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Running Head: PARENTAL INVOLVEMENT AND STUDENT ACADEMIC
ACHIEVEMENT

An Investigation of Parental Involvement and Student Academic Achievement in Middle School

Laura Smokoska

Eastern Illinois University

An Investigation of Parental Involvement and Student Academic Achievement in
Middle School

BY
Laura Smokoska

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SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS
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2020

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I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

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Abstract

The purpose of this research study was to investigate the relationship between parental involvement and student academic achievement in middle school. Additionally, this study investigated whether there were patterns among parental involvement and student academic achievement among different ethnicities. The study was conducted in a diverse school in the Chicago suburbs to determine parental involvement levels and student academic achievement levels among different ethnicities. The study had 41 student and parent participants who took a survey about parental involvement at home and parental communication with the school. In addition to the surveys, students' final English grades, final science grades, and English MAP scores were analyzed. The results of the study revealed parents of White students demonstrated the highest levels of communication with school and that White students had the highest levels of academic achievement compared to African American and Hispanic students. Pearson correlation revealed that there were two significant positive correlations between parental involvement and student academic achievement, which were parents signing weekly grade reports and parents initiating calls with the school, $r = .586, p = .01$, and parents signing weekly grade reports and parents returning calls from school, $r = .479, p = .01$. However, most of the data from the Pearson correlation revealed that there was not a significant correlation between parental involvement and student academic achievement, such as parents checking grades and parents returning calls from school, $r = .202$, and parents signing weekly grade reports and parents reading notes, emails, and texts from school, $r = .054$.

Keywords: parental involvement, student academic achievement, middle school, multiple ethnicities

Dedication

I dedicate this thesis to my family and friends. Thank you for your continuous support throughout my entire thesis writing process. I appreciate your continuous love, support, and words of wisdom for helping me get through one of the most difficult experiences of my life. Thank you for believing in me and pushing me to be the best that I can be.

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Table of Contents

CHAPTER I	1
Introduction	1
Purpose of the Study	3
Research Questions	3
Hypotheses	3
Significance of the Study	4
Limitations of the Study	4
Definition of Terms	5
Summary	6
CHAPTER II	7
Review of Literature	7
Home-Based Involvement	7
School-Based Involvement	8
Home-School Communication	8
Parental Involvement Among Ethnicities	9
Divisions of Parental Involvement	10
Parental Over-Involvement	11
Positive Parental Involvement	11
Promoting Positive Parental Involvement	12
Theoretical Framework of Parenting Styles	14
Epstein	14
Summary	17

CHAPTER III	19
Methods	19
Sample and Setting	19
Sample	20
Setting	21
Instrument and Data Source	22
Parent Survey	22
Student Survey	22
MAP Scores	23
Student Achievement Records	23
Data Collection Procedures	23
Data Analysis	24
Summary	25
CHAPTER IV	26
Results and Findings	26
Research Question One	26
Student Surveys and Parental Involvement Surveys	27
Student Academics	28
Parent Communication	29
Student Surveys and Parent Involvement Surveys by Ethnicity	31
White	32
African American	34
Hispanic	36

Other	38
Student Achievement Records	42
English Final Grades	42
Science Final Grades	43
English MAP Scores	43
Research Question Two	48
Student Survey and Parental Involvement Survey	48
Summary	51
CHAPTER V	52
Discussion and Conclusion	52
Discussion	52
Implications	56
Future Study	57
Limitations	58
Conclusion	58
Appendices	63

List of Tables

Table 1: Information on Parent and Student Ethnicity	20
Table 2: Percentage of 7 th Grade SES	20
Table 3: Percentage of Middle School Demographics According to Ethnicity	21
Table 4: Percentage of Middle School SES	21
Table 5: Who's Involved in Student's Education at Home?	27
Table 6: Mean and Standard Deviation of Parental Involvement in Student Education at Home	31
Table 7: Mean and Standard Deviation of Parental Involvement at Home According to Ethnicity	41
Table 8: White Participants Score of MAP, English and Science Scores	45
Table 9: African American Participants Score of MAP, English and Science Scores	45
Table 10: Hispanic/Latino Participants Score of MAP, English and Science Scores	46
Table 11: Other Participants Score of MAP, English and Science Scores	46
Table 12: Participants Score of MAP, English and Science Scores	47
Table 13: Pearson Correlation between Parental Involvement at Home and Student Academic Achievement In School	50

List of Figures

Figure 1: Parental Involvement and Student Academic Achievement 17

CHAPTER I

Introduction

Over the past couple of decades, the role of parental involvement and its relationship to student academic achievement has been questioned by many researchers. The assumption has commonly been that the higher the amount of parental involvement, the higher the academic achievement of the student. However, it has been determined that there are many factors that influence the extent in which parents demonstrate involvement, such as the relationship with the teacher, school size, type of school (public versus private), grade level, ethnicity, and the student's gender (Kim & Hill, 2015; Oswald, Zaidi, Cheatham, & Diggs Brody, 2017). Kim and Hill (2015) and Oswald et al. (2017) have found that the different factors that lead to parental involvement can yield different types of results in student academic achievement.

Previous research has determined that there are three types of parental involvement: home-based involvement, school-based involvement, and home-school communication (Anthony & Ogg, 2019). Each of these three types of involvement plays a different role in determining the academic success of students. Home-based involvement has two sub-types: parental over-involvement and positive parental involvement. Parental over-involvement is a stricter parenting style which closely monitors children's homework and assignments and often leads to lower levels of self-efficacy in children (Fernandez-Alonso, Alvarez-Diaz, Woitschach, Suarez-Alvarez, & Cuesta, 2017; Fernandez-Alonso, Suarez-Alvarez, & Muniz, 2015; Gonida & Cortina, 2014). Positive parental involvement is a parenting style which has high expectations of children and often leads to high levels of self-efficacy in children (Fernandez-Alonso et al., 2017; Gonida & Cortina, 2014). Home-based involvement and school-based involvement

typically yield positive results in student academic achievement. Home-school communication typically yields little to no effect on student academic achievement.

Current research also states that the majority of the research that has previously been conducted on parental involvement and student academic achievement often stems from the elementary school environment (Oswald et al., 2017; Anthony & Ogg, 2019). It has been found that parental involvement is higher in the elementary school environment than it is in the middle and high school environment due to an increased level of independence from adolescent children (Oswald et al., 2017). It is important to determine whether there is also a correlation among student academic achievement and parental involvement in the middle level grades.

Parents of White children are more involved in their child's schooling than parents of Hispanic and African American children (Zhang, Hsu, Kwok, Benz, & Bowman-Perrott, 2016). In addition, ethnicity and socioeconomic status (SES) have a negative impact on academic proficiency, especially as a student progresses through school (White et al., 2016). This means that there is a larger gap in academic performance between White, Hispanic, and African American students at the middle school and high school level than there is at the elementary school level. However, Kim and Hill (2015) found no significant differences between ethnicity and student academic achievement. Due to these differences in results, it would be important to determine if the involvement of parents, regardless of ethnicity, demonstrates a positive correlation with student academic achievement: the more the parent is involved, the higher the academic achievement of the student.

The author became interested in this research topic during her first year of teaching. The district in which she was employed had a very diverse student population: about one-third of the students were White, about one-third of the students were African American, and about one-third

of the students were Hispanic. From year to year there appeared to be equal levels of academic achievement among the different ethnicities, which suggests that academic achievement has the opportunity to be equal among ethnicities in a diverse school. Over time it became evident that students who had parents who were more involved at home in their academics, through high expectations, grade checks, and communication with the school, had higher levels of academic achievement than students who had parents who were barely involved in their academics. The author wanted to test these observations to determine if there was a correlation between parental involvement and student academic achievement, regardless of ethnicity.

Purpose of the Study

The purpose of this study is to investigate whether there is a relationship between parental involvement at home and student academic achievement in school. In addition, this study is investigating whether there are patterns among parental involvement and student academic achievement among different ethnicities.

Research Questions

This study is guided by two research questions:

1. Does parental involvement at home have a positive relationship with student achievement in school, regardless of ethnicity?
2. What type(s) of parental involvement at home have the most significant impact on a student's achievement in school among different ethnicities?

Hypotheses

It is hypothesized that parental involvement at home will have a positive relationship with student academic achievement in school among all ethnicities. It is hypothesized that students, regardless of ethnicity, will demonstrate higher academic achievement in school when

parents show involvement at home than students whose parents show little or no involvement at home. Additionally, it is hypothesized that students whose parents show positive parental involvement at home will have higher academic achievement than students whose parents are over-involved.

Significance of the Study

This study will be significant in helping researchers and educators further understand the relationship between parental involvement and student academic achievement. Parental involvement and student academic achievement have been studied extensively, however, there has been limited research about the influence of the different types of parental involvement and the role they play in student academic achievement. In addition, there has been little research conducted on parental involvement and student academic achievement among various ethnicities. This study will help to understand the role that home-based parental involvement and home-school communication play in students' academic achievement, as well as the role that parental involvement plays in academic achievement among different ethnicities.

Limitations of the Study

This study has two limitations. First, this study is limited to seventh grade in one school district in the Chicago suburbs. The study may be less limited if it followed sample students through their schooling from kindergarten to eighth grade. Due to this, the findings may not be representative of a larger population. In addition, the findings are not being compared to other similar school districts in the area, so the data may be skewed since it is taken from one school district.

Second, this study is only looking at grades and MAP test scores from specific subjects. Grades can be biased based on teacher perceptions of the student. MAP test scores may not be

accurately representative of a students' achievement level based on the students' perception of testing and if the student has testing anxiety.

Definition of Terms

Parental involvement. Parental involvement is defined as the extent in which parents are involved in their child's education at home and the amount of communication that they have with school. Examples include monitoring student grades, being at home, encouraging and helping student with homework, and communicating with teachers (United States Department of Education, 2004).

Home-based involvement. Home-based involvement refers to the extent in which parents are involved in their child's education outside of school. Examples involve visiting a museum, zoo, or community event (Anthony & Ogg, 2019).

Home-school communication. Home-school communication refers to the extent in which parents communicate with school personnel. Examples include emails, phone calls, newsletters, and conferences (Anthony & Ogg, 2019).

School-based involvement. School-based involvement refers to the extent in which parents are involved with and attend school activities. Examples include Parent-Teacher Association (PTA) events, family nights, and conferences (Anthony & Ogg, 2019; Fernandez-Alonso et al., 2017).

Parental over-involvement. Parental over-involvement refers to a strict parenting style where parents become too involved in their child's education. This parenting style often restricts freedom and closely monitors student homework and assignments. Closely monitoring homework often leads to low levels of self-efficacy in students (Fernandez-Alonso et al., 2017; Fernandez-Alonso, Suarez-Alvarez, & Muniz, 2015; Gonida & Cortina, 2014).

