

The Impact of Parent Involvement on Reading Comprehension Test Scores of Fourth-Grade
Students

by Mr. Steven Gulas

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1. Scatterplot of relationship between MSA Reading scale scores and number of parent visits.

Abstract

The purpose of this study was to examine the relationship between parent involvement and students' reading comprehension test scores. A review of the literature suggests there is a correlation between parent involvement in school activities and students' reading comprehension test scores. The researcher examined the correlation between parent involvement, as measured by the parent sign-in log for volunteers, and reading comprehension, as measured by the RDSS scores on the Maryland School Assessment (MSA) test. A correlation analysis was then conducted on the data. Visual inspection of the scatterplot (Figure 1) supports the statistical finding. A non-significant, positive relationship was found, $r = 0.427, p > .05$.

CHAPTER I

INTRODUCTION

Because reading is fundamental to learning, how well a student reads is of great importance. Many studies measure reading in terms of rate of intake, comprehension, recall ability, and application. Children's literacy development is the foundation on which the rest of their education is built (Sheldon & Epstein, 2005).

Parent involvement is also fundamental to a child's development. According to Epstein (2005), elements of teamwork have explained improvements in programs of family improvement. Sheldon and Epstein (2005) found that research on children's literacy development provides overwhelming evidence of the connections between literacy resources at home and children's literacy development. Additionally, a 2001 report from the U.S. Department of Education sustains the historic finding that children from homes with more books and reading by parents tend to perform higher on reading achievement tests than do children from less reading-rich environments (Sheldon & Epstein). However, resources must be used in order to have an impact. Information on reading resources at home reflects the socioeconomic advantages of some families but reveals little about the family processes that may improve children's reading skills (Sheldon & Epstein).

Because most people have a vested interest in how their children develop, anything that tends to improve the quality of the next generation is a great value. Researchers seek to find anything that will be of interest to parents and professionals, including data, correlations, trends, and services. In one example, a Comprehensive School Reform (CSR) model school was able to close the gap in test scores with the school district as a whole, despite the fact that the school district included several schools in more affluent neighborhoods with higher test scores in the

base year (Epstein, 2005)

Problem Statement

The purpose of this study was to examine the relationship between parent involvement and students' reading comprehension test scores.

Null Hypothesis

There will be no relationship between parent involvement in school activities and students' reading comprehension test scores.

Operational Definitions

Parent involvement will be measured by the parent sign-in log for volunteers. Reading comprehension test scores will be measured by Maryland School Assessment (MSA) reading comprehension test scores. Specifically, the MSA reading comprehension test score is raw data scale score (RDSS).

CHAPTER II

LITERATURE REVIEW

This literature review examined the relationship between parent involvement and reading comprehension. Section one of the literature review defines parent involvement by volunteerism. Section two addresses topics related to parental involvement such as home-school collaboration, parent training, and parent volunteering at school. Section three defines reading comprehension and includes information about literacy skills, student paired reading, and peer tutoring. Section four addresses long-term findings about the connection between parental involvement and student reading success.

Defining Parent Involvement

There is no universal definition of parent involvement and the research literature uses the term “parent involvement” to mean a variety of things. For our purposes, parent involvement is defined as parents volunteering in schools and parent input at home. Parent involvement is an integral part of the learning process because parents are stakeholders in their children’s academic achievement. The issues of how and why parents become involved are critical to making the most out of their input. The distinction between parent involvement in the school and on the home front is of importance because of parent input and the effects on the student.

Epstein and Dauber (1991) list five types of parent involvement including basic obligations of families, basic obligations of schools, involvement at school as a volunteer, involvement in learning activities at home, and involvement in decision making. The same research also notes that a sixth type of involvement has been suggested and is still being researched, that of collaboration and exchanges with community organizations.

More recently, Epstein (2005) reported that there is a strong correlation between school

and community. Small businesses in the community can be eager to build an affinity with local PTA's. Small businesses generate revenue and build rapport. The PTA gets a sponsor for various projects.

According to Epstein and Dauber (1991), the basic obligations of families are to maintain children's health and safety, begin parenting and child rearing skills, and create a positive home environment. The basic obligation of schools involves communicating all pupil progress and all necessary information to the home by many different forms. Involvement at school as a volunteer means assisting teachers, administrators, and other personnel in different areas of the school. Involvement in learning activities at home includes helping children understand the guidance from teachers on their home assignments, promoting a home learning environment, and helping to create study strategies. Parental involvement in decision making includes parents taking participating roles in PTAs, school governments, and advisory councils (Epstein & Dauber).

