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Understanding Effective Parental Involvement Activities Across SES

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Walden University
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Abstract

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by

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MA, Strayer University, 2005

BS, Strayer University, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Parental involvement is pivotal for impoverished middle school students to achieve academic achievement. The purpose of this study was to evaluate the relationship of parental involvement activities and academic achievement for impoverished middle school students. Epstein's six parental involvement types was the theoretical framework for the research study. The six independent variables of parental involvement were parenting, volunteering, learning at home, decision making, communicating, and collaborating with community The relationship for each parental involvement activated to academic achievement as measured by grade point average was evaluated. A quantitative research design was applied using archival data from the U.S. Department of Education. A multinominal logistic regression analysis was used to analyze the research questions. The dependent variable parental involvement was ordinal in nature as categorized as Mostly As, Mostly Bs, Mostly Cs, and Mostly Ds. Three of the six parental involvement activities revealed a statistical significance of $p < 0.05$: three parental involvement activities were volunteering, communication, and decision making. These activities were aligned with research of traditional parental involvement activities. The implication for positive social change was effective parental involvement activities can help mitigate the effects of poverty for future generations.

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Dedication

I want to dedicate this work to my Abba Father who gave this assignment to me through my son, Byron. My early teacher grandmother Betty Lou was instrumental in this journey and showed me the power of love and support regardless of your socioeconomic status and education level. I pray this work will bring my Abba Father glory and make my grandmother Betty Lou smile from heaven.

I would like to thank my husband for his strength, support on this journey, and being Mr. Mom to me, Brittany, and Bryon. I would like to thank my daughter, Brittany, for your laughter in the process. I hope me completing this PhD program will encourage you to continue and complete your MD program. I would like to thank my son, Bryon, for opening my eyes to the need of others. I would like to thank my Aunt Sandy for encouraging me to multitask yet focus on completing this program. Lastly, I would like to thank my mom, who has been with me through day or night and believing in me even when I did not believe in myself.

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I would like to thank Dr. Rochelle Michel for her firm but gentle push across this finish line. My completion of the program would not be possible without Dr. Rochelle Michel. I would like to thank Dr. Valdez for his guidance with the literature review.

I would like to thank Dr. Caitlin Faas for being with me from my prospectus and proposal drafts and analyzing my data. I would like to thank my academic advisor, Catherine Heck. With your help, I got up to continue to run and complete this race. I would also like to thank Research Design and Methodology Office Hours Dr. Ozcan and Dr. Lui for your guidance and teaching during office hours. I would like to thank Dr. Reggie Taylor for your guidance in residency four and Quantitative advising.

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Chapter 1: Introduction to the Study

Education is a powerful predictor of success, one vital for escaping poverty, but disparities exist in educational outcomes based on race and class (Eyman & Dilek, 2020). Specifically, poverty has a negative impact on academic achievement. For this study, the Department of Human Services (2021) poverty guidelines are used to determine whether a family is living in poverty or not. Based on these guidelines, a family of four with an annual income of $26,500 is living in poverty (U.S. Department of Health & Human Services & ASPE, 2015). The income threshold model of poverty measures a household's resources against its basic needs: food, shelter, and clothing. Socio-economic status (SES) is used to expand this model by measuring a person's or household's access to resources— including goods, services, information, and social connections— that are valued by society.

Background

Poverty has also been linked to student development. Students living in poverty have limited access to health care, are exposed to environmental toxins, make poor health-related choices regarding nutrition and tobacco use, have increased exposure to stress, and experience increased psychological distress, all factors negatively associated with socioeconomic indicators (Cho et al., 2015). Moreover, many Americans associate personal attributes or worth with perceived poverty and wealth. The uneven support for programs designed to benefit the poor and reduce inequalities, including the education gap, is driven by perceived poverty and wealth (Cho et al., 2015).

To address the academic achievement gap, it is critical to understand the efforts that lead to academic achievement. Academic achievement is a product of individual attributes (e.g., cognitive ability and psychosocial maturity) and environmental influences (e.g., interactions at home and school, neighborhood safety, and resource availability; Vance, 2014). Accordingly, youth living in poverty areas can achieve academic excellence, given the right resources and support. Parental involvement is critical for families living in poverty areas who have limited resources due to their families' financial constraints (Bibo, 2020). This achievement is vital for children and adolescents to grow into adults who contribute to economic, social, and community activities in their own society. At the same time, parental involvement can also benefit educators, community leaders, and parents themselves. Unfortunately, current parental participation levels are low in many poor neighborhoods, and schools find it difficult to create programs that engage parents (Bower & Griffin, 2011).

Problem Statement

It is a significant challenge for schools to improve and increase parental involvement among low-income families (Bower, 2011). Households living in poverty have a unique set of obstacles, including challenging work schedules, lack of transportation, and lack of childcare. Bower (2011) indicated that further research is needed to understand culturally relevant parental involvement activities among high-minority and high-poverty schools. In terms of traditional strategies for parental involvement, such as volunteering at school and attending Parent Teacher Association (PTA) meetings, African American and Latino families often have low participation rates

(Brisson & Lechuga-Pena, 2018). But parents who are not able to participate in school activities expend great effort to have informal conversations and make unscheduled visits (Bower, 2011). They may view these activities as ways to demonstrate their school involvement to teachers; however, administrators tend to view such activities as obtrusive (Brisson & Lechuga-Pena, 2018). Furthermore, families in poverty are alienated by middle-class families who perceive their lack of traditional involvement as a lack of caring and concern for their children's education (Brisson & Lechuga-Pena, 2018).

The Epstein model of parental involvement, which has been adopted by the National Parent Teacher Association (PTA), includes six strategies: parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community (Epstein 2005, 2011). The concern is identifying the activities that impact impoverished middle school students. Students or a child's academic standing is often defined as academic success. This contrast from academic achievement measured by the students' overall goals and aspiration (Jurado, 2014; Pauynice, 2020). However, academic success and academic achievement are intertwined with the same meaning that evaluate students current progress and standing. Grade point average (GPA) is used often to calculate success and achievement (Jurado, 2014; Pauynice, 2020). Few studies evaluate the effectiveness of parental involvement among high-poverty families using Epstein's model (Bower, 2011). Effectiveness of parental involvement is measured by students' GPAs. It is a challenge and gap in research for schools to understand the parental involvement activities for impoverished middle school students' that increase GPAs. Grading scales are used to evaluate GPA. The typical scale ranges incrementally,

with zero being the lowest score and four being the highest score. However, in this archival data set, GPA is an ordinal variable with five categories. Parental involvement, as it relates to academic achievement, is more urgent in this era of accountability and high-stakes testing (Newman et al., 2019; Zhou, 2014).

Purpose of the Study

The quantitative research study addressed a gap in the literature by exploring whether impoverished middle school students' academic achievement, as measured by GPA in this study, differs across Epstein's six parental involvement activities. Wang et al., (2019) indicate that this student population is understudied in terms of effective parental involvement activities. This study will be examining the relationship between Epstein's six parental involvement activities and GPA. Given the ordinal nature of the dependent variable, an ordinal logistic regression analysis was used to analyze the research data.

Research Question and Hypothesis

This study addresses one research question: What is the relationship between Epstein's six parental involvement activities and student academic achievement, as measured by GPA, among middle school students from high-poverty families? Parental involvement activities were used as the independent variables. GPA was used to measure academic achievement and serve as the dependent variable.

H_0: There is no relationship between the six parental involvement activities and student GPA among middle school students from high poverty families.

H_A: There is a relationship between the six parental involvement activities and student GPA among middle school students from high poverty families.

Theoretical Framework

This study used two theoretical frameworks, Epstein model (Epstein, 2005, 2011) and Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1977). Epstein's model prescribed six parental involvement activities that were used as the independent variables for this study. Bronfenbrenner's ecological systems are foundational to Epstein's model. The ecological system details the manner ones' environment and individuals in the environment are pivotal to human development. The underlying theme for both theories is human development is cultivated through experiences with individuals and systems in ones' sphere. This understanding provides greater awareness of the parental involvement activities that lead to academic achievement for middle school students living in poverty.

Nature of Study

This study was quantitative and used a non-experimental correlational research design. Specifically, it analyzed data from The National Center for Education Statistics (NCES), focusing on the National Household Education Surveys (NHES) Program, which includes the Parent and Family Involvement in Education Survey (PFI) completed in 2019. The PFI asks specific questions related to parental involvement activities. Each question is categorized based on one of the six parental involvement activities. The target population consists of 45,857 participants that completed the PFI.

In this study, parental involvement was the overarching factor used in the analysis, classified into six types of parental involvement. The six types of parental involvement were used as the independent variables. Student academic achievement, measured by GPA, is the dependent variable. In this archival data set, GPA has five categories, making it appropriate for use in an ordinal logistic regression analysis. The PFI asks participants to indicate their child's overall grades, across all subjects: Mostly As, Mostly Bs, Mostly Cs, Mostly Ds or lower, and this child's school does not give these grades.

IBM SPSS Statistics for Windows, Version 27.0, was used to analyze the data. An ordinal logistic regression analysis was conducted to examine the relationship between the parental involvement activities and the four levels of GPA.

Definitions

This section defines several terms relevant to the proposed study, focusing on the strategies in Epstein's model of parental involvement: parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community (Epstein 2005, 2011). The theory of overlapping spheres of influence provides a broader perspective on parental involvement compared to traditional models.

Collaborating with the community: Collaborations between schools and communities involve transferring and sharing resources between the school and community entities. Community entities include area businesses, nonprofits, and civic, religious, and cultural organizations, among other groups (Epstein 2005, 2011). Benefits are realized for all parties involved. Tutoring programs, health services, cultural events,

service opportunities, summer programs, and part-time jobs are examples of collaborating with the community (Epstein, 2008).