Positive parental involvement. Positive parental involvement refers to a parenting style that promotes high levels of self-efficacy in their children. This parenting style encourages high expectations, but does not micromanage their children. High expectations lead to high levels of self-efficacy in students (Fernandez-Alonso et al., 2017; Gonida & Cortina, 2014).

Student academic achievement. Student academic achievement refers to the current level of student learning. Academic achievement is based on whether students meet or exceed grade-level standards on standardized testing (Minnesota Department of Education, 2017). In this study, MAP English scores are being evaluated for standardized testing scores.

Summary

Parental involvement is known to play a large role in the academic achievement of students. Students who have parents that are involved in home-based involvement and school-based involvement tend to achieve higher academic achievement than students who have parents that are not involved in their education. Also, parents who are only involved in home-school communication tend to have little to no impact on their child's academic success. At home, parents must have high expectations for their children and promote high levels of self-efficacy. Failure to do so may result in children who have low levels of self-efficacy and responsibility.

In addition, White students tend to have parents that are more involved in their academics than African American and Hispanic students (Zhang et al., 2016). These lower levels of parental involvement are reported to have a negative impact on the academic achievement of racial minorities (White et al., 2016). The researcher believes that the influence of parental involvement can increase the academic achievement of all students, regardless of ethnicity.

CHAPTER II

Review of Literature

One of the greatest challenges that teachers face in education today is the amount of involvement that parents have in their child's education. The U.S. Department of Education (2004) defines parental involvement as "the participation of parents in regular, two-way, and meaningful communication involving student academic learning and other school activities" (p. 3). As the definition states, the communication between parents and schools must be regular. That means that parents and schools are continually engaged in conversations about student academic achievement; they do not occur just a few times over the course of the school year. Parental involvement is defined in three different ways: home-based involvement, school-based involvement, and home-school communication (Anthony & Ogg, 2019). This literature review will focus on examining the relationship between parental involvement and student academic achievement. This literature review will discuss the three types of parental involvement, how parental involvement differs among ethnicities, the divisions of parental involvement, such as over-involvement and positive levels of involvement, and how teachers can promote positive parental involvement.

Home-Based Involvement

Home-based parental involvement refers to the occurrence of parents engaging their children in educational activities outside of school events. Examples of this type of involvement include "reading or engaging in other academic activities with children as well as more general intellectual activities such as attending educational events or visiting sites in the community [e.g., a zoo]" (Anthony & Ogg, 2019, p. 377). This type of involvement demonstrates to children the everyday learning experiences that they can be involved in outside of school. It

shows children that learning is a part of their everyday life. Previous studies have indicated that home-based parental involvement positively influences student academic achievement (Anthony & Ogg, 2019; Fernandez-Alonso, Alvarez-Diaz, Woitschach, Suarez-Alvarez, & Cuesta, 2017).

School-Based Involvement

School-based parental involvement refers to the extent in which parents attend school-related events (Anthony & Ogg, 2019; Fernandez-Alonso et al., 2017). Examples of this type of involvement include attending conferences, family nights, and Parent-Teacher Association (PTA) events. This type of involvement demonstrates to children that their parents are dedicated to participating in events run by the school and that they want to be actively involved in school-related events. Previous studies have indicated that school-based parental involvement positively influences student academic achievement (Anthony & Ogg, 2019; Fernandez-Alonso et al., 2017).

Home-School Communication

Home-school communication refers to the communication between school personnel (teachers, office staff, etc.) and parents (Anthony & Ogg, 2019). Examples of this type of communication include emails, conferences, and phone calls. This type of involvement demonstrates to children that their parents and teachers engage in on-going communication. Previous studies have indicated inconsistent findings on the impact of home-school communication. Some studies have found positive correlations, while other studies have found insignificant correlations (Anthony & Ogg, 2019; Fernandez-Alonso, 2017; Oswald, Zaidi, Cheatham, & Brody, 2018).

Parental Involvement Among Ethnicities

Although there have been numerous studies conducted on the relationship between parental involvement and student academic achievement, there has been little research conducted that focuses on parental involvement among different ethnicities. Studies have found that parental involvement is higher among White students than African American or Hispanic students (Zhang, Hsu, Kwok, Benz, & Bowman-Perrott, 2016). In addition, a negative correlation has been found between ethnicity (African American and Hispanic students) and academic performance and lower socioeconomic status (SES) and academic performance as students enter middle and high school (White et al., 2016). These findings are concerning for two reasons. First, students that are part of the minority (i.e., Hispanic and African American students) typically perform lower than their non-minority peers on standardized tests and do not have access to as many educational opportunities (Desimone, 1999; White et al., 2016; Kucsera & Orfield, 2014). Second, parents of students, regardless of ethnicity, tend to be less involved in their child's education as they progress through school, which is when the achievement gap becomes more profound between White students and African American and Hispanic students.

Of the limited studies that focus on ethnicity, many of the studies have focused on the relationship between ethnicity, SES, parental involvement, and student academic achievement. These studies have found that as SES decreases, parental involvement also decreases, and as parental involvement decreases, student academic achievement decreases (Desimone, 1999; White et al., 2016; Zhang et al., 2016). In addition, previous research has indicated that there is a strong correlation between SES and ethnicity. Kucsera and Orfield (2014) state that "New York students in racially isolated schools are also far more likely to attend schools with higher percentages of low-income students, segregating students by race and class. Schools that are

isolated by class are often places that limit students' educational opportunities and outcomes" (p. 39). With a relationship between ethnicity and SES it is likely that parents of racial minorities are not able to be as involved in their student's education because they are facing other challenges that come with low SES (i.e., working multiple jobs, working afternoons/nights, low education level, etc.). If racial minorities are consistently placed in low performing schools that limit educational opportunities then it is no wonder why the achievement gap between minority and non-minority students has not diminished.

Divisions of Parental Involvement

While parental involvement is shown to increase student academic achievement, parental over-involvement can have detrimental effects on students. "The way that parents involve themselves in their children's education is associated with differential effects in academic performance. The controlling style is negatively correlated with academic achievement" while "the communicative style is positively related with academic results" (Fernandez-Alonso et al., 2017, p. 459). Students that receive positive reinforcement from their parents are more likely to have higher academic achievement, while students who have over-involved and controlling parents are more likely to have lower academic achievement. "High-performing students reported more positive forms of parental help with homework and that positive forms of parental homework involvement led to higher academic functioning; similarly, low-performing students reported more parental control, and more parental control led to lower functioning" (Dumont, Trautwein, Nagy, & Nagengast, 2014, p. 156). As parents exert more control over their child's homework, the child develops a lower sense of self-efficacy, which leads to lower levels of functioning.

Parental over-involvement. Parents want what is best for their children and sometimes that can lead to becoming too involved in various aspects of their child's life. One example of this, in regard to academic achievement, is homework support. Sometimes, when parents try to help with homework, they are hindering their child academically more than they are helping them (Patall, Cooper, & Robnson, 2008). Parents that help their child complete homework regularly are contributing to reduced levels of autonomy in their children. Children who frequently request parental help with their homework have lower levels of self-efficacy and responsibility (Fernandez-Alonso et al., 2017; Fernandez-Alonso et al., 2015). In turn, students whose parents are constantly involved in their homework, have lower levels of academic achievement because they have not taken ownership of their learning and their education. By having students take ownership of their learning, they are laying the foundation for being able to take responsibility for their actions later on in life.

In addition, it has been found that parental over-involvement could occur partially due to how much parents believe in the success of their child. "The lower the beliefs parents hold for their child the more controlling and interfering style adopt during homework and, in turn, the less efficacious children believe they are in the academic domain" (Gonida & Cortina, 2014, p. 389). As parents begin to interfere more with their child's homework, the child develops a reliance on their parents and believes less in their abilities to complete their assignments on their own. The research conducted by Gonida and Cortina (2014) also indicated that "low parent efficacy beliefs for their child may have detrimental effects in terms of how parents involve themselves in their child's homework and, in turn, to her/his own academic efficacy beliefs" (p. 389).

Positive parental involvement. While a controlling style of parental involvement can academically hinder children, positive parental involvement can academically benefit children.

“More indirect styles of parental involvement, such as support and communication about school matters, demonstrate more association with academic achievement” (Fernandez-Alonso et al., 2017, p. 454). It has also been found that “parental interference and control are less likely to occur when parents hold positive academic efficacy beliefs for their child, while at the same time, parents are more likely to encourage cognitive engagement as supplementary to homework and, in turn, high efficacy beliefs to their children” (Gonida & Cortina, 2014, p. 389). However, during the same study it was discovered that

parent cognitive engagement related to homework was only predicted by parents’ beliefs about their child academic efficacy. That is, parents decide to involve themselves in their child’s homework in a way that takes the child beyond the exact demands of the homework assignments and advance her/his intellectual enrichment only if they believe that their child will effectively cope with these extra demands. (p. 389)

This study showed that only parents who believed that their child was capable of intellectually achieving higher than what the homework assignment asked of them would provide their child with enrichment activities. While this type of positive parental involvement could benefit some students, not all students would have this opportunity presented to them if their parents were not able to present them with enrichment activities. Additionally, parents who are capable of providing their child with enrichment activities will only do so when they think that their child is capable of coping with the extra demands. If the parent holds negative self-efficacy beliefs about their child, they will not present these enrichment activities to them.

Promoting Positive Parental Involvement

Teachers can help promote positive parental involvement. One way that teachers can be involved in helping parents become positively involved in their child’s education is to make

them aware of educational community events and venues that they can attend outside of school. Attending outside events can demonstrate to children that their parents care about all aspects of their education.

Teachers can also work toward building positive relationships with their student's parents. It has been found that "when school staff engage in caring and trusting relationships with parents and recognize parents as partners in the educational development of their children, the relationships enhance parents' motivation to be involved and influence how actively they participate in their children's educational development" (Oswald et al. 2018, p. 322). The development of positive relationships between parents and the teacher can help parents feel encouraged to be more involved in their child's education at school. When children see that their parents are involved in the school, they are more likely to have high academic achievement. Daniel, Wang, and Berthelsen (2016) found that there was a positive correlation between school-based parental involvement and reading achievement. They found that the more parents involved themselves in school-based events, the higher the reading achievement of the child. Meanwhile, Powell, Son, File, and San Juan (2010) found a positive correlation between school-based parental involvement and their child's social skills. Not only can school-based parental involvement lead to higher academic functioning, it can also lead to more advanced social skills. Promoting parental involvement in the classroom is great way that teachers can help set the stage for improved student academic achievement.

Teachers can also be involved in promoting students' academic achievement by communicating with parents and being responsive in a timely manner. Powell et al. (2010) found that children's social outcomes and early reading abilities could be predicted through teacher responsiveness. When teachers communicate with parents on a regular basis and address

their concerns, parents are more likely to think highly of teachers and help establish a positive relationship. This relationship then translates to the child, which helps to promote higher academic achievement.

Theoretical Framework of Parenting Styles

The level and type of parental involvement has been extensively researched and is believed to have an impact on student academic achievement. Research conducted by Joyce Epstein (2002) has identified six types of parental involvement, with each type of parental involvement leading to various results in student academic performance.