Pomerantz, Moorman, and Litwack (2007) point out that school-based involvement means parents making actual contact with schools, including being present at PTA meetings and teacher conferences, and volunteering at school.

Additionally, this research found no standard deviation of parent involvement based upon ethnicity, socio-economic status, or parent education (Epstein & Dauber, 1991). This means the amount of parent involvement does not vary based upon ethnicity, socio-economic status, or parent education.

Home-school Collaboration and Parent Training

The data of Epstein and Dauber's (1991) research resulted in interesting predictions. For example, schools with strong communication between school and home are the least dependable

to predict any type of parent involvement. This means that some schools with strong communication between school and home have many types of parent involvement and some schools have few types of parent involvement. Conversely, a school strong in learning activities at home is more predictable than those of other types of parent involvement (Epstein & Dauber, 1991). This means that the learning activities at home are a more reliable predictor of parent involvement than school-to-home communication. These findings indicate that there is some sequence or hierarchy of parent involvement.

Additional Epstein (2001) research found that with the implementation of a Comprehensive School Reform (CSR) model, a case study school increased the number of families involved in the students' education at home and school via planned intervention. The case study school had a team of people to work parent volunteers. This team help recruit parents into the schools, gave help with at-home learning activities, and stayed in frequent communication with parent volunteers.

The same study also states that longitudinal achievement test scores showed that the CSR case study school improved the percentage of students attaining proficiency by state standards compared to the schools that were matched, one each, for math, reading, and writing. This research is suggesting a positive correlation between parent involvement at home and increased academic performance.

Smith (1998) examined whether there is an association between specific home and school parent involvement activities and student reading scores. According to her research, parents do play an important role in the academic achievement of their children, and their individual activities and participation in home-school partnerships can affect positive changes in their children's academic performance. This research was based on parents that read to their children

at home. Children whose parents read to them at home were more likely to engage in reading at school.

Pomerantz et al. (2007) cite 2006 data from the U.S. Department of Education which says that “national surveys indicate that general school meetings and parent-teacher conferences are commonly attended by approximately two thirds of parents regardless of their ethnicity” (p. 375). This data helps to extinguish any perception that parents of minority ethnicity are less involved than parents of majority ethnicity.

Pomerantz et al. (2007) point out that home-based involvement reflects parents’ input related to school, including securing a child’s study area and course selection, and talking with children about academic issues. Pomerantz et al. (2007) cite additional 2006 data from the U.S. Department of Education which states that, “Parents’ involvement on the home front as manifest in assisting with homework is relatively frequent, with about 70% of parents helping children at least once per week, regardless of parents’ socioeconomic status, educational attainment, or ethnicity” (p. 375). This piece of data suggests that parents do not need to have reached some personal or profession milestone in order to have a positive impact on their children’s school assignments at home.

Smith (1998) notes that many questions need to be answered about what types of parent involvement will maximize the potential of at-risk students. According to Smith (1998), “Within a child’s first eighteen years of life, a parent controls over 87% of a child’s potentially educative time” (p. 18). Thus, a parent controls over six times more potentially educative hours than a school, and the parent offers a relatively large and incompletely tapped resource for improving academic achievement (Smith). Smith adds that parent involvement in a child's education during the middle school years (ages 10-14) is as important to a child's success at school as it is in the

early grades. This research not only highlights a relationship between parent involvement and reading comprehension, but also points out the importance of the role parent involvement plays in the learning process. Overall, the research on parents' involvement consistently suggests that such involvement benefits students academically.

Home-school collaboration

The collaboration between home and school seems to be an entry level one. Parents should be aware of all expectations of their students at school, and the school should have evidence of applied effort at home.

Smith's (1998) study also examined whether there is a connection between reading comprehension achievement and parent involvement variables including homework involvement, reading together, and volunteering in the school. According to Smith (1998), "A preponderance, of all stakeholders, considers collaborative efforts between the family and school as important for the improvement of our nation's schools and crucial to the achievement of the at-risk student" (p. 14). Despite its lack of an agreed-upon definition, parent involvement does have an influence on student learning (Smith). Smith also notes that while "parents reading to children is a highly promoted activity; its positive effects can take place before children enter school" (p. 34).

Epstein and Dauber's (1991) research has identified five steps to maximize the success of the school-family connection. Researchers collaborate with educators and communities to identify these five steps. Funding for this collaboration comes from several sources, including various federal, state, and local programs, and various small grants.