Communicating: Multiple methods are used to communicate between families and schools. Schools provide written communication, such as through notes sent home or flyers about important events and activities (Epstein 2005, 2011). Parents provide communication to schools about the child's health and educational history. A school's website is an additional source of communication with parents and families. Two-way communication is vital between schools and families, as it promotes a healthy relationship between them and corrects each party's preconceived notions.

Decision-making: Participating in school governance committees or organizations, such as parent-teacher association, is a form of decision-making. Parents may assume leadership roles that involve distributing information to other parents. Additionally, parents can actively voice their ideals by developing mission statements, or by designing, reviewing, and improving school policies that affect students and families (Epstein, 2008).

Learning at home: Parents can support their children by helping with homework or providing educational opportunities, such as trips to museums. Goal setting for report cards is also an example of learning at home (Epstein, 2008). This form of parenting produces a learning-focused family environment and encourages parents to interact with the school curriculum (Epstein 2005, 2011).

Parenting: Parenting activities require parents to understand child and adolescent development and foster an environment at home that supports children as students.

Parents differ from teachers because parents maintain a lifelong commitment to their children, while the role of a teacher is relatively limited. Activities that support parenting include providing information to parents to enhance their child's development, health, safety, or home conditions, such as creating spaces at home for students to complete their homework and schoolwork and support student learning (Epstein 2005, 2011).

Volunteering: Three basic methods are available for volunteering in schools. Volunteering in schools or classrooms—such as tutoring or assisting administrators—is helpful to teachers. Fundraisers are another way parents can volunteer and promote community in the school. Other volunteer opportunities include training other parents, volunteering as mentors and coaches, and reaching out to parents to serve as neighborhood representatives and interpreters (Epstein, 2008).

Assumptions

The study's ordinal dependent variable is student academic achievement. The questionnaire requests parents to report their students' performance based on a grading scale from 0.00 to 4.00. It is assumed that parents' responses accurately report students' GPAs based on their report cards. It is assumed that parents' responses are based on the current school year of 2018 - 2019. It is assumed that parents understood all the questions they answered on the survey.

Scope and Delimitations

This study examines the relationships between student academic achievement and defined parental involvement activities for families living in poverty. The study used existing archival data with three criteria exist in this study: (a) parents must have students

enrolled in a public middle school, (b) families must be living in poverty as outlined by federal poverty guidelines, and (c) parents must have completed the NHES program for 2019.

Limitations of Study

This study intends to use secondary data from the NHES program of 2019. NHES data collection process posed a limitation to the study given its address-based sample collection. The target population is often under-sampled due to the response rate. Non-response bias may have occurred since some relevant households may not have participated in the survey. To address this limitation, over-sampling was used to ensure adequate responses were received from the targeted populations. The study focused on students living in poverty with different life experiences.

Significance

Families living in poverty have unique sets of challenges that affect how parental involvement influences student academic achievement. Studies conducted in the past have focused on the traditional aspects of parental involvement and research, suggesting that high-poverty families do not benefit from traditional parental involvement activities, even though they arguably need it the most (Bower, 2011). Academic achievement is essential for equipping impoverished students with the resources needed to move out of poverty.

Other studies focused on understanding parental involvement across SES and elementary school settings. Brueck et al. (2012) identified the positive impact parental involvement had on academic mastery for college. Additional studies are needed to

account for differences in SES, ethnicity, academic, and career goals. Furthermore, current studies on general parental involvement activities offer limited data on their effect in middle school (Matthews et al., 2017; Strickland, 2015).

Educational attainment, nurtured through parental involvement, reduces, and eliminates the effects of poverty. Poverty is directly related to low academic achievement (Ladd, 2012). The effects of low academic achievement can be observed in single-parent households, increased rates of poverty for future generations, and increased rates of crime (Ladd, 2012). Furthermore, students' poor academic achievement is taxing on families, communities, and governmental agencies. Social change can be achieved by providing effective parental involvement activities to families. This study will provide an understanding of which parental involvement activities are related to the academic achievement of impoverished students for middle school students.

Summary

Chapter 1 provided background on the current state of parental involvement for families living in poverty, as well as its effects on student academic achievement. A gap in research exists on which types of parental involvement are most effective for families living in poverty. The study evaluates parental involvement activities that lead to academic success, supported by the theoretical framework of Epstein's model. Chapter 2 will review the literature that is foundational to the research study. Specifically, it will discuss the literature, as well as foundational and current research relevant to parental involvement activities and academic achievement. Lastly, it will discuss key variables for

the research study, along with the benefits of academic achievement for families living in poverty.

Chapter 2: Literature Review

Introduction

Academic achievement is entwined with the interaction of personal social, and environmental factors. Teachers, school administrators, education researchers, and policy maker and social agencies are committed in identifying factors that affect academic success of school aged students (Wilder, 2014). An abundance of research exists on closing the achievement gap for primary grades beyond teachers' instructional control in the classroom or school (Martin, 2015; Wilder, 2014). Student related variables and parent variables are vital in understanding the impact parental involvement has on academic achievement (Otani, 2019). Student related variables are socioeconomic status (SES), gender, age, and ethnicity. The Epstein parental involvement model prescribes six parental involvement activities is used to evaluate parenting variables (Epstein, 2008).

Effective solutions to close the achievement gap extends beyond appropriate instruction in the subject areas especially for students that are struggling academically. In efforts to closing the achievement gap, a multifaceted and comprehensive perspectives must be considered to include social and psychological constructs for low achieving or at-risk students. This process includes understanding the influences of family and school contexts and the relationship within the influences (Bellibas, 2016). Evaluating the influences is essential for understanding academic achievement of secondary students. The development stage for secondary students requires a different set of psychological and social task as compared elementary counterparts. The age between 12 and 18 is a

significant period of transition. During this period, secondary students strive to develop a sense of independence.

Research suggests the pursuit for independence is strongly connected with both intrapersonal and interpersonal relationship and context (Yujeong et al., 2018). This construct is supported by Bronfenbrenner's ecological system indicating adolescent psychological development is contingent on complex, dynamic and reciprocal context (Bronfenbrenner, 1977).

Chapter 2 includes a detail discussion on the existing literature of the dependent and independent variable for parents living in poverty. In this chapter, the theoretical framework is discussed as it relates to the current research study. The independent, dependent of the research is evaluated. The trend of parental involvement is discussed with understanding the existing research gap for this study.

Literature Search Strategy

Library Databases and Key Terms

The Walden University Library provided E-Research by discipline and the literature source for this study. The specific research databases used for this study are Academic Search Premier, ProQuest Central, ProQuest Dissertation & Thesis, Google Scholar, APA PsycInfo and ERIC. *Parental involvement, parenting activity, academic achievement, grade point average, academic achievement, academic success*, *poverty* and *Title 1 schools* are the key terms used in the search feature.

Three criteria were used in the advance search function: full text, scholarly (peer reviewed) journal, and publication date. Publication date for this research study ranged

between 1977 and 2021. The dated journals provided references on the theoretical framework and foundational work. The most up to date research provided references on the current trends of parental involvement and academic achievement. In addition, the research assisted in identifying potential gaps in the current literature.

Theoretical Foundation

Two theoretical foundations are used in this study: Bronfenbrenner's (1977) ecology of human development and Epstein's (2005, 2011) model. Bronfenbrenner's theory is the foundational model for this study with Epstein's theory detail key aspects of family and community that leads to academic achievement for student living in poverty. Epstein's theory tenets are the independent variables for this study.

Bronfenbrenner (1977) proposed human development as the focus on the progressive accommodation, throughout the lifespan, between the growing human organism and the changing environment in which one lives and grows. Bronfenbrenner coined this process as the ecology of human development. The ecology of human development has two key attributes: the formation of human development, and the environment in which human development is fostered. The process consists of relationships obtained within and between immediate settings as well as larger social context, both formal and informal, in which the settings are embedded (Bronfenbrenner, 1977). The environment consists of a nested arrangement of structures, each contained within the next. Within the environment of human develop are five systems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem.

Microsystem is the interaction between the developing person, environment, and their immediate setting (Bronfenbrenner, 1977). Setting is described as a place with a physical feature in which individuals engage in specific activities associated with a household role. Family, educations, and communities, such as religious institutions, greatly impact this setting. The system consists of those in direct contact with the student.

Mesosystem includes the interrelations between the major settings containing the developing person at a particular point in their life (Bronfenbrenner, 1977). Interaction between family, school, churches, and peer groups are examples of mesosystem. Mesosystem may also include the attitude of the student towards a teacher based on experience. A teacher who commends a student for a good job on an assignment may yield increased efforts from the student on future assignments.

Exosystem is an extension of the mesosystem that encompasses specific social structures, formal and informal. There may not be a direct interaction between the developing person and their social structure. However, the developing person's immediate setting is influenced. This includes major institutions in society operating on a singular local level, like the interaction between workplaces, neighborhoods, mass media, agencies of government, business, and informal social networks (Bronfenbrenner, 1977). Exosystem may include the impact of a parent's work schedule, or the support received at home.

Macrosystem includes the overarching institutional patterns of the culture or subculture such as the economic, social, educational, legal, and political systems that microsystem, mesosystem, and exosystem connect (Bronfenbrenner, 1977). Macrosystem

is expressed in carriers of information and ideology that explicitly and implicitly endow meaning and motivate agencies, social networks, roles, activities, and their interrelations. Furthermore, macrosystem includes the culture—culture as it relates to the individual or their family based on SES, ethnicity, and living context (i.e., developed or third world country). Belief systems are developed by the individual in this system, whether preserving despite one's current condition or becoming despondent because of one's condition.