Epstein. Joyce Epstein is a well-known sociologist for her research on parental involvement in regards to student academic achievement. Epstein's research (2002) identifies six types of parental involvement: parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community. These six types of parental involvement are part of a comprehensive program that is suggested to be implemented as a model of partnerships between schools, families, and the community. In addition, each of the six types of parental involvement is said to yield different results in student performance (Epstein, 2002; Kemal Tekin, 2011). Figure 1 on page 17 shows the how parenting at home and parenting in the community come together to support student academic achievement.

Parenting refers to supporting families in creating a supportive environment at home. It is recommended that for this type of parental involvement that parents are provided with suggestions on how to change the conditions at home to make them more conducive to learning, that parents are provided with educational activities, and that parents are provided with family support programs. For this type of parental involvement, student performance results include

improved attendance records, comprehending the importance of school, and improved respect for parents (Epstein, 2002; Kemal Tekin, 2011).

Communicating refers to the establishment of clear and effective communication between schools and parents about student performance and school programs. It is recommended for this type of parental involvement that parents are encouraged to attend parent-teacher conferences, that parents are given information about school policies and school programs, and that parents receive phone calls about student performance. For this type of parental involvement, student performance results include student awareness of their academic performance, knowledge of school policies, and improvement of communication skills (Epstein, 2002; Kemal Tekin, 2011;).

Volunteering refers to encouraging, receiving, and organizing help and support from parents at home, at school, and at other community events. It is recommended for this type of parental involvement that parents help out with the safety and daily operations of the school, assist teachers, and help other parents who need additional support. For this type of parental involvement, student performance results include development of communication skills with adults and improvement of learning skills through the volunteering activities (Epstein, 2002; Kemal Tekin, 2011).

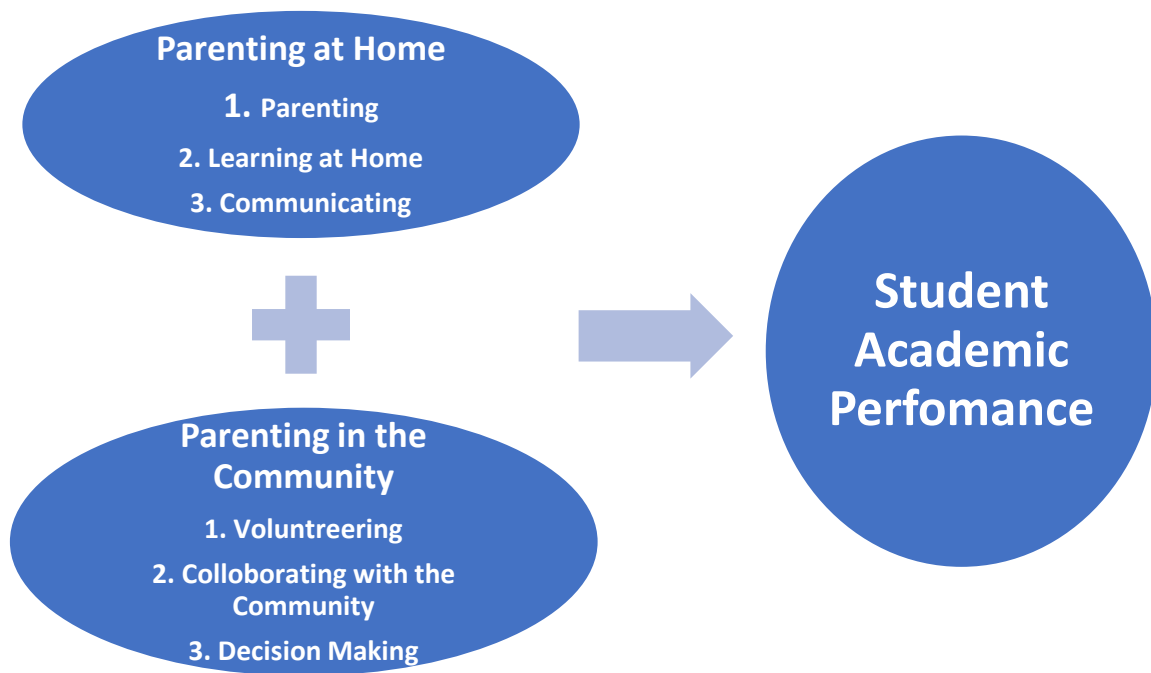
Learning at home refers to ensuring that families have access to information at home that explains what they can do to support their children with their education. It is recommended for this type of parental involvement that parents are provided with information about homework policies, information about supervising their children with homework, and information about family reading programs at school. For this type of parental involvement, student performance results include higher rates of homework completion, students viewing their parents as a partner in their education, and increased levels of self-efficacy (Epstein, 2002; Kemal Tekin, 2011).

Decision making refers to encouraging and having parents serve on school committees as leaders and representatives. It is recommended for this type of parental involvement that parents are informed about Parent-Teacher Organizations (PTO) and Parent-Teacher Associations (PTA) and are encouraged to be active members in these groups. For this type of parental involvement, student performance results include understanding that families are represented in their school and that their rights as students are protected (Epstein, 2002; Kemal Tekin, 2011).

Collaborating with the community refers to improving school programs by implementing resources and services from the community. It is recommended for this type of parental involvement that parents are provided with information about community activities that connect to learning, that schools encourage alumni to come back and participate in school, and that schools integrate partnerships with community organizations, especially those that focus on civic, cultural, and health agencies. For this type of parental involvement, student performance results include an increase in skills and talents and benefits from participating in community programs (Epstein, 2002; Kemal Tekin, 2011).

Figure 1

Parental Involvement and Student Academic Achievement.



Summary

Parental involvement plays an important role in our students' lives. It can help determine how successful a student will be in school depending on the type of parental involvement that they are receiving at school and/or at home. Home-based involvement typically leads to higher levels of academic achievement as parents contribute to their child's education through venues outside of school. Additionally, school-based parental involvement typically leads to higher levels of academic achievement because students see their parents as being actively involved in the school. Home-school communication has led to mixed results in student academic achievement. Some studies have found that home-school communication has a positive correlation with student academic achievement, while other studies have found no significant correlation between home-school communication and student academic achievement.

The relationship between parental involvement and ethnicity has had limited research opportunities. Overall, it has been found that parental involvement occurs more among White students than it does among minority students. In addition, it has been found that lower SES leads to lower academic achievement among students, and that students from lower SES households tend to be minority students. Lastly, minority students typically attend schools where they are given fewer educational opportunities than the schools where their non-minority peers attend. It is vital that research is conducted on the academic achievement of minority students where they are given the same resources as their non-minority peers in relation to parental involvement in education.

Divisions of parental involvement can also lead to various impacts on their child's academic achievement. Parental over-involvement can develop detrimental effects on students as they are typically less responsible and have low levels of autonomy. Parental over-involvement can also lead to low levels of self-efficacy in student achievement. A positive level of parental involvement can be beneficial to students as they develop autonomy skills and responsibility through parental support. Teachers can help parents develop positive levels of involvement through developing positive relationships and encouraging them to volunteer in classrooms and in school activities. As students see their parents become more involved in school, they too will become more involved in school and strive for high academic achievement.

Chapter III

Methods

This study utilized a quantitative approach using survey methods. The quantitative approach analyzes statistical data through the use of surveys (USC Libraries, 2019). The parent and student surveys used in this study used a Likert scale with five ratings, where five is the highest score and one is the lowest score.

In this study, the independent variable was the level of parental involvement and the dependent variable was the students' academic achievement. The study investigated the relationship between the two variables, while also closely examining the relationships between parental involvement and student academic achievement, parental involvement and the students' ethnicity, and student academic achievement and the students' ethnicity.

This study was guided by two research questions:

1. Does parental involvement at home have a positive relationship with student achievement in school among different ethnicities?
2. What type(s) of parental involvement at home have the most significant impact on a student's achievement in school among different ethnicities?

Sample and Setting

The sample for this study was a purposely selected sample of seventh-grade students in one middle school in the Chicago suburbs. The researcher selected this site location because of the criteria for the study. The criteria for the study required the school to have a diverse population of students, consisting of a population of about one-third White, one-third Hispanic, and one-third African-American.

Sample. The sample for this study consisted of 41 seventh-grade students within six different classrooms and their parents. In seventh-grade the students range in age from eleven to thirteen. Forty-three-point nine percent (36) participants are Hispanic, 29.3% (24) participants are African American, 22.0% (18) participants are White, 4.9% (4) participants are Other. These demographics are listed below in Table 1. In the seventh grade, 79.4% (112) students are low income, 17% (24) students are English language learners, and 15.6% (22) students have IEPs. These socioeconomic status (SES) data are listed in Table 2 below. Since SES covers variety of categories, some students have been counted more than once because they meet the criteria for multiple categories.

Table 1

Information on Parent and Student Ethnicity. (n= 82)

Ethnicity	Number	Percent
White	18	22.0
African American	24	29.3
Hispanic or Latino	36	43.9
Other	4	4.9
Total	82	100.00

Table 2

Percentage of 7th Grade SES.

Socioeconomic Status Indicator	Number	Percent
Low Income	112	79.4
English Language Learners	24	17
Students with IEPs	22	15.6
Homeless	0	0

Setting. The middle school chosen for the site location has a student population of 651 students. The student population consists of 31% (202) Hispanic, 29% (188) White, 27% (176) African American, 12% (78) two or more races, and 1% (6) Asian. These demographics are listed in Table 3 below. Overall, the middle school has 77% (501) low income students, 10% (65) English language learners, 13% (85) of students have IEPs, and 1% (7) are homeless (Illinois Report Card, 2019). Since SES covers variety of categories, some students have been counted more than once because they meet the criteria for multiple categories. These SES data are listed in Table 4 below.

Table 3

Percentage of Middle School Demographics According to Ethnicity. (n=651)

Ethnicity	Number	Percent
White	188	29
African American	176	27
Hispanic or Latino	202	31
Asian	6	1
Two or more Ethnicity	78	12
Pacific Islander	1	0
Total	651	100

Table 4

Percentage of Middle School SES.

Socioeconomic Status Indicator	Number	Percent
Low Income	501	77
English Language Learners	65	10
Students with IEPs	85	13
Homeless	7	1

Instrument and Data Source

This study used two instruments and two data sources. The two instruments were self-developed surveys created by the researcher. They were parent surveys and student surveys. These surveys were created to be in dyad design so that the data could be easily triangulated to test for reliability in this research study.

The two data sources that were analyzed were student achievement records for science and English grades and students' Measures of Academic Progress (MAP) scores for English. MAP is used to track a students' progress in school, and the test is taken three times a year at the site location. Student's academic achievement were obtained by looking at student report card grades in science and English for the previous trimesters.