Step one, according to Epstein and Dauber (1991), involves assessing parent strengths and weaknesses. A starting point needs to be identified by each school. Step two in the family-

school connection requires identifying hopes, dreams, and goals. Schools need to decide where they want to be at several points in the future. The means to achieve these ends is not necessary right now. Step three relates to identifying who will have responsibility for reaching those goals. One person or entity needs to be in charge of supervising growth. Step four is to evaluate implementations and results. Based on each year's reviews, programs may be maintained, extended, or tweaked to meet established goals. Step five involves continuing to support program development (Epstein & Dauber, 1991). Ultimately, parent involvement is not an event but a process. It is a means to an end that involves planning, implementing, and reflecting on the effort made and the goals achieved (Epstein & Dauber, 1991).

Parent Training

In terms of input, parent training must be modeled for parents and explained to parents. In terms of outcomes, parent training should be defined. With regard to becoming involved in school activities, parents can think about the underlying question, "What's in it for me?"

In their 1998 study, Johnson, Kaim, Trotter, and Zbinden aimed at improving the reading skills of at-risk students of middle and high school students. According to Johnson et al. (1998), the problem of low reading achievement has several documented causes including high student mobility rates, changing family structure, and increasing time constraints on parents. Johnson et al. (1998) point out a review of solution strategies suggests two major interventions: the incorporation of strategies to improve reading skills and comprehension, and the implementation of a parent involvement program. Johnson et al. (1998) identify two reading strategies which are used in schools and can be implemented at home, "buddy reading" and "sustained silent reading" (p. 43).

Smith (1998) argues that since reading development is linked to reading practices,

parents can be trained in a method that deals with the concept of how to engage students in supportive reading practices. When parents think about their involvement in the learning process as an investment into their children's future, then parents can place their own value on their involvement.

Epstein and Dauber (1991) gathered data by way of a teacher-generated questionnaire to interpret teachers' attitudes on many forms of parent involvement. The data was categorized into profiles or clinical summaries which summarized the strengths and weaknesses of schools based on the five types of involvement. Overall, the results indicated a strong, positive attitude about parent involvement.

Reading Comprehension

Traditionally, reading comprehension is defined in several ways including rate of intake, percentage of comprehension, recall ability, and application.

Van Keer (2004) defines reading comprehension as constructing a mental representation of textual information and then interpreting it, or as extracting meaning from written words, sentences, and texts. Hawes and Plourde (2005) tried to determine the relationship between parental involvement and the reading achievement of sixth grade middle school students. Hawes and Plourde (2005) survey data appears to support a relationship between increased student achievement levels and the amount of school-based learning materials parents provide to their young children at home.

According to the eighth U.S. educational goal in Goals 2000, "Every school will promote partnerships that will increase parental involvement, and that will promote participation the social, emotional, and academic growth of children" (Hawes & Plourde, 2005, p. 48).

Evans, Shaw, and Bell (2000) examination of the impact of home environments on the

language and literacy development of children allowed for predictors of reading achievement, phonological spelling, and phonological reading comprehension. This research predicted that when at-home parent involvement included reading activities or reading games, then those children had higher reading comprehension test scores.

Literacy

DeAngelo, Reents, and Zomboracz's (1997) study showed that at-risk students of a targeted middle school exhibited poor achievement in reading. This study points out that the evidence for the existence of the problem of poor reading achievement among the middle-schoolers comes from teacher observation, checklists, standardized tests, and student questionnaires. Other researchers have suggested the best way to respond to this problem is with a combination of multiple strategies. For example, a student with low comprehension might be prescribed a combination of learning strategies including underlining, note-taking in the margins, and a phone call to the home to involve the parents.

As stakeholders in our children's futures, all Americans need to know not only where our students rank in comparison to each other but also where they rank in comparison to students throughout the world. Accordingly, DeAngelo et al. (1997) points out "A major cause for concern is where U.S. students rank in reading achievement compared to students in other countries; American students are ranked at or below the international average" (p. 12). DeAngelo et al. (1997) state that many experts are reiterating the common theme of "shared accountability." Because there are so many parts to the educational system, it is important that each part knows what is happening on other fronts.

Senechal and LeFevre (2002) advance the thought that children are exposed to two types of literacy experiences at home: informal and formal. "Informal literacy activities are those for

which the primary goal is the message contained within print; formal literacy activities are those for which the parent and child focus on the print per se” (Senechal & LeFevre, p. 445). Informal literacy would be reading for information without regard for grammar or punctuation. For example, informal literacy might include directions for assembly or map directions. Formal literacy would focus on grammar, spelling, punctuation, and sentence structure without regard to the specific topic. For example, a child reading the book, Aesop’s Fables is learning about morals without regard to which analogy is used.

