventh grade classes) by their classroom teachers in late spring, 1984 over a two week period of time. The sixth grade students were given the Stanford Intermediate 2 Battery, Form F and the seventh grade students were given the Stanford Advance Battery, Form E. The O-LSAT, Form 5, was administered to both groups. These tests were given to each group in its classroom. The students were directed to mark all answers on a computerized answer sheet which was later forwarded and machine scored.
Statistical Analysis

The t-test was used to determine if there were any differences in reading scores between (1) mobile and non-mobile pupils, (2) mobile pupils who had remained in the parochial school system and those who had transferred from the public school system, and (3) mobile pupils who had transferred before grade four or after grade four.

The point-biserial correlation was used to determine if there was a significant relationship between reading comprehension scores of mobile pupils and sex.

The Spearman rho was used to determine if any relationship existed between reading comprehension scores of mobile pupils and IQ.

To determine the strength of the above relationships, the coefficient of determination was used.

Summary

The purpose of this study was to reveal the significance of relationship between mobility and achievement in reading comprehension for a sample of seventh and eighth grade children attending two city parochial schools.

This was accomplished through the use of three types of statistical analysis: t-tests, point-biserial correlation, and Spearman rho.
Chapter IV
Statistical Analysis

Purpose
The relationships among mobility, non-mobility, types of schools attended, the grade level at which the transfer occurred, sex, and intelligence, were investigated in this study. The data of this study were derived from the cumulative records of 78 sixth and seventh grade students. Intelligence test scores for the Otis-Lennon School Ability Test and the achievement subtest score in reading comprehension for the Stanford Achievement Test were obtained from those student records. The cumulative records yielded additional information regarding the types of schools attended (parochial versus public), the grade level at which the transfer occurred (grades 1-3 versus grades 4-8), and sex. Not all of the above information was found in the cumulative records of mobile pupils. Therefore, the size of each sample group varied to test each hypothesis. The analysis of these data are included in this chapter.
Findings from the t-test for Independent Means

The first three null hypotheses were tested at the .05 level of significance by the t-test for independent means to find the significance of the differences. These results are presented in Tables 1 and 2.

The first hypothesis states that there is no significant difference in reading comprehension scores between mobile and non-mobile pupils. The data pertaining to this hypothesis are presented in Table 1. On the basis of these data, the first hypothesis was rejected. The difference in reading comprehension scores between mobile and non-mobile pupils was significant at the .05 level.

Table 1
Difference in the Mean Reading Comprehension Scores of Mobile and Non-mobile Pupils

<table>
<thead>
<tr>
<th>Mobile x Non-mobile</th>
<th>Mobile</th>
<th>Non-mobile</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>33</td>
<td>45</td>
</tr>
<tr>
<td>Mean</td>
<td>6.7</td>
<td>8.2</td>
</tr>
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<table>
<thead>
<tr>
<th>t-value</th>
<th>2.03*</th>
</tr>
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<tbody>
<tr>
<td>df</td>
<td>76</td>
</tr>
<tr>
<td>.05 level of significance</td>
<td>2.00</td>
</tr>
</tbody>
</table>

* = significant difference at .05 level
The second hypothesis states that there is no significant difference in reading comprehension scores between mobile pupils who have remained in the parochial school system (Type A) and those who have transferred from the public school system (Type B). The third hypothesis states that there is no significant difference in reading comprehension scores between mobile pupils who have transferred before grade four (Type X) or after grade four (Type Y). The data pertaining to these two hypotheses are presented in Table 2.

Table 2

Difference in the Mean Reading Comprehension Scores of Mobile Pupils

<table>
<thead>
<tr>
<th>Type A</th>
<th>Type B</th>
<th>Type X</th>
<th>Type Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>6</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td>Mean</td>
<td>6.1</td>
<td>6.8</td>
<td>7.3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>AxB</th>
<th>XxY</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-value</td>
<td>.55</td>
</tr>
<tr>
<td>df</td>
<td>31</td>
</tr>
<tr>
<td>.05 level of significance</td>
<td>2.042</td>
</tr>
</tbody>
</table>

These data failed to reject the second and third
hypotheses. There was no significant difference in reading comprehension scores between mobile pupils who have remained in the parochial school system and those who have transferred from the public school system. There was no significant difference in reading comprehension scores between mobile pupils who have transferred before grade four or after grade four.