Parent survey. The purpose of the parent survey was to determine the level of parental involvement displayed by parents of students at the site location. The questions within the survey were developed by the researcher of this study and were selected based on the extent in which they applied to answering the research questions. The survey consisted of nineteen questions. The survey included two questions that required background information from the parent, thirteen questions that related to parental support at home, and four questions that asked about parent-school communication levels. All questions in the survey used a five-point Likert-scale. The survey had a .87 reliability score of alpha Cronbach.

Student survey. The purpose of the student survey mirrored the parent survey. The student survey is used to determine the level of parental involvement from the student's perspective. The questions within the survey were self-developed by the researcher of this study and were also selected based on the extent in which they applied to answering the research questions. This survey mirrored the parent survey so that data could be cross-examined. The

survey consisted of the same questions, written from a different perspective. The survey consisted of nineteen questions. The survey included two questions related to background information about the student, thirteen questions related to parental support at home, and four questions related to parent-school communication. All questions in the survey are answered using a Likert scale, except on demographic information. The survey has .82 reliability score.

MAP scores. MAP scores track student progress throughout second to twelfth grade. MAP scores help determine whether or not students are demonstrating growth throughout the year and from year to year. Using MAP scores was an appropriate instrument for this study because MAP analyzes individual student academic achievement. Since students participate in MAP testing three times a year, the researcher was able to analyze how each students' scores progressed throughout the course of the school year. The students' English MAP scores were analyzed in this study.

Student achievement records. The instrument that was used to determine student achievement was the students' report cards. The researcher used the students' grades from Trimester 1 and Trimester 2 for this study. Student report cards were analyzed from the current school year. The researcher only analyzed the students' grades in English and science for this study.

Data Collection Procedures

The data for this study was collected from February to March after receiving approval from the Institutional Review Board (IRB) and after receiving consent from the middle school's principal and parents. Before administering the survey, letters of consent were sent home to parents and returned to the school to indicate consent to participate in the study. Paper copies of

the survey were sent home to parents who gave permission that they would participate in the study.

The student achievement records were obtained through the middle school at the site location. The achievement records were obtained for Trimester 1 and Trimester 2 of the current school year, 2019-2020. The achievement records were analyzed for only English and science final grades. Each student that participated was given numerical representation for privacy, such as Student 1, Student 2, etc. Each students' numerical representation remained the same for the entire study. The students' MAP scores were obtained through the Northwest Evaluation Association (NWEA) MAP website.

Data Analysis

The Statistical Package for the Social Science (SPSS) was used to analyze data from this study. The mean and standard deviation were used to determine the extent in which parental involvement affected student academic achievement from both the parent survey and the student survey. Pearson correlation was also used to analyze data and to determine if there was a relationship between student academic achievement and level of parental involvement.

Research question one was answered by using data from parent and student surveys, MAP scores, and student achievement records. The survey is used to look at student ethnicity and level of parental involvement. The MAP scores and student achievement records was used to provide data for level of student academic achievement. These three data sources were analyzed together to determine whether ethnicity plays a role in parental involvement and student academic achievement. Research question two was answered by using the data from the parent and student surveys.

Summary

A quantitative approach was utilized during this study to determine the relationship between parental involvement, ethnicity, and student academic achievement. The study used parent and student surveys with a five-point Likert scale for data collection. Data from the surveys, along with student achievement records and MAP scores, was used to answer the research questions, does parental involvement at home have a positive relationship with student achievement in school among different ethnicities? and what type(s) of parental involvement at home have the most significant impact on a student's achievement in school among different ethnicities?

Data from parent and student surveys, MAP scores, and student achievement records were used to answer research question one. Data from the parent and student surveys were used to answer research question two. Overall, data from this study was used to determine the relationships between parental involvement and student academic achievement, parental involvement and the students' ethnicity, and student academic achievement and the students' ethnicity.

CHAPTER IV

Results and Findings

This chapter discusses the results and findings from the research study. The results for both research question one and research question two will be discussed in this chapter. Research question one asked “Does parental involvement at home have a positive relationship with student achievement in school, regardless of ethnicity?”. Research question two asked “What type(s) of parental involvement at home have the most significant impact on a student’s achievement in school among different ethnicities?”. The researcher utilized the Statistical Package for the Social Sciences (SPSS) to run the analyses in order to determine mean, standard deviation, and Pearson correlation for each of these research questions.

The data from both the Student Survey and the Parental Involvement Survey were analyzed using mean, standard deviation, and Pearson correlation to determine if there was a correlation between parental involvement at home and student academic achievement in school. The data from final student grades in English and science were analyzed to determine mean and standard deviation. The data from student English MAP scores was also analyzed to determine mean and standard deviation. In the research study the independent variable was the level of parental involvement and the dependent variable was the students’ academic achievement. The following chapter discusses the results of the research study as they relate to research question one and research question two.

Research Question One

Research question one asked “does parental involvement at home have a positive relationship with student achievement in school among different ethnicities?”. To answer research question one, data from the Student Survey and Parent Involvement Survey were

analyzed. In addition, student achievement records for English and science and student MAP scores for English were analyzed.

Student surveys and parent involvement surveys. The first source of data to answer research question one was student and parent surveys. Students and parents were given surveys that asked them the same questions to ensure validity of results. In total, there were 41 students who participated in taking the survey and 41 parents/guardians that participated in taking the survey. To determine the kind of support that students have available at home, they were asked “who at home is able to assist you with homework?”. Based on student responses in the survey, 29.3% (12) students said mother, 9.8% (4) students said father, 2.4% (1) student said grandparent, 14.6% (6) students said sibling, and 43.9% (18) students said other. These responses can be found in Table 5 below.

Table 5

Who's Involved in Student's Education at Home? (n=41)

Who	Number of Student Responses	Percentage
Mother	12	29.3
Father	4	9.8
Grandparent	1	2.4
Sibling	6	14.6
Other	18	43.9
Total	41	100.00

In addition to determining the kind of support that students have available at home, the Student Survey and Parental Involvement Survey analyzed 16 different aspects of parental involvement. Of the 16 different aspects of parental involvement, eleven questions were related to student academics and five questions were related to parent communication with the school.

Each of the sixteen questions were answered using a Likert scale. Five variations of a Likert scale were used in the survey. These variations included both numerical and descriptive responses. There were three variations of numerical responses, which included a scale ranging from 0 to 5 or more hours per week, a scale ranging from 0 to 6 or more hours per week, and a scale ranging from 1 to 5 or more times per week. There were two variations of descriptive responses, which included a scale ranging from never to always and a scale ranging from very unlikely to very likely. In each variation of the Likert scale, the fifth response represented highest score and the first response represented the lowest score. In variations where only four response choices were available, the fourth response represented the highest score and the first response represented the lowest score.

Mean and standard deviation were used to analyze the results of the Student Survey and Parental Involvement Survey. The Student Survey and the Parental Involvement Survey were in dyad form so that the data from the surveys could be cross-examined. In order for the surveys to mirror each other, the surveys consisted of the same questions, but they were written from a different perspective, either the student's perspective or the parent's perspective. Each numbered question asked the same thing on each survey so that responses could be matched up with each other.

Student academics. The Parental Involvement Survey and Student Survey consisted of 11 questions that related to student academics. The surveys found that parents were the most involved with MAP scores. Parents encouraging their child to do their best on MAP had a mean of 4.70 and a standard deviation of 0.67. Parents checking their child's MAP scores had a mean of 4.12 and a standard deviation of 1.09. The mean and standard deviation for each question on the survey can be found in Table 6 on page 31.

In addition, the surveys revealed that students often notified their parents of tests and quizzes in English and science, that parents often checked grades, and that parents often signed grade reports and sent them back to school with their child. The mean for parents being notified about English tests and quizzes was 3.34 with a standard deviation of 1.25. The mean for parents being notified about science tests and quizzes was 3.34 with a standard deviation of 1.19. The mean for parents checking grades was 3.31 with a standard deviation of 1.34. Lastly, the mean for parents signing and returning weekly grade reports was 3.70 with a standard deviation of 1.26. The mean and standard deviation for each question on the survey can be found in Table 6 on page 31.

The Parental Involvement Survey and Student Survey also revealed the areas of academics that parents are the least involved. These areas of academics included the number of hours that parents spent helping their child complete English and science homework, and the number of hours that parents spent helping their child study notes for English and science. The number of hours that parents spent helping their child complete English homework had a mean of 1.36 with a standard deviation of 0.76. The number of hours that parents spent helping their child complete science homework had a mean of 1.29 with a standard deviation on 0.64. The number of hours that parents spent helping their child study English notes had a mean of 1.31 and a standard deviation of 0.60. The number of hours that parents spent helping their child study science notes had a mean of 1.19 and a standard deviation of 0.40. The mean and standard deviation for each question on the survey can be found in Table 6 on page 31.

Parent communication. The Parental Involvement Survey and Student Survey consisted of five questions that related to parent communication. The surveys found that parents most frequently read notes, emails, and texts from the school and returned calls from school. Parents

that read notes, emails, and texts from school had a mean of 4.24 and a standard deviation of 1.06. Parents that returned calls from school had a mean of 4.17 and a standard deviation of 1.30. Parents also often responded that they read newsletters from school, which had a mean of 3.43 and a standard deviation of 1.18. The mean and standard deviation for each question on the survey can be found in Table 6 on page 31.

The Parental Involvement Survey and Student Survey also revealed the areas of communication that parents are the least involved. These areas of communication included calling or emailing the school/teacher and checking their child's planner. The mean for initiating a call or email with the school/teacher was 2.68 with a standard deviation of 1.14. The mean for checking their child's planner was 1.87 with a standard deviation of 1.34. The mean and standard deviation for each question on the survey can be found in Table 6 on page 31.

Table 6

Mean and Standard Deviation of Parental Involvement in Student Education at Home. (n=41)

Aspect of Involvement	Mean	Standard Deviation
Academic		
English Homework	1.36	0.76
Science Homework	1.29	0.64
English Study	1.31	0.60
Science Study	1.19	0.40
English Test	3.34	1.25
Science Test	3.34	1.19
Check Grade	3.31	1.34
Missing Work	2.75	1.49
Sign Grade Report	3.70	1.26
Check MAP Score	4.12	1.09
Encourage Do Best in MAP	4.70	0.67
Communication		
Read Newsletter	3.43	1.18
Read Notes, Email, Texts	4.24	1.06
Check Planner	1.87	1.34
Call, Email School	2.68	1.14
Return Call	4.17	1.30

Student surveys and parent involvement surveys by ethnicity. In order to fully answer research question one, which asked “does parental involvement at home have a positive

relationship with student achievement in school among different ethnicities?”, the data that was collected in the survey had to be sorted by ethnicity. Survey results revealed that of the 41 parent participants, nine participants were White, 13 participants were African American, seventeen participants were Hispanic, and two participants stated their ethnicity was Other. Once again, the data from the surveys was divided into two sections, student academics and parent communication with the school. The Parental Involvement Survey and Student Survey consisted of eleven questions that related to student academics and five questions that related to parent communication.