Many studies seek to validate the legitimacy of reading concerns. Smith (1998) suggests that reading concerns are reflected through the inability of many students to read at grade level and select appropriate reading materials at grade level. Smith also points out that the results of reading tests measuring comprehension, vocabulary, speed, and accuracy are recorded before an intervention and then again after an intervention to measure the impact of the intervention.

Paired Reading

Smith’s (1998) study points out that paired reading addresses two concerns: reading development and parental involvement. DeAngelo et al. (1997) add that several sources agree that a paired reading program using parental involvement with daily oral reading and an incentive program is a motivating combination. Many researchers agree that paired reading can be done at home between parent and child. DeAngelo et al. remind us that a paired reading program using parental involvement with daily oral reading and an incentive program can be part of a healthy solution strategy.

Peer Tutoring

Besides the importance of instruction in explicit reading strategies, there is evidence that opportunity to participate in peer-led interaction on structured reading activities also makes up an

important part of reading instruction that aims at an actual increase in reading comprehension (Van Keer, 2004). Peer tutoring can be defined as “people from similar social groupings, who are not professional teachers helping each other to learn, and learning themselves by teaching” (Van Keer, p. 293). Van Keer (2004) also points out that peer tutoring has been successful in a variety of curriculum areas and age groups. Many researchers have indicated positive effects on academic achievement for both tutor and tutee.

Long Term Findings

Senechal and LeFevre (2002) present the findings of the final phase of a five-year longitudinal study in which the complex relations among early home literacy experiences, literacy skills, and reading achievement were examined. In this longitudinal study, the complex relations among early home literacy experiences, developing receptive language, emergent literacy skills, and reading achievement of children were examined in a middle- to upper-middle class sample. “Parents completed an extensive questionnaire about home literacy experiences at the beginning of the study because their own literacy level was considered relevant in measuring parent input” (Senechal & LeFevre, p. 499). Senechal and LeFevre used this longitudinal study to predict reading achievement at the end of grades one and three. Since the researchers considered parent input relevant in making predictions, then the researchers can consider making predictions based upon factors including parent education, parent purposes for reading, and parents’ goals for their children’s reading comprehension skills.

Additional research by Van Keer and Verhaeghe (2005) found that “Explicit reading strategies instruction, followed by practice in teacher-led whole class or peer tutoring activities, enhances second and fifth graders’ reading comprehension achievement more than traditional reading comprehension instruction” (p. 296). This research suggests that the combination of

instruction coupled with practice is more effective than just instruction alone.

Summary

Parent involvement is not only valuable but also vital to student success. The success attributed to parent involvement is consistent with the success of other student-related goals including high school graduation rates, SAT scores, and similar goals. The reviewed research establishes a correlation between parent involvement and student reading comprehension test scores. The research suggests that parent involvement may also promote emotional and social development.

Epstein and Dauber's (1991) five types of parent involvement, while interrelated, are still individualized. Schools can advance the support of and participation of parents through various types of parent involvement. Through peer guides for parents, modeling, administrator encouragement, and follow-up communication, parents can become involved in their children's education on an entry-level basis and then in a more substantial role.

Epstein and Dauber (1991) suggest that the school programs of parent involvement are stronger, more positive, and more comprehensive at the elementary school level than those of middle schools. Additionally, elementary schools use more frequent and more specific communication with families (Epstein & Dauber, 1991). However, as middle schools and middle school teachers improve their understanding and affinity for the school-home connection, then family-specific communication will likely improve.

CHAPTER III

METHODS

The purpose of this study was to examine the relationship between parent involvement and students' reading comprehension test scores.

Design

The researcher used the design model of a modified case study similar to correlation.

Participants

This study utilized records of twelve students from two schools, six students from each school. Of the six students at each school, three students participated in instrumental music and three did not. Both schools are public schools in Maryland and the schools were selected because this researcher teaches at both elementary schools. All twelve students were selected randomly.

Instrument

The two instruments used in this research study were the MSA reading comprehension test scores and the parent sign-in logs.

Procedure

This research study gathered data over one school year for the parent volunteer sign-in logs and the MSA reading test scores.

In June, after the end of the school year, the lead secretaries at each school accessed the parent sign-in log from the school computer. Each parent's entire year's log was collated by that parent's last name, purpose of visit to the school, and sign-in day and time. The parent sign-in log was printed out. Each parent's sign-in for volunteering was counted by hand. In July of the same school year, the MSA reading comprehension test scores became available. The MSA reading comprehension test scores were printed out.