Chronosystem is the influence of both change and stability within the person's life throughout development (Bronfenbrenner, 1986). Chronosystems provide an understanding of the impact of personal and historical life events on family processes. Life transitions and environmental events impact this system. For example, parents that have experienced a sudden loss may impact the child's behavior immediately following the event.

Bronfenbrenner's theory of human development reveals the impact parents, educators, and the community have on a child's development. Child development is also influenced by governmental policies and procedures, such as funding schools to support low-income families. Parents' occupations impact a child's development too, either due to the work schedule or time demands, and an educator's interactions with the student can greatly influence a child's development as well. Acknowledging a student's effort or potential may encourage students to put forth more effort. Community members or organizations are also influential in a child's development. A church may offer students hope, support, and mentorship. Life events and experiences impact a student's

development and awareness of their environment. The impact is not singular, but rather complex with each person, experience, and environment.

Overlapping Spheres of Influence

School, family, and community partnership is the progression of parental involvement. These practices have resulted in the theory of overlapping spheres of influences (Epstein 2005, 2011). The theory's premise is students learn more when parents, educators, and other in the community members work together. The process includes all parties guiding and supporting student learning. It is critical that home, school and community overlaps their influences and interaction across all contexts with the student. Emphasis is placed on the need for collective interaction between parents, educators, and other in partners to understand each other perspective, understanding, identify common goals for students, and appreciate others point of view towards student development (Epstein 2005, 2011).

The theory of overlapping spheres of influence model is inspired by Bronfenbrenner (1977). The ecology of human development supports the Epstein model of parental involvement. Three spheres exist in the Epstein model: parent, educator, and community (Epstein 2005, 2011). Maintaining the three spheres of influence that direct the Epstein model of parental involvement uses a similar concept with overlapping spheres of influences. Each sphere yields an experience that influences the child's development. Epstein (2005, 2011) indicated additional research is needed to understand the manner overlapping of home, school, and community leads to optimize academic achievement at each grade levels.

The theory of overlapping spheres of influence provides a broader perspective as compared to the traditional parental involvement that yields a narrow perspective. Six types of parental involvement are also outlined in Epstein model: parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community (Epstein, 2005, 2011).

Parenting: Parenting activities include parents understanding child and adolescent development and foster an environment at home that supports children as students. Parents differ from teachers because parents maintain a lifelong commitment to their children, while the role of a teacher is relatively limited. Activities that support parenting include providing information to parents about their child's development, health, safety, or home conditions such as creating spaces at home for students to complete their homework and schoolwork that can support student learning (Epstein, 2005, 2011).

Communicating: Multiple methods are used to communicate between families and schools. Schools provide written communication either through notes sent home or flyers about important events and activities (Epstein, 2005, 2011). Parents provide communication to schools about the child's health and educational history. A school's website is an additional source of communication with parents and families. Two-way communication is vital between schools and families. The benefit of two-way communication as it promotes a healthy relationship between the parent and education that removes preconceived notions from both parties.

Volunteering: Three basic methods are available for volunteering in schools. Volunteering in schools or classrooms—such as tutoring or assisting administrators—is

helpful to teachers. Fundraisers are another way parent can volunteer and promote community in the school. Other volunteer opportunities include training other parents, volunteering as mentors and coaches, and reaching out to parents to serve as neighborhood representatives and interpreters (Epstein, 2008).

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Decision Making: Participating in school governance committees or organizations, such as parent-teacher association, are forms of decision making. Parents may assume leadership roles that involve distributing information to other parents. Additionally, parents can actively voice their ideals in developing mission statements, in designing, reviewing, and improving school policies that affect students and families (Epstein, 2005, 2011).

Collaborating with the Community: Collaborations between schools and communities involve transferring and sharing resources between the school and community entities. Community entities include areal businesses, nonprofit, civic, religious, and cultural organizations, among other groups (Epstein, 2005, 2011). Benefits are realized for all parties involved such as tutorial programs, health services, cultural events, service opportunities, summer programs, and part-time jobs are examples of collaborating with the community (Epstein, 2008).

Literature Review Related to Key

Parental Involvement Effectiveness

The benefits associated with parent involvement are well-documented and include students being more likely to complete their homework, low school absentee rates, and enhanced linguistic skills (Allen & White, 2018; Jeynes, 2007). Parental involvement has a direct impact on the academic achievement gap that reveals a disparity in the level of achievement between race and social economic status. Teachers and administrators constantly evaluate parental involvement as a major tool to address student achievement, and it helps create partnerships between parents and schools. Jeynes's (2016) study evaluated the impact that parental involvement has on African American students. Jeynes's results indicate that parent engagement has a positive influence on African American seniors.

Erion (2006) investigated a singular component of parental involvement—parent tutoring. This concept expands beyond simply monitoring homework to providing parents the needed skills to support students in various ways. Two treatment categories were created in the study: training that included written instructions, modeling, supervised practice length of training, and duration of training sessions, and follow-up features that consisted of consultation and monitoring (Erion, 2006). The traditional concept of parental involvement is more passive. Studies that evaluate the traditional aspect of parents monitoring the homework process led to academic achievement. The study yielded positive results (Erion, 2006). Using specific tutoring skills and giving appropriate materials and feedback enables parents to have a positive impact on their

child academic achievement (Erion, 2006). The impact of parent tutoring did not vary by grade level of children or by the skill level at which children received tutoring.

Khan and Rush (2016) evaluated the predictor variables of parental involvement that lead first generation students to pursue college. There is a positive correlation between higher education and earned incomed, and a negative correlation between not pursuing higher education and reliance on public assistance (Khan & Rush, 2016). Yet, pursing a college education for first generation students is vital. First generation college students are generally from low SES households (Kahn & Rush, 2016). Parents education expectation significantly for first generation college students is the highest predictor for the parental involvement types.

Barriers to Parental Involvement

Evidence supports the value parental involvement has for students. Some families experience barriers to engaging in parental involvement. Low SES parents experience a unique set of barriers. Some educators and policy makers perceived the barriers experienced by low SES status as disinterest. African American families have cited negative experiences regarding their interactions with school personnel. Parents have reported feeling isolated, alienated, and disengaged. Financial and educational resources are barriers for low SES parents, and limited financial resources are often associated with jobs with less flexible schedules (Williams & Sanchez, 2011). Restricted resources are also associated with poverty. Malone (2017) indicated limited parental involvement can be attributed to limited access to resources and opportunities that is an inherit characteristic of low SES. Research supports that some barriers may be attributed to

parents' low social and financial capital (Allen & White, 2018; Bower, 2011; Drummond & Stipek, 2004). Yet, some barriers can be attributed to actions of teachers, administrators, and policy makers (Luet, 2017). Barriers to traditional parental involvement include lack of transportation, childcare, and inflexible work schedules (Allen & White, 2018; Bower, 2011; Drummond & Stipek, 2004). Malone (2017) expanded on the barriers experienced by low SES parents: lack of knowledge or education, preference for home-based involvement, and visibility of involvement.

Lack of knowledge or education is a potential barrier for low SES parents. Turney & Kao (2009) evaluated race and immigrant differences among barriers to parental involvement at their children's school. Previous studies of racial, ethnic, and immigrant differences in parental involvement focus on adolescents. Turney & Kao's (2009) study focused on elementary students. A multivariate analysis was used to illustrate the race and immigrant differences that hinder parents from contacting their child's teacher. Parents from mid to high SES are often more educated and are more actively engaged in their child's school than low SES parents (Turney & Kao, 2009). The deficit of knowledge and education places low SES parents at a disadvantage based on their lack of understanding of procedures to gain resources to support their student's education. Parental involvement decreases as students transition from elementary to middle and high school, because some parents are less knowledgeable in higher level subjects. Low SES parents may not feel qualified compared to mid to high SES parents based on their education background (Coulter-Kern & Duchane, 2007). Luet (2017) identified a contrasting view with the distinction between middle/upper-class parents that are able to

make generous contributions to schools, and lower SES parents that are described as lacking skills and knowledge to add anything of value to their children's education.

Low SES parents desire to participate in their children's school activities, but challenges persist with inflexible work schedules and limited transportation. Low SES parents are more inclined to have occupations with low wages and limited flexibility. This creates a hardship on parents as they often must decide whether to maintain their current employment to support their family financially, or attend school events (Hoover-Dempsey, & Sandler, 2007). Similar constraints hold true for limited transportation. Low SES parents may rely on public transportation or one car per family, which makes attending school events difficult. Researchers suggest school officials provide bus transportation for major events, such as open house or back to school activities (Malone, 2017).

The challenges experienced by families may perceived as parents are not interested in support their children. However, it is critical to properly measure parental involvement activities conduct at home. The inability to measure in home parental involvement is the challenge for schools (Allen & White, 2018; Bower & Griffin, 2011). The Epstein model is a widely referenced framework for parental involvement utilizing the six concrete types of involvement. Epstein model acknowledges the positive impacts of home-based involvement, including encouragement and support of educational activities. Allen & White (2018) implied the role of parents in the decision-making process is defined and created within the school framework rather than within families' terms. Bower and Griffin (2011) utilized the Epstein model to evaluate the effectiveness

of defined parental involvement types for African American families. Constraints are present within this model as it does not account for cultural and ethnic differences. Even with these constraints, the Epstein model is comprehensive in outlining parental involvement activities and is prevalent in the field and used by schools (Allen & White, 2018; Bower & Griffin, 2011).

Visibility of involvement is a challenge to parental involvement from a school perspective. Traditional parental involvement activities are demonstrated in schools and can be observed by teachers and administrators (Allen & White, 2017; Bower & Griffin, 2011; Epstein, 2005, 2011; Luet, 2017). Luet (2017) evaluated how policy makers impact parental involvement utilizing a qualitative study. The study considered the implications of having policy makers focus on fixing the problems in failing schools rather than attempting to fix parents. Home-based parental involvement has been argued to be just as effective as traditional parental involvement based on the students' academic achievement (Luet, 2017). Parental involvement activity regarding parents helping their students with homework increases the students' academic achievement.