White. Of the 41 parents that participated in the Parental Involvement Survey, there were nine parents that stated their ethnicity was White. The mean and standard deviation for these surveys is sorted into two categories, student academics and parent communication, below.

Student academics. The surveys found that White parents were the most involved with MAP scores and frequently checking their child’s grades. Parents encouraging their child to do their best on MAP had a mean of 4.80 and a standard deviation of 0.61. Parents checking their child’s MAP scores had a mean of 4.72 and a standard deviation of 0.67. Parents checking their child’s grades had a mean of 4.25 and a standard deviation of 1.19. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

In addition, the surveys revealed that students often notified their parents of tests and quizzes in English and science, and that parents often signed grade reports to be returned at school by the child. The mean for parents being notified about English tests and quizzes was 3.51 with a standard deviation of 1.29. The mean for parents being notified about science tests and quizzes was 3.67 with a standard deviation of 1.34. Lastly, the mean for parents signing and

returning weekly grade reports was 3.98 with a standard deviation of 1.20. The mean and standard deviation for each question on the survey can be found in Table 7 on page 42.

The Parental Involvement Survey and Student Survey also revealed the areas of academics that parents are the least involved, which showed the same results as the surveys in general. These areas of academics included the number of hours that parents spent helping their child complete English and science homework, and the number of hours that parents spent helping their child study notes for English and science. The number of hours that parents spent helping their child complete English homework had a mean of 1.57 with a standard deviation of 0.85. The number of hours that parents spent helping their child complete science homework had a mean of 1.45 with a standard deviation on 0.79. The number of hours that parents spent helping their child study English notes had a mean of 1.44 and a standard deviation of 0.77. The number of hours that parents spent helping their child study science notes had a mean of 1.41 and a standard deviation of 0.71. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Parent communication. The surveys found that White parents most frequently return calls from school and read newsletters. Parents that return calls from school had a mean of 4.67 and a standard deviation of 0.67. Parents that read newsletters from school had a mean of 4.10 and a standard deviation of 0.88. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Parents also responded that they often read notes, emails, and texts from school and that they often initiate calls with school. Parents reading notes, emails, and texts from school had a mean of 3.99 and a standard deviation of 1.03. Parents that initiate calls with school had a mean

of 3.11 and a standard deviation of 0.77. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The Parental Involvement Survey and Student Survey also revealed the area of communication that parents are the least involved. This area of communication was checking their child's planner. The mean for checking their child's planner was 1.07 with a standard deviation of 0.11. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

African American. Of the 41 parents that participated in the Parental Involvement Survey, there were 13 parents that stated their ethnicity was African American. The mean and standard deviation for these surveys is sorted into two categories, student academics and parent communication, below.

Student academics. The surveys found that African American parents were the most involved with checking MAP scores and signing weekly grade reports. Parents checking their child's MAP scores had a mean of 4.33 and a standard deviation of 0.55. Parents signing and returning weekly grade reports had a mean of 4.01 and a standard deviation of 1.09. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

In addition, the surveys revealed that students often notified their parents of tests and quizzes in English and science, that parents often check their child's grades, and that parents often encourage their child to do their best on MAP. The mean for parents being notified about English tests and quizzes was 3.65 with a standard deviation of 1.33. The mean for parents being notified about science tests and quizzes was 3.01 with a standard deviation of 1.31. The mean for parents checking their child's grades was 3.02 with a standard deviation of 1.31. Lastly, the mean for parents encouraging their child to do their best on MAP was 3.89 with a standard

deviation of 1.27. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The Parental Involvement Survey and Student Survey also revealed the areas of academics that parents are the least involved, which showed the same results as the surveys in general and the same results as the surveys completed by White parents. These areas of academics included the number of hours that parents spent helping their child complete English and science homework, and the number of hours that parents spent helping their child study notes for English and science. The number of hours that parents spent helping their child complete English homework had a mean of 1.32 with a standard deviation of 0.75. The number of hours that parents spent helping their child complete science homework had a mean of 1.12 with a standard deviation on 0.72. The number of hours that parents spent helping their child study English notes had a mean of 1.77 and a standard deviation of 0.78. The number of hours that parents spent helping their child study science notes had a mean of 1.01 and a standard deviation of 0.71. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Parent communication. The surveys found that African American parents most frequently have one source of communication, which is returning calls from school. Parents that return calls from school had a mean of 4.05 and a standard deviation of 0.95. Parents also responded that they often read notes, emails, and texts from school, which had a mean of 3.01 and a standard deviation of 1.21. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The Parental Involvement Survey and Student Survey also revealed the areas of communication that parents are the least involved. These areas of communication included

calling or emailing the school/teacher, reading newsletters from school, and checking their child's planner. The mean for initiating a call or email with the school/teacher was 2.33 with a standard deviation of 1.11. The mean for reading newsletters from school was 2.44 with a standard deviation of 1.11. The mean for checking their child's planner was 1.06 with a standard deviation of 0.11. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Hispanic. Of the 41 parents that participated in the Parental Involvement Survey, there were 17 parents that stated their ethnicity was Hispanic. The mean and standard deviation for these surveys is sorted into two categories, student academics and parent communication, below.

Student academics. The surveys found that Hispanic parents were the most involved with MAP scores, signing weekly grade reports, and checking their child's grades. Parents encouraging their child to do their best on MAP had a mean of 3.98 and a standard deviation of 1.27. Parents checking their child's MAP scores had a mean of 3.95 and a standard deviation of 1.12. Parents signing and returning weekly grade reports had a mean of 3.20 and a standard deviation of 1.26. Lastly, parents checking their child's grades had a mean of 3.01 and a standard deviation of 1.31. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

In addition, the surveys revealed that parents often check their child's grades for missing work and that students often notified their parents of tests and quizzes in English and science. Parents checking their child's grades for missing work had a mean of 2.99 and a standard deviation of 1.25. The mean for parents being notified about English tests and quizzes was 2.92 with a standard deviation of 1.39. The mean for parents being notified about science tests and

quizzes was 2.97 with a standard deviation of 1.35. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The Parental Involvement Survey and Student Survey also revealed the areas of academics that parents are the least involved, which showed the same results as the surveys in general, the surveys completed by White parents, and the surveys completed by African American parents. These areas of academics included the number of hours that parents spent helping their child complete English and science homework, and the number of hours that parents spent helping their child study notes for English and science. The number of hours that parents spent helping their child complete English homework had a mean of 1.22 with a standard deviation of 0.45. The number of hours that parents spent helping their child complete science homework had a mean of 1.23 with a standard deviation on 0.72. The number of hours that parents spent helping their child study English notes had a mean of 1.23 and a standard deviation of 0.72. The number of hours that parents spent helping their child study science notes had a mean of 1.25 and a standard deviation of 0.77. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Parent communication. The surveys found that Hispanic parents most frequently read notes, emails, and texts, read newsletters, and return calls from school. Parents that read notes, emails, and texts had a mean of 3.75 and a standard deviation of 1.05. Parents that read newsletters from school had a mean of 3.10 and a standard deviation of 1.01. Parents that return calls from school had a mean of 3.00 and a standard deviation of 1.12. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The Parental Involvement Survey and Student Survey also revealed the areas of communication that parents are the least involved. These areas of communication were initiating

a call with the school/teacher and checking their child's planner. The mean for initiating a call or email with the school/teacher was 2.55 with a standard deviation of 0.78. The mean for checking their child's planner was 1.03 with a standard deviation of 0.10. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Other. Of the 41 parents that participated in the Parental Involvement Survey, there were two parents that stated their ethnicity was Other. The mean and standard deviation for these surveys is sorted into two categories, student academics and parent communication, below.

Student academics. The surveys found that parents who stated their ethnicity as "Other" were the most involved with MAP scores. Parents encouraging their child to do their best on MAP had a mean of 4.44 and a standard deviation of 0.56. Parents checking their child's MAP scores had a mean of 4.21 and a standard deviation of 0.89. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

In addition, the surveys revealed that parents often sign grade reports, that parents often check their child's grades for missing work, and that students often notified their parents of tests and quizzes in English and science. Parents signing grade reports had a mean of 3.22 and a standard deviation of 1.12. Parents checking their child's grades for missing work had a mean of 3.21 and a standard deviation of 1.00. The mean for parents being notified about English tests and quizzes was 3.51 with a standard deviation of 1.11. The mean for parents being notified about science tests and quizzes was 3.51 with a standard deviation of 1.11. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The Parental Involvement Survey and Student Survey also revealed the areas of academics that parents are the least involved, which showed the same results as the surveys in general, the surveys completed by White parents, the surveys completed by African American

parents, and the surveys completed by Hispanic parents. These areas of academics included the number of hours that parents spent helping their child complete English and science homework, and the number of hours that parents spent helping their child study notes for English and science. The number of hours that parents spent helping their child complete English homework had a mean of 1.01 with a standard deviation of 0.21. The number of hours that parents spent helping their child complete science homework had a mean of 1.07 with a standard deviation on 0.20. The number of hours that parents spent helping their child study English notes had a mean of 1.21 and a standard deviation of 0.20. The number of hours that parents spent helping their child study science notes had a mean of 1.07 and a standard deviation of 0.21. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Parent communication. The surveys found that parents who stated their ethnicity as “Other” most frequently read notes, emails, and texts, return calls from school, and read newsletters from school. Parents that read notes, emails, and texts had a mean of 3.00 and a standard deviation of 0.75. Parents that return calls from school had a mean of 2.99 and a standard deviation of 1.16. Parents that read newsletters from school had a mean of 2.45 and a standard deviation of 1.25. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The Parental Involvement Survey and Student Survey also revealed the areas of communication that parents are the least involved. These areas of communication were initiating a call with the school/teacher and checking their child’s planner, which was the same as Hispanic parents. The mean for initiating a call or email with the school/teacher was 1.22 with a standard deviation of 0.88. The mean for checking their child’s planner was 1.01 with a standard

deviation of 0.09. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

Table 7

Mean and Standard Deviation of Parental Involvement at Home According to Ethnicity. (n=41)

Ethnicity (n)	W (9)	AA (13)	H/L (17)	O (2)
Aspect of Involvement	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Academic				
English Homework	1.57 (0.85)	1.32 (0.75)	1.22 (0.45)	1.01 (0.21)
Science Homework	1.45 (0.79)	1.12 (0.72)	1.23 (0.72)	1.07 (0.20)
English Study	1.44 (0.77)	1.77 (0.78)	1.23 (0.72)	1.21 (0.20)
Science Study	1.41(0.71)	1.01 (0.71)	1.25 (0.77)	1.07 (0.21)
English Test	3.51 (1.29)	3.65 (1.33)	2.92 (1.39)	3.51 (1.11)
Science Test	3.67 (1.34)	3.01(1.31)	2.97 (1.35)	3.51 (1.11)
Check Grade	4.25 (1.19)	3.02 (1.31)	3.01 (1.31)	3.21 (1.00)
Missing Work	2.22 (1.18)	2.15 (1.29)	2.99 (1.25)	2.27 (1.55)
Sign Grade Report	3.98 (1.20)	4.01(1.09)	3.20 (1.26)	3.22 (1.12)
Check MAP Score	4.72 (0.67)	4.33 (0.55)	3.95 (1.12)	4.21 (0.89)
Encourage Do Best in MAP	4.80 (0.61)	3.89 (1.27)	3.98 (1.27)	4.44 (0.56)
Communication				
Read Newsletter	4.10 (0.88)	2.44 (1.11)	3.10 (1.01)	2.45 (1.25)
Read Notes, Email, Texts	3.99 (1.03)	3.01 (1.21)	3.75 (1.05)	3.00 (0.75)
Check Planner	1.07 (0.11)	1.06 (0.11)	1.03 (0.10)	1.01 (0.09)
Call School	3.11 (0.77)	2.33 (1.11)	2.55 (0.78)	1.22 (0.88)
Return Call	4.67 (0.67)	4.05 (0.95)	3.00 (1.12)	2.99 (1.16)

Note. W= White, AA= African American, H/L= Hispanic/Latino, A= Asian*, O= Other

*Asian= no participant

Student Achievement Records. In addition to data from the Parent Involvement Survey and Student Survey being used in this research study, student achievement records were used as a data source. The academic records that were looked at were the student's final grades for English and science during the first two trimesters of the 2019-2020 school year.