Findings from the Point-Biserial Correlation

The fourth hypothesis states that there is no significant relationship between reading comprehension scores of mobile pupils and sex. This hypothesis was tested at the .05 level of significance by the point-biserial correlation analysis and the data are presented in Table 3.

<table>
<thead>
<tr>
<th></th>
<th>Male x Female</th>
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<tbody>
<tr>
<td>$r_{pbis}$</td>
<td>.21</td>
</tr>
<tr>
<td>df</td>
<td>31</td>
</tr>
<tr>
<td>.05 level of</td>
<td></td>
</tr>
<tr>
<td>significance</td>
<td>.349</td>
</tr>
</tbody>
</table>

Note: $N = 33$

These data failed to reject the fourth hypothesis.
There was no significant relationship between reading comprehension scores of mobile pupils and sex.

Findings from the Rank-Difference Correlation (Spearman rho)

The fifth null hypothesis states that there is no significant relationship between reading comprehension scores of mobile students and IQ. This hypothesis was tested at the .05 level of significance by using Spearman rho. The data pertaining to this hypothesis are presented in Table 4.

Table 4
Correlation Coefficient between Reading Comprehension Scores of Mobile Pupils and IQ Scores

<table>
<thead>
<tr>
<th>Reading Comprehension x IQ</th>
<th>p(rho)</th>
<th>df</th>
<th>.05 level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.75</td>
<td>20</td>
<td>.423</td>
</tr>
</tbody>
</table>

Note: N = 22

On the basis of these data, the null hypothesis was rejected. The relationship between reading comprehension scores of mobile pupils and IQ was significant at the .05 level.
To test the strength of this relationship, a coefficient of determination was obtained. The coefficient was found to be .56. This finding indicates that 56% of the variance in reading comprehension scores of the mobile pupils is due to the variance of the IQ scores.

Summary

The purpose of this study was to investigate the relationship between mobility and achievement in reading comprehension. Five hypotheses were generated and analyzed.

The t-test for independent means revealed a significant difference in reading comprehension scores between mobile and non-mobile pupils. There are no significant differences among reading comprehension scores, movement history, and time of movement.

The point-biserial analysis revealed no significant relationship between reading comprehension scores of mobile pupils and sex.

The Spearman rho analysis indicated a significant positive relationship between reading comprehension scores of mobile pupils and IQ obtained from the SAT and O-LSAT measures.
Chapter V

Conclusions and Implications

Purpose

This study investigated the relationship between mobility and achievement in reading comprehension of junior high pupils.

Conclusions

The results of the t-test demonstrated that there was a significant difference between the reading comprehension scores of mobile and non-mobile pupils. This result indicated that for this testing population, the students who remained in one school through the junior high scored higher in the reading comprehension area than those students who had one or more moves prior to the junior high level.

While examining the types of school attended and the time when the transfer occurred, the t-test demonstrated that there were no significant differences between these areas and the reading comprehension scores of mobile pupils. There was no difference in the scores of mobile students who had remained in the parochial school system and those students who had transferred from the public school system. It is also apparent that
for this testing population, reading comprehension scores of students who transferred before grade four were no different from the scores of students who transferred after grade four.

The results of the point-biserial correlation revealed that there was no significant relationship between reading comprehension scores of mobile pupils and sex. For the students involved in this study, sex was not a factor in determining a relationship between mobility and reading comprehension.

The results of the Spearman rho demonstrated that there was a significant relationship between reading comprehension scores of mobile students and IQ. The findings of this study reinforce what other studies have found; there was a significant positive relationship between reading comprehension scores and IQ for this testing population at the .01 level.