Williams and Sanchez (2011) identified and sought methods to decrease barriers to parental involvement for inner-city parents. The tenets of parental involvement have a positive impact on academic achievement, school engagement, and school adjustment. The common theme identified was that actively involving parents in low-income communities is a great challenge for educators. Past research has found a contrast between parental involvement for families of higher SES status and families of lower SES status. Limited resources and knowledge remain a barrier for parents of lower SES

status. The scarcity of resources impacts both family as well as neighborhood level. Inner-city schools are characterized by minority students, high crime, high unemployment, gang activity, illegal drug dealing, and perpetual violence (Williams & Sanchez, 2011).

Key barriers identified for inner-city parents are restricted access to financial and educational resources, less flexible work schedule to attend school functions, and negative interaction with school personnel (Allen & White, 2018; Williams & Sanchez, 2011;). In addition, African American parents found it difficult to dispel the misperception that they do not care about their child's education if the parent was not successful in school. Williams and Sanchez (2011) indicated that despite the barrier, most school personnel value building productive programs and positive relationship with inner-city families. However, school personnel appear reluctant to try based on their current knowledge. Three ways to involve parents have been listed as giving parents a meaningful role, keeping them informed, and presenting opportunities for them to support educational developmental progress at home and school (Allen & White, 2018, Williams & Sanchez, 2011). Strong communication between school personnel and inner-city families is fundamental to involving parents. Empowerment and local resources and outreach are additional strategies to increase parental involvement for inner-city African American parents. Research suggests that vulnerable families that suffer high levels of stress and isolation could be empowered by school-based programs that support the production of social capital, a sense of connectedness, and a sense of knowing (Allen & White, 2018; Williams & Sanchez, 2011)

Past research focused on parental involvement from a parent's perspective, with minimal regard to the school personnel perspective or combined perspective from the parent and school personnel. Limited studies are available that examine the barriers of parental involvement for inner-city high school context. Williams and Sanchez's study examined the specific barrier for parental involvement from the perspective of the parent and school personnel (Williams & Sanchez, 2011). Inner-city students are often categorized as impoverished students and relates to research participants for this study.

Poverty and Academic Achievement

Time poverty is defined as the activities at home and away from school that consume parents' time. Employment was listed as a primary task that consumed parents' time and posed a barrier in becoming more involved in their child's education. Lack of access is the difficulty to gain access to the school physical structure to attend school events and meetings. Participants indicated that it is difficult for parents with disability or illness to participate in school events. Parents cited scheduling of school events and operating hours that were not sensitive to the schedules of parents that work during the day. One individual from the school personnel acknowledged the parents' concern with lack of access and reiterated the school's attempts to accommodate parents with scheduling events on different days and times.

Community poverty has a significant impact on parental involvement as it relates to academic achievement. Gordon & Cui (2014) explored how community poverty affects the associations between school related parental involvement and adolescents'

academic achievement. The theoretical framework is the ecological theory by Bronfenbrenner (1979).

From the parental involvement activities, positive outcomes have derived, such as higher test scores on standardized tests, higher grade point averages, and a greater sense of higher academic success (Gordon & Cui, 2014). Other studies indicated that parental involvement had no significant impact on student achievement (Okpala, Okpala & Smith, 2001; Ucus et al., 2019). Gordon and Cui (2004) revealed such inconsistent findings are likely due to the difference in the operationalization of parental involvement. The term can vary from the activities in parental involvement or the types of involvement, rather it is parental activities conducted at home such as assisting with homework or school related activities such as volunteering.

Gordon and Cui's (2014) study is based on two core gaps in literature: the difference between adolescent academic achievement and examining parental involvement in general with a focus on school-related parental involvement. Previous literature has focused on younger students. Limited literature focuses on adolescents. Various forms of parental involvement exist that creates operationalization differences in parental involvement. The differences have created a literature gap.

In addition to the ecological theory, the social disorganization theory is used as a theoretical framework. Gordon & Cui (2014) indicate the theory suggests the influence of community factors on such outcomes as community poverty that impacts adolescents' academic achievement. Furthermore, the theory suggests individuals living in neighborhoods with high levels of poverty are less able to maintain collective cohesion

for the good of their community. Distressed communities may weaken parents' efforts to assist with their adolescents' academic achievement. Parental involvement activities that support science fairs may not be as effective due to the limited funding to support such projects. In addition, parents' support of attendance and education may be dampened by truancy and delinquency of other peers in the community (Ucus et al, 2019; Wentzel, 2009). The ecological theory and social disorganization theory are used in conjunction to determine the influence of community factors on individual outcomes (Gordon & Cui, 2014).

Gordon and Cui (2014) acknowledged healthy associations between parenting and adolescent development. However, few studies have addressed the impact of community poverty as it relates to adolescents' development. Limited research exists in examining community poverty and its effect on the association between school-related parental involvement and adolescent academic outcome (Gordon & Cui, 2014). Eamon and Altshuler (2004) determined that the quality of parenting practices was less effective for adolescents from poorer, lower quality communities, which resulted in lower academic achievement.

Kohen, Leventhal, Dahinten, and McIntosh (2008) evaluated the extent to which neighborhood socioeconomic conditions impact parental involvement. Participants in the study consisted of younger students who were on average 5 years old (M=5). The study found that the effects of community disadvantage is associated with parenting and adolescents' academic outcomes. The lack of research is attributed to small samples sizes at a community level (Gordon & Cui, 2014). This limits researchers' ability to investigate

the complex influences of community poverty on the association between parenting and adolescents' achievement outcomes (Gordon & Cui, 2014). To fill the gap in research, Gordon and Cui (2014) used a community sample to investigate the nonlinear multiplicative effects of parenting and community-level poverty on adolescents' academic achievement.

Gordon & Cui's (2014) goal was to determine whether community poverty is associated with school related parental involvement and adolescents' academic achievement. Three measures and one covariate were used in the study: community-level poverty, school related parental involvement, and academic achievement in adolescence with ethnicity, gender, and family SES as the covariates. Community poverty is summed up with five adverse community characteristics based on the US Census data (Gordon & Cui, 2014). The five items are: proportion of female-headed households with children 18 years or younger, portion of household with public assistance income, proportion of individuals with service level jobs, proportion of households with income below the poverty level, and proportion of individuals who are unemployed (Merten, 2010; Rowe et al, 2019). Multilevel regression models were used to examine the moderating effects of community poverty on school related parental involvement and adolescents' academic achievement (Gordon & Cui, 2014).

Adolescents' academic achievement was the dependent variable. Gordon & Cui (2014) introduced a cross level interaction term by specifying the slope for individual level, school related parental involvement as a function of poverty. The findings revealed a significant and positive interaction coefficient between school related parental

involvement and community poverty on grade level. (b=-.01, p <.01). The R2 for final model was .131 and the effect size was .15. This revealed a medium effect (Cohen, 1992). The medium effect size indicates a moderate relationship between the school related parental involvement and community poverty. Furthermore, school related parental involvement was less effective for adolescents who lived in communities with high poverty, yielding a lower academic achievement for adolescents. The findings mirror similar research for school related academic achievement and poverty communities (Eamon & Altshuler, 2004: Hill & Tyson, 2009).

Gordon & Cui (2014) aimed to fill this gap in the literature by moderating effects of community poverty on the associations between school related parental involvement and adolescents' academic achievement. The findings suggest that positive effects of parental involvement on adolescents' schooling from high income communities are consistent with previous research (Gordon & Cui, 2014). The theme from the research is that community can affect the success of parenting in influencing adolescents' academic outcome. Gordon & Cui (2014) found that communities in poverty have an adverse impact on the effectiveness of school-related parental involvement on adolescents' academic achievement.

Gordon & Cui's (2014) study mirrored other research indicating that white adolescents have higher academic achievement as compared to blacks and Hispanics, but lower than Asians. In addition, female students' academic achievement is higher than that of male students. Parents' education and family structure impact the outcome of student achievement. Gordon & Cui (2014) revealed that even after moderating effect of

community, poverty still impacted the effectives of parental involvement. The study is among the first to explore the interactive influences of multilevel factor community poverty on school related parental involvement and adolescents' academic achievement outcomes. However, the study provides limited information on the effective strategies for parents to use with adolescents living in community poverty. The implications enable parents, policy makers, and other vested parties to explore various avenues for improving the academic success of adolescents. It is pivotal to understand the type of parental involvement activities that lead to improvement for impoverished middle school students.

Mayo & Siraj (2015) conducted a study on the disadvantaged position of working-class children in the education system. The study used 35 case studies conducted through the Effective Provision of Pre-School, Primary, and Secondary Educations (EPPSE 3-16) research project. The EPPSE 3-16 study utilized a mixed method approach that followed the progression of over 3,000 children from age 3 to 16 years old. Parents' SES and level of education had a significant impact on student achievement outcome (Mayo & Siraj, 2015). In addition, the study also revealed that how parents engaged with their children had a significant impact on children's academic outcome. Parents cultivate learning experiences for their children through socialization practices (Mayo & Siraj, 2015, McDowell et al, 2018). A variety of experiences with an emphasis in cultural differences help develop those skills and knowledge considered most valuable.

Mayo & Siraj (2015) aimed at contributing to the understanding of how and why some parents and children from low-SES families manage to create a family environment that enables them to overcome the poor odds associated with socioeconomic

disadvantage. Parenting practices in the study are operationalized as active cultivation. The term active is used because the strategy requires and stimulates participation from all involved. Cultivation is used as it aims to make the most of a child's life by fostering learning and education. Active cultivation combines aspects of the socialization patterns and concerted cultivation with a distinctive twist.