English final grades. English final grades were analyzed in two different ways. They were analyzed in general by looking at the grades of all participants in the research study and they were broken down by ethnicity. For each participant, the average for their final English grades was found by adding the final grade from Trimester 1 and the final grade from Trimester 2 and dividing the total by 2. The English final grades in general had a mean of 87.7 and a standard deviation of 10.7. The mean and standard deviation for English final grades for all students can be found in Table 12 on pages 47-48.

When broken down by ethnicity, English final grades had differing means. The mean for English final grades of White students was 93.1 with a standard deviation of 6.8. The mean and standard deviation of English final grades for White students can be found in Table 8 on page 45. The mean for English final grades of African American students was 89.5 with a standard deviation of 6.8. The mean and standard deviation of English final grades for African American students can be found in Table 9 on page 45. The mean for English final grades of Hispanic students was 82.4 with a standard deviation of 12.8. The mean and standard deviation of English final grades for Hispanic students can be found in Table 10 on page 46. Lastly, the mean for English final grades of students who stated their ethnicity was Other was 97.0 with a standard deviation of 2.8. The mean and standard deviation of English final grades for students who stated their ethnicity was Other can be found in Table 11 on page 46.

Science final grades. Science final grades were also analyzed in two different ways. They were analyzed in general by looking at the grades of all participants in the research study and they were broken down by ethnicity. For each participant, the average for their final science grades was found by adding the final grade from Trimester 1 and the final grade from Trimester 2 and dividing the total by 2. The science final grades in general had a mean of 91.4 and a standard deviation of 8.1. The mean and standard deviation for science final grades for all students can be found in Table 12 on pages 47-48.

When broken down by ethnicity, science final grades had differing means. The mean for science final grades of White students was 96.0 with a standard deviation of 4.0. The mean and standard deviation of science final grades for White students can be found in Table 8 on page 45. The mean for science final grades of African American students was 91.7 with a standard deviation of 4.6. The mean and standard deviation of science final grades for African American students can be found in Table 9 on page 45. The mean for science final grades of Hispanic students was 87.9 with a standard deviation of 10.3. The mean and standard deviation of science final grades for Hispanic students can be found in Table 10 on page 46. Lastly, the mean for science final grades of students who stated their ethnicity was Other was 99.0 with a standard deviation of 6.4. The mean and standard deviation of science final grades for students who stated their ethnicity was Other can be found in Table 11 on page 46.

English MAP scores. The third source of data that was used in this research study was student English MAP scores. English MAP scores were analyzed in two different ways, just like student achievement records. They were analyzed in general by looking at the MAP scores of all participants in the research study and they were broken down by ethnicity. For each participant, the average for their MAP scores was found by adding their score from fall testing and their

score from winter testing and dividing the total by 2. The English MAP scores in general had a mean of 213.2 and a standard deviation of 10.9. The mean and standard deviation for English MAP scores for all students can be found in Table 12 on pages 47-48.

When broken down by ethnicity, English MAP scores had differing means. The mean for English MAP scores of White students was 222 with a standard deviation of 8.7. The mean and standard deviation of English MAP scores for White students can be found in Table 8 on page 45. The mean for English MAP scores of African American students was 208.2 with a standard deviation of 11.5. The mean and standard deviation of English MAP scores for African American students can be found in Table 9 on page 45. The mean for English MAP scores of Hispanic students was 211.6 with a standard deviation of 9.3. The mean and standard deviation of English MAP scores for Hispanic students can be found in Table 10 on page 46. Lastly, the mean for English MAP scores of students who stated their ethnicity was Other was 219.3 with a standard deviation of 8.8. The mean and standard deviation English MAP scores for students who stated their ethnicity was Other can be found in Table 11 on page 46.

Table 8

White Participants Score of MAP, English and Science Scores. (n=9)

Participant	MAP	English	Science
1	224.5	98	100
4	218	99	100.5
5	229.5	97	95.5
7	232	81	94
13	229	97.5	97
17	211.5	88	96
18	217	91.5	94
25	208	85.5	87.5
36	228.5	100	99.5
Mean	222.00	93.06	96.00
Standard Deviation	8.67	6.83	4.03

Table 9

African American Participants Score of MAP, English and Science Scores. (n=13)

Participant	MAP	English	Science
2	218	86	91
3	201.5	90	86.5
6	203.5	84.5	90
8	224	91.5	97
10	202	91	93.5
14	207.5	102	99.5
27	187.5	84.5	83
31	223.5	90.5	93.5
32	215	90	92
33	216	98	96.5
34	212	90.5	92.5
38	189.5	73.5	86.5
39	207	92	91
Mean	208.23	89.54	91.73
Standard Deviation	11.50	6.84	4.59

Table 10

Hispanic/Latino Participants Score of MAP, English and Science Scores. (n=17)

Participant	MAP	English	Science
9	214	79.5	91
15	196	80.5	81.5
16	216.5	71.5	76
19	204.5	71.5	91.5
20	224	78.5	67
21	224	98	100.5
22	194.5	88	91
23	210	71.5	97
24	222	94	94.5
26	218	91.5	88
28	208.5	78	85.5
29	197.5	46	65
30	214	97.5	97
35	212.5	88.5	86
37	207	87	91.5
40	213.5	85.5	92
41	220.5	93.5	99
Mean	211.59	82.38	87.88
Standard Deviation	9.33	12.84	10.33

Table 11

Other Participants Score of MAP, English and Science Scores. (n=2)

Participant	MAP	English	Science
11	213	95	103.5
12	225.5	99	94.5
Mean	219.25	97.00	99.00
Standard Deviation	8.84	2.83	6.36

Table 12

Participants Score of MAP, English and Science Scores. (n=41)

Participant	MAP	English	Science
1	224.5	98	100
2	218	86	91
3	201.5	90	86.5
4	218	99	100.5
5	229.5	97	95.5
6	203.5	84.5	90
7	232	81	94
8	224	91.5	97
9	214	79.5	91
10	202	91	93.5
11	213	95	103.5
12	225.5	99	94.5
13	229	97.5	97
14	207.5	102	99.5
15	196	80.5	81.5
16	216.5	71.5	76
17	211.5	88	96
18	217	91.5	94
19	204.5	71.5	91.5
20	224	78.5	67
21	224	98	100.5
22	194.5	88	91
23	210	71.5	97
24	222	94	94.5
25	208	85.5	87.5
26	218	91.5	88
27	187.5	84.5	83
28	208.5	78	85.5

29	197.5	46	65
30	214	97.5	97
31	223.5	90.5	93.5
32	215	90	92
33	216	98	96.5
34	212	90.5	92.5
35	212.5	88.5	86
36	228.5	100	99.5
37	207	87	91.5
38	189.5	73.5	86.5
39	207	92	91
40	213.5	85.5	92
41	220.5	93.5	99
Mean	213.18	87.71	91.43
Standard Deviation	10.95	10.65	8.14

Research Question Two

Research question two asked “what type(s) of parental involvement at home have the most significant impact on a student’s achievement in school among different ethnicities?”. To answer research question two, data from the Student Survey and Parent Involvement Survey were analyzed. Pearson correlation was used to analyze data and to determine if there was a significant correlation between student academic achievement and level of parental involvement.

Student survey and parental involvement survey. Data from the Student Survey and Parental Involvement Survey revealed that there were significant positive correlations between parental involvement and student academic achievement. One example of a significant positive correlation is between signing weekly grade reports and initiating calls with school/teachers,

where $r = .586$, $p = .01$. In addition, signing weekly grade reports had a significant positive correlation with returning calls from school, where $r = .479$, $p = .01$. However, most of the data from the Pearson correlation revealed that there was not a significant correlation between parental involvement and student academic achievement. One example of an insignificant correlation is between checking grades and returning calls from school, where $r = .202$. Another example of an insignificant correlation is between signing weekly grade reports and reading notes, emails, and texts from school, where $r = .054$. The data from the Pearson correlation can be found in Table 13 below.

Table 13

Pearson Correlation between Parental Involvement at Home and Student Academic Achievement In School. (n=41)

Type of Involvement	Student Academic Achievement														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. English Homework	1	.844**	.708**	.412**	.101	.078	.223	.167	.267	-.084	.067	.122	-.112	.050	.107
2. Science Homework		1	.651	.355*	-.003	-.036	.150	.076	.108	-.264	-.028	-.042	-.289	-.007	-.059
3. English Study			1	.660	.181	.156	.270	.196	.058	-.171	-.072	-.198	-.237	-.210	-.127
4. Science Study				1	.261	.222	.021	.206	-.130	-.282	-.152	-.185	-.056	-.296	-.109
5. English Test					1	.935	.126	.391	.236	.168	.120	-.002	-.045	.042	-.035
6. Science Test						1	.102	.453	.232	.253	.126	.068	.011	.008	.056
7. Check Grade							1	-.134	.479**	.428**	.349	-.042	-.194	.163	.202
8. Missing Work								1	.383*	-.042	.076	.090	.148	.157	.144
9. Sign Grade Report									1	.348*	.420**	.204	.054	.586**	.479**
10. Check MAP Score										1	.651**	.015	-.005	.071	.203
11. Encourage Do Best in MAP											1	.008	-.175	.134	.164
12. Read Newsletter												1	.467**	.233	.108
13. Read Notes, Email, Texts													1	.248	.315*
14. Call School														1	.324*
15. Return Call															1

Note.

1=English Homework, 2= Science Homework, 3= English Study, 4= Science Study, 5= English Test, 6= Science Test, 7= Check Grade, 8= Check for Missing Work, 9= Sign Weekly Grade Report, 10= Check MAP Score, 11=Encourage Do Best in MAP, 12= Read Newsletter, 13= Read Notes, Emails & Texts, 14= Initiate Call with School, 15= Return Call.