**Implications for Further Research**

Since the results of this study indicate that scores of mobile students are significantly different from scores of non-mobile students, research needs to be conducted to determine possible factors to account for this. Future researchers might consider investigating
the relationships among mobile pupils, IQ, and sex.

Due to the incomplete data available from the students' cumulative records, the size of the sample in this study was limited. Perhaps in a future study, a larger population could be utilized which would yield different results regarding sex, time of movement and movement history consistent with other research (Gallagher 1965, Abramson 1974, 1975).

The difference in reading comprehension scores between students who transferred before grade four and after grade four were not significant at the junior high level. A study could be undertaken to investigate differences in reading comprehension scores at lower grade levels to see if the difference would become significant.

As stated, the information this researcher obtained from cumulative records was often incomplete yet every attempt was made to interpret the data accurately. It would be beneficial for future researchers to acquire student data through the use of personal interviews with the parents of these mobile students. In this manner, accurate mobility data, as well as additional information could be collected which would be unattainable from the child's cumulative records. It would be
interesting to examine parental attitudes concerning their child's transfer as well as the reasons for the mobility. Children's adjustments are often affected by their parents' attitudes.

In addition to personal interviews with the parents, interviews with the children would be helpful in yielding information regarding their attitudes about mobility and reading. If it is possible to interact with the students in future studies, other factors which should be investigated and may influence reading comprehension scores of mobile pupils are the child's personality and his locus of control.

**Implications for Schools**

The analysis of data indicates that non-mobile pupils at the junior high level score higher on reading comprehension tests than mobile pupils. If educators are aware of such a finding, perhaps difficulties experienced by mobile students can be minimized.

While gathering the necessary information to complete the data, this researcher found movement history and time of movement information incomplete in many mobile students' cumulative records. It would be particularly helpful if the following information be part of the transferable records in all schools: (1) the names of
reading programs the child was involved with; (2) the dates when the child withdrew from one school and entered another; and (3) the number of times the child had transferred.

Counselors need to consider mobility while investigating possible factors which are influencing a student's behavior or attitude. Aver, Docter & Lahr (1978) found that mobility had an effect upon achievement and social acceptance within a learning environment. Ekstrand (1977) found that social adjustment suffered both from a child being completely stationary or being moved around too much.

Because America is such a highly mobile society, educators and counselors should be aware of the problems faced by their mobile students in the area of reading and be ready to help those who find more difficulty in adjusting to new school settings.

**Summary**

A significant difference was found between the reading comprehension scores of mobile and non-mobile students. No difference was found between reading comprehension scores of mobile pupils and the types of schools attended or the grade level at which the transfers occurred. A significant relationship was found between
reading comprehension scores of mobile pupils and IQ, but no relationship was found between reading comprehension scores and sex. This analysis led to the conclusion that in this testing population of junior high students, the non-mobile students scored higher in the reading comprehension area than those students who had one or more moves between schools. In addition, intelligence was positively related to reading comprehension.

It would be beneficial for further researchers to work with a larger sample of students than was used in this study. If cumulative records were complete, it would be possible to be certain of the accuracy of the information gathered. Whenever possible, personal interviews with mobile parents and children would yield information regarding attitudes which would be unattainable from written school records.
References


Gilchrist, M.A. Reading Achievement and Geographic Mobility. South Bend, Indiana, 1970. (ERIC Document Reproduction Service No. ED 041 699)

Kaplan, B. The Influence of Student Transfer on Reading Achievement Scores in Grade 1-5 in Selected Elementary Schools. 1978. (ERIC Document Reproduction Service No. ED 174 943)


**PERSONAL DATA FORM**

Address: ______________________________________________________

Sex: M______  ______

I.Q.: ______

**Reading Achievement Scores**

Word Study Skills: ______  
Reading Comprehension: ______  
Vocabulary: ______  
Total Reading: ______

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