Mayo & Siraj (2015) adapted a grounded theory using a mixed methods framework. The quantitative data from the EPPSE project was combined with the grounded theory. Risk and resilience for academic achievement research was reviewed from international literature along with qualitative interview data design, collected and analyzed over two years for the case studies.

Mayo & Siraj (2015) conducted in-depth interviews with each participant. The interview topic focused on occurrence of risk and protective factors associated with academic achievement, and participants perception of influences on academic trajectories. A collective review of international literature from the fields of psychology, sociology, and education was conducted to identify the themes of parenting beliefs and self-efficacy. The focus area consisted of early years of home learning. Additional case specific questions include how remedial classes impact learning. The learning trajectories were based on children's cognitive assessments between the ages 3 and 14. At the time of the study, children's participants were between the age of 14 and 16 years old (Mayo & Siraj, 2015). Children and parents who were interviewed followed the same process with one exception. The parent interview process included questions around parents' education, life experiences, socioeconomic family circumstances, and parenting beliefs.

The interviews were transcribed by research assistants that followed a strict protocol. A second author independently coded several initial transcripts. Inter-coded reliability used established visual comparisons, and all differences were resolved by discussion and applied in subsequent coding. The analysis centered on instances of well-established risk and protective factors.

The study identified two dimensions of parental involvement that are perceived to have significantly contributed to the child's path to academic success: emotional and practical support with learning. Verbal communication played a vital role in emotional support, such as when parents and children discussed school and learning activities daily. Through the direct dialogue between the parent and child, parents were able to emphasize the importance of school for the child's future, which had a favorable impact on academic achievement. Favorable impacts include high aspirations and expectation in homework, improves classroom behavior, and future education goals (Mayo & Siraj, 2015). The relationship between parents and children demonstrating warmth, and encouragement had a positive impact on academic achievement.

Practical help with school and learning is instrumental to academic achievement. Basic conditions must be set by parents for children to be engaged in school-related work and activities in the family environment, such as providing a computer for schoolwork, regulating activities in the home environment, and interacting with teachers (Mayo & Siraj, 2015). However, a financial constraint may be imposed from the need to purchase a computer and have internet access for their children. While computers did have a positive impact on creative ways to develop basic skills, the use of social media and game

consoles had a negative impact. The difference in academic achievement with the known constraints was based on parents' guidelines around usage (Mayo & Siraj, 2015). Leisure time had a positive impact on academic achievement. Parents that allowed their children to play indoor and outdoor with supervision had progressed as predicted by the study. However, some parents incorporated school learning in leisure time activities. Such activities included visiting the library, thinking of games to practice school skills, reading books for fun, and utilizing other learning activities, including practice exams. As children progressed into primary and secondary school, they lost interest in school-related activities (Mayo & Siraji, 2015; McDowell et al, 2018).

The study predicted that the socialization strategy of accomplishment of natural growth provided children with ample opportunities to gradually discover, negotiate, and obtain a place within society as they developed skills and internalized goals that met the expectations and values of their community (Mayo & Sirija, 2015). Ironically, academic success was not part of the socialization strategy. The findings illustrated that parents understand the importance of teaching their children rules and practices that are needed to function in society and educational institutions. Mayo & Sirija (2015) revealed a counter impact on socialization strategy as parents foster positive interactions with the education system. The same holds true for negative interaction—parents that feel incapable of addressing items as they pertain to their children's education. The socialization strategy explains how the negative feelings are passed down to the children.

Goals are set and communicated clearly towards academic socialization. Shared goals rooted in family structure and community view had a favorable impact on academic

achievement. All values focused on additional goals of upwards social mobility. Education was esteemed as a vehicle to achieve the goals and was valued as a necessity. This viewpoint encouraged the parent to remain active in their child's education journey. The creation of a home environment that facilitated and stimulated learning by providing learning materials, fostering a positive orientation towards literacy by communicating with teachers to resolve issues, establishing homework routines, and providing consistent, emotional support had a tremendous impact on academic achievement. In addition, frequent bi-direction conversations between the parent and child that discussed daily, and future had a positive impact as well (Mayo & Sirija, 2015).

Conclusion

Parental involvement has been found an important factor related to student achievement (Bower, 2011). However, identifying the type of parental involvement has been found to be an important factor related to student achievement. This statement is especially true for families living in poverty. Limited research is available that identify parental involvement activities are related to higher levels of academic achievement for families living in poverty. The aim for this study is to Utilize an ordinal logistic regression analysis as the research design to evaluate the relationship of parental involvement and academic achievement for families living in poverty with students in middle school.

Chapter 3: Research Methodology

The purpose of this research study was to determine the relationship of academic achievement and parental involvement activities. The dependent variable of academic achievement was analyzed using an ordinal logistic regression analysis. The relationship between the six independent variables related to parental involvement activities and the ordinal dependent variable grade point average was examine. Chapter 3 includes the methodology for the current research study. The research design strategy is explained and justified. The population, sampling, and sampling process are detailed. The procedure for recruitment, participation, and data collection are discussed. The instrumentation and operationalization of each variable are detailed.

Research Design and Rationale

In this quantitative nonexperimental, survey-based study, participants included parents of public-school students in middle school living in poverty. Research variables was parental involvement activities, students' GPA. Archival data were used for this study. The archival data were stored and available publicly (Jackson et al., 2021). The independent variables were a set of parental involvement activities. The parental involvement activities included collaborating with community, communication, decision making, learning at home, parenting, and volunteering. The ordinal dependent variable was academic achievement based on students' grades as reported by parents. Academic achievement was measured using five categories, Mostly As, Mostly Bs, Mostly Cs, and Mostly Ds or lower. Archival data provided significant benefits for this research study,

including reduced data collection time, availability to the public, as well as no financial cost to the researcher associated with the data collection

Ordinal logistic regression was the research design to address the research question in this study. The research question was as follows:

- Is there a relationship between Epstein's six parental involvement activities and student academic achievement, as measured by GPA, among middle school students from high-poverty families?
    - Is there a relationship between Epstein's six parental involvement activity parenting and student academic achievement, as measured by (GPA), among middle school students from high-poverty families?
    - Is there a relationship between Epstein's six parental involvement activity volunteering and student academic achievement, as measured by (GPA), among middle school students from high-poverty families?
    - Is there a relationship between Epstein's six parental involvement activity learning at home and student academic achievement, as measured by (GPA), among middle school students from high-poverty families?
    - Is there a relationship between Epstein's six parental involvement activity decision making and student academic achievement, as

measured by (GPA), among middle school students from high-poverty families?

- Is there a relationship between Epstein's six parental involvement activity communicating and student academic achievement, as measured by (GPA), among middle school students from high-poverty families?
- Is there a relationship between Epstein's six parental involvement activity collaborating with community and student academic achievement, as measured by (GPA), among middle school students from high-poverty families?

An ordinal logistic regression was suited for this study based on the independent and dependent variables. GPA, the dependent variable, has four ordered response categories. An ordinal logistic regression was to predict GPA, the dependent variable, and rank the relative significance of the parental involvement activities, the independent variables. The odds ratio was used to explain the impact of the predictor variables (Garson, 2012). Understanding the relationship between GPA and the parental involvement activities will provide an understanding of the parental involvement activities that lead to academic achievement for families in poverty.

Population

In this study, the target population was guardians of students enrolled in middle school, specifically those students enrolled in the sixth, seventh or eighth grade in public schools located in the United States. The study was focused on families living in poverty.

The poverty level was based on all families living in poverty as defined by the Human Health Services guidelines (Jackson et al., 2021). Families or parents/guardian with students enrolled in home school and parent that did not complete the survey.

Sampling and Sampling Procedures

The sample for this study was from archival data from the 2019 National Household Education Survey Program. (NHES:2019) The survey was conducted by the U.S. Census Bureau and included a screener survey and two additional surveys: the Early Childhood Program Participation Survey and the PFI. Survey. The screener survey asked for a list of household members and was used to select an eligible child to be the focus of the survey. The PFI survey collects data about students who are enrolled in K-12 in a physical or virtual school or are homeschooled for equivalent grades. The survey asked questions about various aspects of parent involvement in education. The NHES:2019 used a nationally representative address-based sample covering the 50 states and the District of Columbia. The PFI data are nationally representative of the nonhome schooling population of students in grades K-12, including children enrolled in public, private, and virtual schools. Only children enrolled in public schools were included in the sample for this study. The middle school segment was based on parents with children in the sixth, seventh and eighth grade. Two key characteristics of the selected sample was students enrolled in a public middle school and families living in poverty as defined by Human Health Services (Jackson et al., 2021).

Non-probability purposive sampling is the sample design. This design yields data for the target population. A constraint with this model may result in the overweight of

subgroups that participated in the survey either returning mail surveyed or web survey. The response rate for the survey completion was 52.6%. The original size of the sample was 16,477.

PFI had 205,000 addresses selected. The initial file was based on a file with residential addresses maintained by Marketing System Group (MSG), the United States Post Office (USPS), and Computerized Delivery Sequence File (Jackson et al., 2021). NHES:2019 consist of a two-stage stratified sample. The first sample consist of the residential addresses provided by MSG file with the second sampling included eligible child from the information provided by the household mail screener. Differential probability was used in selecting households and children based on Black and Hispanics composition of the Census tract where an address is located, residential address type, and children's survey eligibility within the households for PFI. NHES weighting methodology accounts the differential probabilities of selection (Jackson et al., 2021). As the weights are applied to the PFI survey, it is nationally representative of students enrolled in grades K-12 that are enrolled in public schools, private schools, and those that are home schooled.