* Correlation is significant at the level $p < .05$, two tailed

** Correlation is significant at the level $p < .01$, two tailed

Summary

The results from the Student Survey and Parental Involvement Survey revealed that the type and extent of parental involvement varies among ethnicities. However, the results for all ethnicities determined that parents were the least involved when it came to helping their child with homework for English and science and helping their child study for English and science.

The results from the student achievement records revealed that the average grade that students received in English and science also varied among ethnicities. These results revealed that White students typically demonstrated the highest academic grades, followed by African American students, and then Hispanic students.

The results from student English MAP scores revealed that the average score that students received also varied among ethnicities. These results revealed that White students typically demonstrated the highest English MAP scores, followed by Hispanic students, and then African American students.

Lastly, the results from the Pearson correlation demonstrated two significant positive correlations. These significant positive correlations were between signing weekly grade reports and initiating calls with school/teachers and signing weekly grade reports and returning calls from school. The rest of the data from the Pearson correlation revealed that there was not a significant correlation between parental involvement and student academic achievement. The results of this research study will be further discussed in Chapter V.

CHAPTER V

Discussion and Conclusion

The purpose of this research study was to determine if there was a relationship between parental involvement at home and student academic achievement in school. In addition, this study investigated whether there are patterns among parental involvement and student academic achievement among different ethnicities. This section will further discuss the results from the research study, as well as, the implications, areas for future study, limitations, and final conclusions.

Discussion

This research study aimed to answer two research questions. Research question one aimed at determining if there was a positive relationship between parental involvement at home and student academic achievement in school among different ethnicities. Research question one was answered using two instruments and two data sources. The instruments utilized were the Parental Involvement Survey and the Student Survey. The data sources that were utilized were English MAP scores and student achievement records for English and science. Mean and standard deviation were found for both of the instruments and data sources. In addition, the data was analyzed by ethnicity to determine if parental involvement and student academic achievement differed by ethnicity.

The research study revealed that parents of White students had the highest levels of communication with the school compared to parents of African American and Hispanic students. In the surveys there were five questions that related to parent communication, and of the five questions, parents of White students showed frequent involvement in four types of communication: returning calls from school, reading newsletters, reading notes, emails, and

texts, and initiating calls with school. Returning calls from school had a mean of 4.67 with a standard deviation of 0.67, reading newsletters had a mean of 4.10 with a standard deviation of 0.88, reading notes, emails, and texts had a mean of 3.99 with a standard deviation of 1.03, and initiating calls with school had a mean of 3.11 and a standard deviation of 0.77. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41. This conclusion is consistent with the findings of Zhang et al. (2016), who found that parents of White children are often more involved in their child's schooling than parents of Hispanic and African American children.

In addition, the research study revealed that parents of African American students and parents of Hispanic students showed similar levels of communication with the school. Of the five questions, parents of African American students and Hispanic students showed occasional involvement in the same four types of communication: returning calls from school, reading newsletters, reading notes, emails, and texts, and initiating calls with school. For parents of African American students, returning calls from school had a mean of 4.05 with a standard deviation of 0.95, reading newsletters had a mean of 2.44 with a standard deviation of 1.11, reading notes, emails, and texts had a mean of 3.01 with a standard deviation of 1.21, and initiating calls with school had a mean of 2.33 and a standard deviation of 1.11. For parents of Hispanic students, returning calls from school had a mean of 3.00 with a standard deviation of 1.12, reading newsletters had a mean of 3.10 with a standard deviation of 1.01, reading notes, emails, and texts had a mean of 3.75 with a standard deviation of 1.05, and initiating calls with school had a mean of 2.55 and a standard deviation of 0.78. The mean and standard deviation for each question on the survey can be found in Table 7 on page 41.

The results from the research study also revealed that White students demonstrated higher levels of academic achievement and higher test scores than African American and Hispanic students. The study found that, on average, White students had higher English final grades than African American and Hispanic students. The mean for English final grades of White students was 93.1 with a standard deviation of 6.8, which can be found in Table 8 on page 45. The mean for English final grades of African American students was 89.5 with a standard deviation of 6.8, which can be found in Table 9 on page 45. The mean for English final grades of Hispanic students was 82.4 with a standard deviation of 12.8, which can be found in Table 10 on page 46. This conclusion is consistent with the findings of White et al. (2016), who found that African American and Hispanic students had lower levels of English proficiency than White students, especially at the middle and high school level.

The study also found that, on average, White students had higher science final grades than African American and Hispanic students. The mean for science final grades of White students was 96.0 with a standard deviation of 4.0, which can be found in Table 8 on page 45. The mean for science final grades of African American students was 91.7 with a standard deviation of 4.6, which can be found in Table 9 on page 45. The mean for science final grades of Hispanic students was 87.9 with a standard deviation of 10.3, which can be found in Table 10 on page 46.

Lastly, the study found that, on average, White students had higher English MAP scores than African American and Hispanic students. The mean for English MAP scores of White students was 222 with a standard deviation of 8.7, which can be found in Table 8 on page 45. The mean for English MAP scores of African American students was 208.2 with a standard deviation of 11.5, which can be found in Table 9 on page 45. The mean for English MAP scores

of Hispanic students was 211.6 with a standard deviation of 9.3, which can be found in Table 10 on page 46.

Research question two aimed at determining which type(s) of parental involvement at home have the most significant impact on a student's academic achievement among different ethnicities. Research question two was answered using two instruments. The instruments utilized were the Parental Involvement Survey and the Student Survey. Pearson correlation was run on the surveys to determine if there were significant positive correlations between parental involvement and student academic achievement.

The data revealed that there were two significant positive correlations between parental involvement and student academic achievement. The first positive correlation that was revealed was between parents signing weekly grade reports and parents initiating calls with the school, where $r = .586$, $p = .01$. The second positive correlation that was revealed was between parents signing weekly grade reports and parents returning calls from school, where $r = .479$, $p = .01$.

While there were two significant positive correlations that were found between parental involvement and student academic achievement, most of the data from the Pearson correlation revealed that there was not a significant correlation between parental involvement and student academic achievement. The first example of an insignificant correlation is between parents checking grades and parents returning calls from school, where $r = .202$. A second example of an insignificant correlation is between parents signing weekly grade reports and parents reading notes, emails, and texts from school, where $r = .054$. All of the data from the Pearson correlation can be found in Table 13 on page 50.

The researcher had three hypotheses for this research study. The first hypothesis was that parental involvement at home would have a positive relationship with student academic

achievement in school among all ethnicities. This hypothesis was incorrect, only a relationship between parental involvement of White parents and student academic achievement was found. The second hypothesis was that students, regardless of ethnicity, would demonstrate higher academic achievement in school when parents showed involvement at home than students whose parents showed little or no involvement. This hypothesis was incorrect, the results demonstrated that all parents showed involvement. The third hypothesis was that students whose parents showed positive parental involvement at home would have higher academic achievement than students whose parents were over-involved. This hypothesis was incorrect, the results demonstrated that all parents showed positive parental involvement and that no parents were over-involved.

Implications

One implication drawn from this research study is that there are gaps between the academic achievement of White, African American, and Hispanic students at the middle school level. The study found that in English and science, White students had the highest levels of academic achievement followed by African American students, and then Hispanic students. When looking at English MAP scores, White students had the highest scores followed by Hispanic students, and then African American students.

A second implication drawn from this research study is that there are variations in communication levels between parents and schools among different ethnicities. The study found that parents of White students had higher levels of communication with the school/teacher than parents of African American and Hispanic students.

These implications are important to educators so that they can work toward decreasing the academic achievement gap among ethnicities. It is important that educators promote high

levels of achievement among all students and set high expectations for their students.

Additionally, it is important for educators to know which method of communication is best for each family so that they can ensure that there is open communication between them and their students' parents.

These implications are important to researchers so that they can work on conducting research in more locations to see if these results are consistent with a larger sample. In addition, researchers can conduct future studies to determine how different types of parental involvement impact student academic achievement in school. By determining how different types of parental involvement impact student academic achievement, schools can implement programs that help parents practice positive parental involvement, and hopefully, decrease the academic achievement gap among students with different ethnicities.

Future Study

This research study lays the foundation for future research. Replicating this research study in additional diverse areas across the United States would allow for a larger sample of data to be analyzed. By analyzing a larger sample of data, the results would be more representative of the United States' population. Additionally, by replicating the research study in more areas, the results would allow for more ethnicities to be represented in the sample.

In addition, it would be beneficial to replicate this research study in kindergarten through twelfth grade. Replicating the research study in all grade levels would allow for a large sample of data to be collected. It would also allow for researchers to analyze the data among the different grade levels to see the relationship between parental involvement and student academic achievement, and how the relationship changes across grade levels.

Lastly, future research could benefit from including all student academic records and MAP testing scores in their data analysis. Since student academic achievement can vary by subject, final grades from all core subjects, English, math, science, and social studies, should be analyzed. In addition, MAP testing scores can vary by subject, so it would be beneficial to include MAP scores for English, math, and science in future analyses.

Limitations

There were two limitations with this research study. The first limitation of this research study is that it was limited to the seventh-grade students in one school district in the Chicago suburbs. Due to this, the results cannot be representative of a larger population or of another grade level. Additionally, the results were not compared to other similar school districts in the area. That being said, the data from this research study may be skewed since it only represents one school district.

The second limitation of this research study is that final grades were only analyzed for specific subjects and only the students' English MAP test scores were analyzed. Final grades may be biased based on teacher perceptions of the student and English and science grades may not be representative of a students' academic achievement. In addition, MAP test scores may not be representative of a students' achievement level based on the students' perception of standardized testing and if the student has testing anxiety.

Conclusion

The purpose of this research study was to determine if there was a relationship between parental involvement at home and student academic achievement in school. In addition, it investigated whether there are patterns among parental involvement and student academic achievement among different ethnicities. The literature that was examined for this research

study discussed the various types of parental involvement, how teachers and schools can help promote parental involvement, and how parental involvement differs among ethnicities.

The researcher first became interested in this research topic during her first year of teaching. The district in which she was employed had an equally diverse population of students, where about one-third of the students were White, about one-third of the students were African American, and about one-third of the students were Hispanic. In the school there appeared to be equal levels of academic achievement among the different ethnicities. The researcher observed that students who had parents that were more involved in their academics appeared to demonstrate higher levels of academic achievement than students who had parents that were less involved in their academics. This research study gave the researcher the opportunity to test these observations to determine if there was a positive relationship between parental involvement and student academic achievement among different ethnicities.

The results of the study indicated that White students had parents who demonstrated the highest level of communication with the school, and that African American and Hispanic students had parents that showed lower levels of communication with the school. The results of the study also indicated that White students demonstrated the highest levels of academic achievement when it came to final English grades and final science grades. White students also demonstrated higher English MAP scores than African American and Hispanic students. Lastly, the results of the study indicated that there were only two significant positive correlations between parental involvement and student academic achievement. They were between parents signing weekly grade reports and parents initiating calls with the school and between parents signing weekly grade reports and parents returning calls from school.