CHAPTER IV

RESULTS

This study examined the relationship of parent volunteers upon the reading achievement of their children. The researcher collected data from a sample of 12 students at 2 elementary schools. Each elementary school sample consisted of 6 students. Of the 6 students at each elementary school, 3 students were instrumental music students and 3 were not instrumental students. Six students' parents volunteered in instructional activities and 6 students' parents volunteered in non-instructional activities. The number of parent volunteer visits for each corresponding student was logged, and the MSA Reading Scale Score (RDSS) for each student was logged. A correlation analysis was then conducted on the data. Visual inspection of the scatterplot (Figure 1) supports the statistical finding. A non-significant, positive relationship was found, $r = 0.427, p > .05$.

The data that was collected by this researcher supports the null hypothesis. The data supports no correlation between parent involvement and MSA reading comprehension test scores.

Figure 1

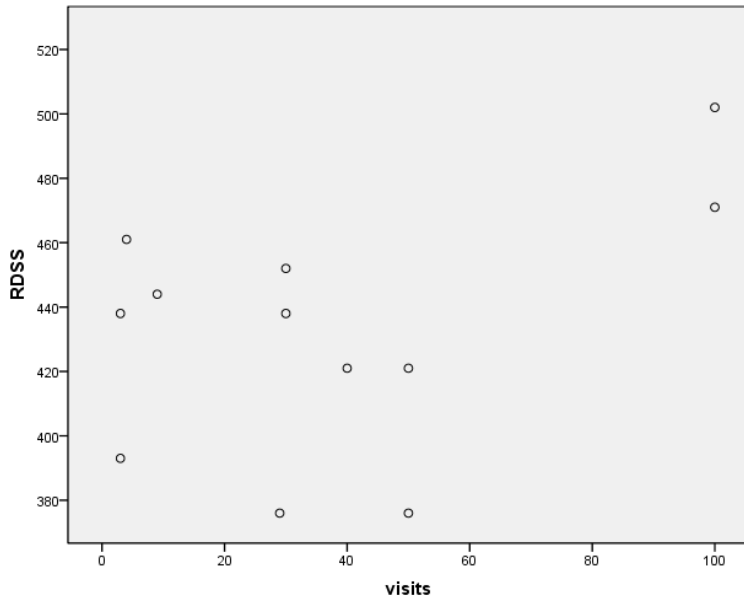


Figure 1. Scatterplot of relationship between MSA Reading scale scores and number of parent visits.

CHAPTER V

DISCUSSION

The purpose of this study was to examine the relationship between parent involvement and students' reading comprehension test scores. The results that are displayed in Chapter IV indicate that the null hypothesis of no relationship between parent volunteer hours and reading scale score achievement should be retained.

Threats to Validity

This study has threats to validity. Those threats include but are not limited to both internal validity and external validity.

This study has several major threats to external validity – the ability to generalize from this study. There are external threats to validity. External threats to validity include pretest-x interaction and multiple-x interference. The size of the sample is a threat to validity because it is small. The sample is limited to two schools in one grade level.

There are internal threats to validity – so called design threats – that limit the strength of the study. Threats to internal validity include history, maturation, testing, instrumentation, regression, selection, mortality, and selection interactions. The size of the group is also a threat to validity. The small size weakens the power of a statistical test to detect real differences.

The null hypothesis could be retained based on the lack of correlation between parent involvement in school activities and students' reading comprehension test scores.

There are limits to how this study can be generalized. Generalizability is a term that refers to the applicability of findings to settings and contexts different from the one in which they were obtained. The size of the group is also a threat to validity. The small size limits the generalizations that can be made from the study.

The findings of this study are incompatible with the research reviewed in Chapter II. The research indicates benefits from parent involvement resulting in higher Maryland Schools Assessment (MSA) reading comprehension test scores. The results of this study supported the null hypothesis.

Summary and Directions for Future Research

The literature reviewed indicates a positive correlation between parent involvement and higher MSA reading comprehension test scores. In the future, the same kind of research can be repeated with additional input. For example, increasing the number of students sampled will give more credibility to the research. Additionally, increasing the number of schools sampled will give more credibility to the research. Also, additional research could include a survey of parents' involvement at school combined with a parent survey of learning activities at home. Additional research could also include a longitudinal study for an increased number of school years. This change of input can change the data results. The change in data results could support the literature review and a more positive correlation between parent involvement and higher MSA reading comprehension test scores.

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