NHES:2019 oversampled Black and Hispanic households' Census and sample frame data (Jackson et al., 2021). The process of oversampling is required to ensure a reliable estimate of subdomain defined by groups. In the past, the response rate for Blacks and Hispanics have been lower than the other group spectrum. In addition, the oversampling compensates for the differential of response rates to the interviews for Black and Hispanic.

The GPower3.16 software was used to determine the minimum samples size for this study. The priori power analysis was the power analysis conducted. The power analysis computed the required sample size given *a = .05*, power = .95 and effect size = .25. (Faul, et al., 2007, 2009), resulting in a sample size of 1180. This ranges between 1,980 for effect size = .10 and 198 for effect size of .40. Type I errors are increased with small effect size = .10. Type II errors are reduced with high power. The rationale for using a .95 power in this research study. Type I errors are reduced with lower *a*.

Procedures for Recruitment Participation and Data Collection

In this study, PFI-NHES:2019 a national data set provided information about parent and family involvement in middle school children attending public schools in the United States. The data collection process primarily utilized a mail based, self-administered questionnaire. The data collection process was conducted in two stages: a screener and topical survey stage. A brief screening questionnaire was mailed to the sampled household addresses. Questionnaires were sent out in packets written in English only or bilingual (English and Spanish) version. The packets included an introductory letter, requesting an adult household member living at the address complete the questionnaire, $5 monetary incentive, and preaddress postage paid return envelope. NHES:2019 introduced new strategies to collect data from the survey called multi-mode design. Participants were encouraged to complete the survey either by Web or Telephone Questionnaire Assistance. Participants that completed the survey by web or telephone were entitled to receive $10 or $20 cash reward.

To obtained signed consent on completing and releasing the data provided in the questionnaire, two sections of the survey addressed this item. A statement on page 2 of the survey indicated the participant authorize the collection of data as governed by the bill and statue Section 9543, 20 U.S. Code. On the last page of the questionnaire in the commonly asked questions, the questionnaire reiterates the authorization of survey Section 9543, 20 US Code. The survey also details that the United Sates the Office of Management and Budget (OMB) approved the survey, further indicating the OMB reviews all federally sponsored surveys. The survey approval number was provided, 1850-0768. After completing the questionnaire, participants were thanked and asked to return the Participant the survey in the postage paid envelope provided. Instructions were provided to participants on returned questionnaires if the envelope was lost. Once the participant completed survey was returned, participants exited the process.

The completed screener questionnaire was used to subsample children in the household for a more in-depth topical survey. Based on the response, parents either received the questionnaire for the Early Childhood Program Participation questionnaire, the Parent and Family Involvement (PFI-Enrolled) questionnaire for children enrolled in public or private school or the Parent and Family Involvement in Education (PFI-Homeschooled) questionnaire for homeschooled children.

Completed questionnaires were assigned a check in code that indicated the form completion status and logged into the Automatic Tracking and Control system. The screener and topical questionnaires received outcome codes of completeness. To ensure the validity, a second data review was completed for all screeners and topical

questionnaires. Forms that did not meet the completeness requirements were reclassified as non-interviews. The three groups were created into batches based on the type of form and interview status: interview, “non-interviews,” and out of scope for survey.

A series of processing procedures were completed for respondents that completed and returned the questionnaire forms to confirm the data is complete and accurate. The survey processing procedures included data capture and imaging, reformatting keyed data, interview classification, a series of computer edits, school coding, the final interview status classification and a set of imputation procedures used to generate values with missing information. The process was repeated after imputation to ensure no errors were introduced in the imputation process.

The data capture process for the PFI included converting questionnaires from paper to electronic format using a combination of imaging technology and manual data keying with both being facilitated by the Census Bureau’s Integrated Computer Assisted Data Entry system. Once the questionnaires were received by the Census Bureau’s National Processing Center (NPC), the Census Bureau clerical processing staff validate the bar code for all checked in questionnaire. All questionnaire checked in questionnaires were prepared for scanning and scanned on both sides simultaneously using a duplex scanning equipment. A cross reference process was completed that reviewed the questionnaire for the appropriate number of pages. All electronic questionnaire that had adequate page count for were accepted. Electronic questionnaires with discrepancies in the page count was forward to the manual registration process. The accepted batches

proceeded to the next stages of data capture: auto registration including optical mark recognition (OMR) and manual registration.

NHES:2019 recognized that during the auto registration, several items may impede the process, either with the system being able to read the bar code and unable to read the questionnaire ID or misreads that occur due to marking outside of the check box, scratch outs, or random marks on a page. All questionnaires with problem were transferred to the manual registration process. The manual registration process involved the clerical staff reviewing the questionnaires and addressing the issues. Questionnaires without problems during the auto registration and OMR bypassed manual registration completely.

Acceptable NHES questionnaire were converted into ASCII files at the Census Bureau's. After the completion of converting the files into ASCII, the files were sent to the Census headquarters that was reformatted into SAS data sets to all permit the remaining data processing tasks. Topical case classification was completed by the Interview Status Recode (ISR) to determine whether topical case was an interview, non-interview, or out of scope for the NHES. Once verification was completed, a final ISR classification was provided for each case.

Student Archival Data Collection

The archival data from the PFI:2019 were used in this study. The archival data are stored on the NCES website located at https://nces.ed.gov/nhes/data_files.asp. To start the process, I completed the prescribe NCES Distance Learning Database training. This provided an introduction course in using the NCES-PFI data sets. Once the training was

completed, the questionnaire and data file user manual were reviewed to determine the relevant items and variables needed for the study (Jackson et al., 2021). In addition, the codebook was downloaded from the NHES website. The descriptive information on the relevant variables was reviewed. The code book provided details on value labels, frequency counts, and percentage distribution for all data. This information was reviewed prior to downloading the dataset for the PFI 2019 file.

Once the Dataset Training was completed, I downloaded the 2019 Data Products. To gain access to the data, all users must agree to use the data for information purposes only. In addition, it is unlawful to attempt to determine participants identity and the use of the download would not be used for that purpose. The PFI SPSS set up file was selected and downloaded from the website. Two files were included in the file: data file and SPSS import instructions.

Instrumentation and Operationalization of Constructs

The (PFI) Survey was the published instrument that will be used in this study. The (NCES) developed the instrument and published it in 2019. The instrument provides data on students in the United Sates attending elementary, middle, and secondary school (Jackson, et al., 2021). Parent and family involvement in the students' education during the 2018 and 2019 school year as reported by the parents. The family activities used for this study are the foundation of Epstein's model, which is the theoretical framework for this study and includes the six parental involvement activities The questionnaire contains demographic information on families. Pertinent demographic information for this study

included income level, student enrollment in public school in the United States, as well as enrollment in grades six, seven, or eight (Jackson, et al., 2021).

Basis for Development

The relevant study variables included in the PFI data set are school and family characteristics; parental involvement activities and parents reported academic achievement of the child included in the study, as measured by grade point average reported by the parents.

Previous research indicated that effective parental involvement levels differ for families living in poverty (Bower, 2011) and additional research is needed to better understand the relationship between parental involvement activities and academic achievement for families living in poverty. This study sought to understand parental involvement activities for families living in poverty. Families' income levels used in defining the sample of families living in poverty.

The proposed study outcome variable was child's academic achievement and was measured by the PFI survey with report card grades for all subjects. Academic achievement was measured by one single response question. The parent participating in the study reported their child's level of academic achievement. The question specifically asked "Overall, across all subjects, what grades does this child get?". The response options were: Mostly A's, Mostly B's, Mostly C's, Mostly D's or lower, or schools do not record grades. The response of "school does not give these grades" will not be included in the study.

Operationalization

Dependent Variable

In this study, the parent's report of their child's (GPA) was used as the dependent variable in the analysis. The item asked, "Please tell us about this child's grades during this school year. Overall, across all subjects, what grades does this child get?' This item requested parents to their child's overall grade. It was measured by a 5-point categorial scale to reflect the students' GPA ranging from Mostly As to Mostly Ds or lower, as well as a category to capture children for whom grades were not provided.

Children whose schools did not provide grades was excluded, as the study seeks to understand the impact of the parental involvement activities on students' GPA. The academic achievement variable was treated as an ordinal variable.

Screening Variables

Poverty Levels. The item asked, "Which category best fits the total income of all persons in your household over the past month." The item requested parent to provide their household income. It was measured by a 10-point categorial scale to reflect household from income based $0 to $10,000 to $150,001 or more. This variable was used to identify poverty levels.

School Designation. The item classifies, "Whether child is Home School or Enrolled in School?" The survey item is measured with a dichotomous scale. The response is (1 = Home School and 2 = Enrolled in School). Home School was excluded from this study.

School Type. The item, classifies, “Whether the student attends Private of Public School.” The survey item is measured with a dichotomous scale. The response is (1 = Public School and 2 = Private School). The study focused on students enrolled in a public school.

Independent Variables: Parent Involvement

In this study, six areas related to parental involvement was used as the independent variables. The six variables that was used to measure parental involvement are parenting, volunteering, learning at home, decision making, communicating, and collaborating with community. The six parental involvement categories that was used in this study are aligned with the literature review for this study.

Parenting. The item asked, “In the past week, how many days has your family eaten the evening meal together”. The activity used to measure parenting is frequency of families eaten meals within the past week utilizing a rating scale. It was measured by a 7-point categorical scale to reflect the frequency with a range of zero to seven. Score 0 response is “Zero Days”. Score 1 is “One Day”. Score 2 is “Two Days”. Score 3 is “Three Days”. Score 4 response is “Four Days”. Score 5 response is “Five Days, Score 6 response is “Six Days”. Score 7 is “Seven Days”. The variable is ordinal.