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Appendix A
Survey Instruments

Parental Involvement Survey

The purpose of this survey is to examine the amount of parental/guardian involvement displayed throughout your student's in middle school. It will take approximately 10-12 minutes to complete. Your answers to the questions will remain anonymous and will not be linked back to you in any way. You may choose not to take the survey. If you begin the survey, you may end it at any point without penalty. Thank you for your participation!

Please circle the selection that is most appropriate for each answer below.

1	What is your relationship to the child?	Mother	Father	Grandparent	Other	
2	What is your ethnicity?	White/ Caucasian	African American/ Black	Hispanic/ Latino	Asian/ Pacific Islander	Native American/ American Indian
3	How many hours per week do you assist your child with English homework?	0-2	3-4	5-6	More than 6	
4	How many hours per week do you assist your child with studying English notes?	0-1	2-3	4-5	More than 5	
5	How often does your child tell you that they have an upcoming test/quiz in English ?	Never	Rarely	Sometimes	Often	Always
6	How many hours per week do you assist your child with science homework?	0-2	3-4	5-6	More than 6	
7	How many hours per week do you assist your child with studying science notes?	0-1	2-3	4-5	More than 5	
8	How often does your child tell you that they have an upcoming test/quiz in science ?	Never	Rarely	Sometimes	Often	Always
9	How many hours per week do you assist your child with other subjects' homework?	0-2	3-4	5-6	More than 6	
10	How many times a week do you check your child's grades?	1	2	3	4	5 or more
11	How often do you send weekly signed grade reports back to school?	Never	Rarely	Sometimes	Often	Always

12	How often do you check your child's grades for missing work?	Never	Rarely	Sometimes	Often	Always
13	How many times a week do you check your child's planner?	1	2	3	4	5 or more
14	How often do you read newsletters from school?	Never	Rarely	Sometimes	Often	Always
15	How often do you read notes, emails, texts from school?	Never	Rarely	Sometimes	Often	Always
16	How often do you call or email teachers about your child's progress?	Never	Rarely	Sometimes	Often	Always
17	How often do you return calls from school?	Never	Rarely	Sometimes	Often	Always
18	What is the likelihood of you checking your child's MAP scores?	Very unlikely	Somewhat Unlikely	Neutral	Somewhat likely	Very likely
19	What is the likelihood of you encouraging your child to do their best on MAP?	Very unlikely	Somewhat Unlikely	Neutral	Somewhat likely	Very likely

Thank you very much for your time. Please remember to return this survey to your student's teacher.

Appendix B
Survey Instruments
Survey for Students

The purpose of this survey is to examine the amount of your parent involvement displayed throughout your education in middle school. It will take approximately 10-12 minutes to complete. Your answers to the questions will remain anonymous and will not be linked back to you in any way. You may choose not to take the survey. If you begin the survey, you may end it at any point without penalty. Thank you for your participation!

Please circle the selection that is most appropriate for each answer below.

1	Who at home is able to assist you with homework?	Mother	Father	Grandparent	Sibling	Other
2	What is your ethnicity?	White/ Caucasian	African American/ Black	Hispanic/ Latino	Asian/ Pacific Islander	Native American/ American Indian
3	How many hours per week does your parent assist you with English homework?	0-2	3-4	5-6	More than 6	
4	How many hours per week does your parent assist you with studying English notes?	0-1	2-3	4-5	More than 5	
5	How often do you tell your parent(s) about an upcoming test/quiz in English ?	Never	Rarely	Sometimes	Often	Always
6	How many hours per week does your parent assist you with science homework?	0-2	3-4	5-6	More than 6	
7	How many hours per week does your parent assist you with studying science notes?	0-1	2-3	4-5	More than 5	
8	How often do you tell your parent(s) about an upcoming test/quiz in science ?	Never	Rarely	Sometimes	Often	Always
9	How many hours per week do your parents assist you with other subjects' homework?	0-2	3-4	5-6	More than 6	
10	How many times a week do your parents check your grades?	1	2	3	4	5 or more
11	How often do your parents send weekly signed grade reports back to school?	Never	Rarely	Sometimes	Often	Always

12	How often do your parents check your grades for missing work?	Never	Rarely	Sometimes	Often	Always
13	How many times a week do your parents check your planner?	1	2	3	4	5 or more
14	How often do you bring newsletters from school for your parents to read?	Never	Rarely	Sometimes	Often	Always
15	How often do your parents read notes, emails, texts from school?	Never	Rarely	Sometimes	Often	Always
16	How often do your parents call or email teachers about your progress in school?	Never	Rarely	Sometimes	Often	Always
17	How often do your parents return calls from school?	Never	Rarely	Sometimes	Often	Always
18	What is the likelihood of your parent(s) checking your MAP scores?	Very unlikely	Somewhat Unlikely	Neutral	Somewhat likely	Very likely
19	What is the likelihood of your parent(s) encouraging you to do your best on MAP?	Very unlikely	Somewhat Unlikely	Neutral	Somewhat likely	Very likely

Appendix C
IRB Approval Letter

February 10, 2020

Laura Smokoska
Sham'ah Md-Yunus
Teaching Learning and Foundations

Dear Laura,

Thank you for submitting the research protocol titled, "An Investigation of Parental Involvement and Student Academic Achievement in Middle School" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 2/10/2020, has certified this protocol meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 20-025. You are approved to proceed with your study.

The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 217-581-8576
Fax: 217-581-7181
Email: eiuirb@www.eiu.edu

Thank you for your cooperation, and the best of success with your research.

John Bickford, Chairperson
Institutional Review Board
Telephone: 217-581-7881
Email: jbickford@eiu.edu

Appendix D
Recruitment Letter

Dear Parent/Guardian,

My name is Laura Smokoska and I am currently a science teacher at Columbia Central, as well as a student at Eastern Illinois University. I am working with Dr. Md-Yunus to obtain my Master's Degree in Curriculum and Instruction and I am in the process of conducting research for my thesis. My thesis involves studying how different types of parental involvement (at home vs. communicating with school) impact student academic achievement. The study has been approved by Steger School District 194 and Eastern Illinois University.

I am requesting your written consent to allow your son/daughter to participate in a survey. By participating in the survey, your son or daughter and their answers will remain anonymous. The survey is 19 questions, will be completed at home, and should take no longer than 10-12 minutes to complete. The questions on the survey require a response to be circled, and ask questions related to parental involvement with homework, parental involvement with grades, and parental communication with school.

In addition to your child's participation, I am requesting your voluntary participation in the survey. My research would be benefited by having parental involvement in the survey. By participating in the survey, your answers will remain anonymous. The survey is 19 questions, will be completed at home, and should take no longer than 10-12 minutes.

In addition to the survey, your child's MAP scores and final grades from Trimester 1 and 2 will be analyzed. Your child's MAP scores and final grades will be kept confidential and anonymous. Your child's MAP scores and final grades will only be used if you consent to participating in the survey.

The individual results of this study will remain confidential and anonymous. The data from this research will be utilized for this thesis project only. Steger School District 194 has granted permission for this research study. Your participation and your child's participation are voluntary, and you can choose to withdrawal from participating in the study at any time.

Your approval to have your son or daughter participate, along with your consent to participate by filling out a survey would be greatly appreciated. Please fill out and return this form by Friday, February 14, 2020. Please feel free to contact me if you have any questions, require additional information, or would like to inspect the survey. I can be contacted at lsmokoska@sd194.org or 708.753.4721.

Sincerely,

Laura Smokoska- Science Teacher

Your child's name: _____

By signing here _____, you agree to have your child participate in this research study.

Please check this box if you choose to have your child opt out of this research study.

Appendix E
Participants' MAP, English and Science Scores

Assigned Number	Student Ethnicity	Fall MAP	Winter MAP	T1 English	T2 English	T1 Science	T2 Science
1	White	223	226	A+ 99	A 97	A+ 101	A+ 99
2	African American	217	219	B 87	B 85	A 93	B+ 89
3	African American	193	210	B+ 89	A- 91	A- 90	B 83
4	White	216	220	A+ 101	A 97	A+ 100	A+ 101
5	White	227	232	A 97	A 97	A 96	A 95
6	African American	196	211	B- 81	B+ 88	A 95	B 85
7	White	230	234	C+ 79	B 83	A 94	A 94
8	African American	225	223	A- 92	A- 91	A 97	A 97
9	Hispanic	214	214	C- 70	B+ 89	A- 91	A- 91
10	African American	194	210	A- 91	A- 91	A 95	A- 92
11	Other	213	213	A 95	A 95	A+ 103	A+ 104
12	Other	223	228	A+ 100	A 98	A 95	A 94
13	White	229	229	A 98	A 97	A 96	A 98
14	African American	206	209	A+ 103	A+ 101	A+ 102	A 97
15	Hispanic	191	201	B- 82	C+ 79	B 86	C 77
16	Hispanic	216	217	D+ 69	C 74	D+ 68	B 84
17	White	212	211	B 85	A- 91	A 97	A 95
18	White	221	213	A- 90	A 93	A 96	A- 92
19	Hispanic	193	216	D 66	C 77	A- 90	A 93
20	Hispanic	223	225	C 73	B 84	B 85	F 49

21	Hispanic	222	226	A+ 100	A 96	A+ 101	A+ 100
22	Hispanic	187	202	A- 91	B 85	A- 92	A- 90
23	Hispanic	202	218	D+ 68	C 75	A 98	A 96
24	Hispanic	226	218	A 96	A- 92	A 95	A 94
25	White	203	213	B- 82	B+ 89	A 93	B- 82
26	Hispanic	214	222	A 96	B 87	B+ 88	B+ 88
27	African American	183	192	B- 82	B 87	B 87	C+ 79
28	Hispanic	204	213	C 75	B- 81	A 93	C+ 78
29	Hispanic	191	204	F 48	F 44	D 63	D 67
30	Hispanic	201	227	A+ 99	A 96	A 96	A 98
31	African American	223	224	A- 90	A- 91	A 95	A- 92
32	African American	213	217	B 86	A 94	B+ 89	A 95
33	African American	216	216	A 98	A 98	A 93	A+ 100
34	African American	210	214	A- 92	B+ 89	A- 92	A 93
35	Hispanic	207	218	B+ 88	B+ 89	B+ 89	B 83
36	White	228	229	A+ 101	A+ 99	A+ 99	A+ 100
37	Hispanic	200	214	A- 90	B 84	A 93	A- 90
38	African American	191	188	D 66	B- 81	B 86	B 87
39	African American	N/A	207	A- 90	A 94	B+ 88	A 94
40	Hispanic	209	218	B+ 88	B 83	A- 90	A 94
41	Hispanic	221	220	A- 92	A 95	A 97	A+ 101