Collaborating with Community. The item asked, “In the past month, has anyone in your family done the following things with this child?”. This activity used to measure activities of collaborating with the community. The survey item is a construct that mirrors Epstein Parental Involvement framework for the parenting category. Each activity is

measured with a dichotomous scale. The response is (1 = Yes and 2 = No). The variable is nominal.

Communicating. The item asked, “Since the beginning of this school year, has any adult in the child’s household done any of the following things at this child’s school?” The activity is used to measure communication. Four activities were used to measure communication. The items asked, “Attended a school or class event, such as play, dance, sports event or science fair”, “Attended a general school meeting for example an open house or back-to-school night, “Attended a meeting of the parent-teacher organization or association”, and “Gone to a regularly scheduled parent-teacher conference with this child’s teacher”. The survey items are construct that mirrors Epstein Parental Involvement framework for the communicating category. Each activity was measured with a dichotomous scale. The response is (1 = Yes and 2 = No). The variable is nominal.

Decision Making. The item asked, “Since the beginning of this school year, has any adult in the child’s household done any of the following things at this child’s school?” Eight activities were used to measure decision making activities. The survey item is a construct that mirrors Epstein Parental Involvement framework for the decision-making category. Each activity is measured with a dichotomous scale. The response was (1 = Yes and 2 = No). The variable is nominal.

Learning at Home. The item asked, In the past month, has anyone in your family done the following things with this child”. Seven activities were used to measure learning at home activities. The item included five of the subset questions to evaluate the construct

learning at home. The item asked, “Visited library, visited bookstore, gone to a play, visited an art gallery, museum or historical site, and Visited a zoo or aquarium”. The survey item is a construct that mirrors Epstein Parental Involvement framework for the decision-making category. Each activity is measured with a dichotomous scale. The response was (1 = Yes and 2 = No). The variable was nominal.

Volunteering. The item asked, “Since the beginning of this school year, has any adult in the child’s household done any of the following things at this child’s school?” This question included a total of eight activities, but only two of the activities will be used to evaluate the construct volunteering. The item asked, “Participated in fundraising for the school, and Served as a volunteer in this child’s classroom or elsewhere in the school.” The survey item is a construct that mirrors Epstein Parental Involvement framework for the volunteering category. Each activity is measured with a dichotomous scale. The response is (1 = Yes and 2 = No). The variable is nominal.

Data Analysis Plan

For this quantitative study, regression test was conducted. SPSS version 27 was the software that will be used for this analysis.

1. What is the relationship between the six parental involvement activities, parenting, volunteering, learning at home, decision making, communicating, and collaborative with community on academic achievement, as measured by grade point average (GPA), among middle school students from high poverty families?

   H_o: There is no relationship between the six parental involvement activities on

academic achievement, as measured by grade point average (GPA), among middle school students from high poverty families.

H_A: There is a relationship between the six parental involvement activities parenting, volunteering, learning at home, decision making, communicating, and collaborative with community on academic achievement, as measured by grade point average (GPA), among middle school students from high poverty families.

Several steps are included in the data analysis plan. Given the ordinal nature of the dependent variable, an ordinal logistic regression will be the most appropriate statistical test for the hypothesis of this study (Tabachnick & Fidell, 2019). This functionality predicts the level of the grade point average, the dependent variable based on six parental involvement activities, independent variables. Descriptive statistics for the data set was calculated to include mean scores and standard deviation. The p-value was set at industry standard .05 level to assess the significance of each statistic. The confidence interval was set at 95%.

The Likelihood ratio was used to test the hypothesis for this research study. Two models are evaluated to determine whether to accept the null hypothesis or reject the null hypothesis. An ordinal logistic regression analysis has four assumptions. Assumption one is the dependent is measured at the ordinal level. Assumption two was one or more independent variables are continuous, ordinal, or nominal. This assumption includes dichotomous variables. Assumption three was multicollinearity cannot exist. Assumption five indicates outliers, high leverage values or highly influential points can exist in the study.

To test and assess the assumptions four, five, and six, SPSS statistical tests are required. Assumption one, two, and three must validated prior to running SPSS statistics. Hausman-McFadden test is used to test the assumption of independence amount the dependent variable (Garson, 2012). The odds ratio estimates for each parental involvement activity will be derived from the ordinal logistic regression coefficients. The parameter estimates were detail in the categories of dependent variables that are statistically significant. Dependent and independent variable combinations with p values less than or equal to .05 are deemed statistically significant indicating which parental involvement types yields higher grade point averages.

Threats to Validity

Internal Validity

Threat to validity can occur during the data design and collection for both internal and external. One possible threat to the internal validity in this study is differential participation. Differential participation occurs with families with different background characteristics deciding not to participate in the study or responding differently to the questions within the survey that may affect the dependent variable differently. It can be perceived that families from demographic variables either ethnicity or income variation may influence the dependent variable. The differential selection was addressed through our sampling.

In addition, GPA was reported by the parents and not collected from the official report card. This may result in a discrepancy between the parents reported and actual

GPA. Variables other than parental involvement may contribute to student's academic achievement that are not planned inclusion in this study.

External Validity

The threat to external validity is related to the population and whether the study findings can be generalized to larger populations or across different subpopulations. It is advised that a study with a large or random sample can increase the population validity results. The original sample for this study was 16,446. The sample size calculation indicated that 363 participants are required. Based on the large sample that will be used in this proposed study, this will help to address potential threats to external validity.

Construct Validity

Construct validity focus on the effectiveness of the survey in measuring the construct. PFI was established in the late 1990s. Prior to implementing a new survey, the OMB evaluates the effectiveness of the survey and its items. Each item is reviewed to determine the effectiveness of measuring the construct. All new subsequent surveys must be approved prior to releasing the next survey.

Ethical Procedures

In this study, an archival data set was used from NCES. The ethical procedures for applying to the Institutional Review Board (IRB) at Walden University was used. This study did not include personal information on research participants.

NCES used great care to protect the identity of the families that participated in the study, NCES informed all participants of their right to participate or not participate in the study. NCES removed any characteristic that may lead to the identification of the

participants, which were removed prior to releasing the public use dataset located on the NCES website. NCES instructs all users of the data that the data must be used for research purposes. It is prohibited by law to attempt to determine the identity of participants with all violations resulting in criminal proceedings. NCES indicates that all intentional identification violates the participants' assurances of confidentiality given to the providers of the information (Jackson, et al., 2021).

Summary

In this quantitative nonexperimental, survey-based study, participants included parents of public-school students in middle school living in poverty. The goal is to examine the relationship between parental involvement activities and students' academic achievement. The study was limited to parents with a child in a public middle school in the United States living in poverty. This chapter detailed the proposed research design, data collection process, and data analysis.

Chapter 4: Results

Introduction

The purpose of this quantitative study was to examine whether the predictor variables, parental involvement activities: parenting, communicating, volunteering, learning at home, decision making and collaborating with the community predicts academic achievement of middle school students from families living in poverty. Ordinal logistic regression analysis was used for this study. This was accomplished by addressing the following research question, null hypothesis (H_0), and alternate hypothesis (H_A):

RQ: What is the relationship between the six parental involvement activities, parenting, volunteering, learning at home, decision making, communicating, and collaborative with community on academic achievement, as measured by (GPA), among middle school students from high poverty families?

H_0: There is no relationship between the six parental involvement activities on academic achievement, as measured by (GPA), among middle school students from high poverty families.

H_A: There is a relationship between the six parental involvement activities parenting, volunteering, learning at home, decision making, communicating, and collaborative with community on academic achievement, as measured by (GPA), among middle school students from high poverty families.

The purpose of this chapter is to display and discuss the results of ordinal logistic regression analysis conducted through hypothesis testing. Chapter 4 details the data collection process to include time frame, recruitment, and response rates. Inconsistencies

are discussed. In Chapter 4, I discuss and report the results of the study to include data collection procedures, demographic results, statistical assumptions, analysis of findings, results, and a summary.

Data Collection

The National Household Education Survey for Parent and Family Involvement of 2019 (PFI-NHES: 2019) was used in this study. The data collection time is based on school year 2018 – 2019. Parents with students in public schools were recruited for this survey. PFI unit response rate is 83.4% with an overall weighted response rate of 52.6%. This study focused on parents of middle school student living in poverty. The total number of participants who were families living in poverty was 2,255. The final selected sample of families living in poverty with middle school students was 526.

Demographic

The final sample, N = 526, consisted of 30.5% White, non-Hispanic students; 22.4% Blacks, non-Hispanic students; 36.3% Hispanic students; and 10.8% for all other races and multiple races. Male students represented 54.9% of the sample, and females represented 45.1% of the sample. Families with household incomes less than $20,000 represented 80.3% of the students. The two regions within the United States where most families lived were within the South region (49.7%) and the Midwest region (22.7%).

Table 1

Demographic Data for Participants (N = 526)

Variable	N	%
Race		
White, non-Hispanic	90	30.5
Black, non-Hispanic	66	22.4
Hispanic	107	36.3
Other races, non-Hispanic	33	10.8
Gender		
Male	162	54.9
Female	133	45.1
Parent structure of household		
Two parents	113	38.3
Mother only	142	48.1
Father only	16	5.4
Non-parental guardian	24	8.1

Non-Probability Sampling

The sampling is derived from a larger sampling using archival data from the Department of Education, totaling 16,446. Purposive sampling was used to identify two categories. Families living in poverty equaled 2,255. Families living in poverty with middle school students equaled 526 and represented the final sample size. This method assists in selecting those with required characteristics for this study. This method achieves external validity, as all participants that met the two categories of poverty and middle school students are evaluated. Based on this information, the findings can be used to generalize a larger population adhering to external validity.

Results

The research question was developed to understand the parental involvement activities that impact academic achievement for middle school students living in poverty.

The average grade as reported by parents is 1.92 with a standard deviation of .85. Grades classified as missing and schools that do not report grades are not listed.

Table 2

Dependent Variable Frequency

Variable	*N*	%
Mostly As	170	32.3
Mostly Bs	206	39.2
Mostly Cs	85	16.2
Mostly Ds	24	4.6

Statistical Assumption

Ordinal logistic regression analysis was originally proposed and required the testing of four assumptions. The dependent variable must be measured as an ordinal variable. GPA is the dependent variable, with four categories that require ordering. The independent variables are classified as continuous, categorical, or ordinal. The six parental involvement activities are the independent variable and categoric, and continuous. There is no multicollinearity, as the independent variables does not have connections to each other in the analysis. However, proportional odds assumption was violated. Therefore, a multinomial logistic regression analysis is used. This analysis plan changed from the approved ordinal logistic regression analysis to a multinomial logistic.

Multinomial logistic regression analysis has the same assumptions except for proportional odds is excluded. Proportional odds ratio is not an assumption. Two additional assumptions are included: a linear relationship exists between independent variable and dependent variable; outliers do not exist.

Report Statistical Analysis and Findings

Pseudo R-Square

The Cox and Snell value, 10.8% of the GPA predicted parental involvement activities. Nagelkerke indicates that 11.9% of the GPA predicted parental involvement activities. The McFadden analysis reveals that 4.8% of the GPA predicted parental involvement activities.

Table 3

Pseudo R Square

	Pseudo R-Square
Cox and Snell	.108
Nagelkerke	.119
McFadden	.048

Model Fitting Information

The model fit was assessed using the Chi-square statistic. The Chi-square value was 53.83, and the p-value is .000 and less than 0.05. This provides evidence that there is a significant relationship between the dependent variable and independent variables in the final model. The final model is a significant improvement in the fit for the full model [$X^2(18, N=526) = 53.831, p=0.000$].

Table 4

Model Fitting Information

	Model fitting criteria	Likelihood ratio tests		
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept only	369.355			
Final	315.525	53.831	18	.000

Goodness of Fit

The Pearson (133.501) and deviance (135.964) statistic test proves that the model is fit. Since the test is not statistically significant, that is p value is greater than 0.05. Pearson's chi-square test indicates that the model does fit the data [$X^2(123) = 133.501$, $p=0.244$], the Deviance chi-square does indicate good fit [$X^2(123) = 135.964$, $p=0.200$].

Table 5

Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	133.501	123	.244
Deviance	135.964	123	.200

Likelihood Ratio Test

The likelihood ratio test proves parental involvement independent variables decision making p=0.09, communication p=.001, and volunteering p=.001 was $p < 0.05$ and statistically significant that indicate the independent variable contributes significantly to the final model.

Table 6

Likelihood Ratio Tests

	Model fitting criteria	Likelihood ratio tests		
Effect	-2 Log Likelihood of reduced model	Chi-Square	df	Sig.
Intercept	315.525[a]	.000	0	.
Learning at home Attended a religious event in the past month	319.909	4.384	3	.223
Decision making - Attend a school meeting	327.123	11.598	3	.009
Communication Attend parent - teacher conference	332.376	16.852	3	.001
Learning at home Visited a library in the past month	318.345	2.821	3	.420
Parenting Meal frequency	317.578	2.053	3	.561
Volunteering - Serve as a volunteer	328.427	12.902	3	.005

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

Parameter Estimates

The categorical dependent variable component mostly B and decision making attending a school meeting had a statistical significance (p = .039, OR = 2.78) as compared the dependent variable component mostly D. Parameter estimate was ran evaluating mostly A. Decision making attending school meeting and volunteering serve as a volunteer had a statistical significance (p = .000, OR 3.47 and p = .008, OR .333).

Summary of Results

The research question analyzed on the academic achievement as the dependent variable and six parental involvement activities as the independent variables. A statistical significance of $p < 0.05$ exist for three parental involvement: volunteer, communication and decision making. Therefore, the null hypothesis was rejected. There is a relationship between academic achievement and parental involvement activity.

Chapter 5 interpretates the research findings and confirms the literature as reviewed in Chapter 4 through the context of theoretical framework. The limitation of the study is discussed. The research recommendation for further research is discussed. The potential for social change for families and communities is discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Education with the adequate supports remains the greatest equalizer for families living in poverty. This study aimed to understand the relationship between academic achievement and parental involvement. Families living in poverty have unique barriers and understanding effective parental involvements for students provides the needed support.

This quantitative, nonexperimental study was conducted to examine the following questions: What is the relationship between the six parental involvement activities, parenting, volunteering, learning at home, decision making, communicating, and collaborative with community on academic achievement, as measured by GPA among middle school students from high poverty families? A nonparametric, multinomial logistic regression design was used to analyze archival data collected by NHES with a total participant of 526. Six parental involvement activities were evaluated. Three of the six predictor variables, volunteering, communicating, and decision making were found to be an adequate factor in predicting academic achievement.

Interpretation of the Findings

Epstein's (2005, 2011) parental involvement activities are critical in supporting students in poverty with their academic endeavors. The challenge is identifying the parental activities that lead to academic achievement for students living in poverty. The results of the multinomial logistic regression indicated that parental involvement activities were factors in predicting academic achievement. The results are supported by

Epstein's parental involvement model. Six tenets exist in this model, communication, volunteering, learning at home, decision making, collaborating with the community, and parenting.

Research indicated that traditional parental involvement activities are not as effective for families living in poverty (Bowers, 2011). This study also focused on understanding parental involvement, specifically in the context of families living in poverty. However, this study did indicate some traditional parental involvement activities are effective. Communication, volunteering, and decision making were found to be related to student academic achievement. Communication as measured by attending parent teaching conference was found to be a statistically significant predictor of academic achievement. Research supports the value of strong communication between school personnel and inner-city families that leads to academic achievement (Allen & White, 2018; Williams & Sanchez, 2011). Volunteering was measured by whether there was parental service as a volunteer and was found to be statistically significant. Research indicated school base programs that support production of social capital, a sense of connectedness, and a sense of knowing (Allen & White, 2018; Williams & Sanchez, 2011). Volunteering enables families to foster strong relationships among families, school and community. Volunteer counters stress and isolation experience for families living in poverty (Allen & White, 2018; Williams & Sanchez, 2011).

Decision making was measured by parental attendance at school meetings and was also found to be statistically significant. This explains may explain why participation was low in decision making activates. Time poverty is evident for families living in

poverty and activities that home and away from schools that consume parents' time. Parents' job was listed as a main task that consumes parents' time and a barrier to parental involvement.

The remaining parental involvement activities that were evaluated as part of this study, which included learning at home, collaborating with the community and parenting, were not found to be statistically significant. Collaborating with the community was measured by parental attendance at a religious event in the last month, learning at home was measured by number of visits to the library in the past month, and parenting was measured by number of times parents were eating meals with their child. Mayo and Siraj (2015) completed a study that contributed to understanding the impact of parenting has on academic achievement for low-SES families. The study concluded two types of parental involvement activities are effective in supporting academic achievement, learning at home and parenting.

The study examines the impact of each parental involvement activity on student academic achievement, as measured by GPA. GPA was reported on Mostly As, Mostly Bs, Mostly Cs and Mostly Ds. Parameter estimate table showed Mostly Bs has a greater statistical significance with three of six parental activities evident. This is further supported by the classification table that indicated Mostly Bs predicted percent is 72.2%.

Limitation of the Study

Oversampling was initially noted for a potential limitation of the study. This item continued to be a limitation for the study. Initially, each category of parental involvement was made up of multiple questions. Once the analysis was complete, several of the

categories did not have ample responses, resulting in a Hessian matrix warning in SPSS. To address this warning, each category was reduced to one survey question.

The original decision-making question included, served on a school committee. The response to this question indicated that 93.4% of the participants respond no. This question was not a good fit for the research participants and was removed from the analysis. The replacement decision making question of attended school meetings was used. As the decision-making definition included participating in school governance committees or organizations, such as parent-teacher association, are forms of decision making. Parents may assume leadership roles that involve distributing information to other parents. The intent is to give parents an opportunity to actively voice their ideals in developing mission statements, in designing, reviewing, and improving school policies that affect students and families (Epstein, 2005, 2011).

Recommendation

The study used archival data from the NHES for Public School systems. The dependent variable of GPA, as reported by parents, was used. It may be helpful to evaluate the actual grade point average with a numeric value, instead the categories (i.e., Mostly As, Mostly Bs, Mostly Cs, Mostly Ds) that were in the archival data used in this study. Based on my initial analysis of group parental involvement activities, some activities are missing representation. It is recommended that schools evaluate the decision-making activities and actively engage parents who are in families living in poverty. The first response to the lack of participation may be parents are not interested in

these types of activities. However, this research has challenged me to realize that families may not be invited to participate in these types of activities.

Implication

The implication of parental involvement for families increases students' academic performance, reduces delinquency, and provides a means to escape poverty for the next generation. These challenges left unaddressed are magnified (Epstein, 2005, 2011). Engaging parents in their child's academic performance reduces disciplinary actions, attendance problems, and poor performance. Schools and families engage in effective parental involvement strategies reduces the negative consequences of poor performance (Bowers, 2011). In addition, high school graduation rate improves, and crime may be reduced. Lastly, academic achievement for one generation has the impact to remove poverty for the next generation (Bowers, 2011).

Conclusion

This study focused on parental involvement activities that leads to academic achievement for families with middle school student living in poverty. The initial research indicated that traditional parental involvement activities may not be as effective for families living in poverty. However, this study revealed that some additional parental involvements are effective. The common denominator is open communication for parents, students, teachers, school faculty, and community.

It is critical that school to home connections are made to support middle school students in families living in poverty to help support the families as they work with their

middle school students to attain academic achievement, helping to mitigate poverty for the community and next generation.

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