Parent Involvement in Pre-Kindergarten and the Effects on Student Achievement

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Abstract

An ever-present achievement gap has been found among students and their peers. Educational research and literature have found that the growing gap is due in part to a lack of parent involvement in their students' education and academic performance. The purpose of this study was to investigate how parent involvement affects student achievement and academic success in Pre-Kindergarten. It was hypothesized that parents who display higher levels of involvement will have children who perform better academically. The participants in this study included 26 preschool children and their parents. The researcher utilized a curriculum-based measurement, *AIMSweb,* and *IGDI*'s (**Indicators of Individual Growth and Development for Infants and Toddlers**), a pre-k assessment measure used to **monitor and assess early literacy development** in preschool children. A modified version of the *Parent Involvement Project Questionnaire (PIPQ)* was also used to determine if there is a positive correlation between parent involvement and student achievement. Results of the study indicate that invitation from school was statistically correlated with role construction and parent self efficacy but that student achievement was not statistically correlated with any of the scales from the parental involvement survey. Because the results were based on self-report and included a relatively small sample size, the outcomes of the study may not align with the majority of published studies pertaining to parent involvement and student achievement, due to its subjective nature. Or, perhaps for some students, there may be other

factors that are more influential than parent involvement. Implications and further research are discussed.

Parent Involvement in Pre-kindergarten and the Effects on Student Achievement

Introduction

The emphasis and focus on education has increased over the years, but there is still a prominent and ever-present achievement gap in our educational system between students and their peers. Research and literature have suggested that educational achievement has remained inequitable for a variety of reasons, one of which is the lack of parental involvement in their students' academic performance (Larocque, Kleiman & Darling, 2011). Parental involvement can take on many forms and is seen as an effective strategy to enhance student success, as evidenced in studies done on the relationship between parental involvement and academic performance in students (Bower & Griffin, 2011).

Parental involvement "has been operationally defined as parental aspirations for their children's academic achievement, parents' communication with their children about education and school matters, parents' participation in school activities, parents communication with teachers about their children, and parental supervision at home" (Fan, 2011, p. 29). Although defining parental involvement has been somewhat intuitive in nature, Epstein (1992, 1994) developed a theoretical framework using a typology to identify six levels of how parents can actively participate in their children's education, and these six levels can be analyzed and measured. The six levels of parent involvement include: a) helping parents understand child development and have confidence in their parenting, b) communication between parent and school, c) parent involvement in school volunteer opportunities, d) parent involvement in home-based learning, e) parent involvement in decision making regarding school, and f) involvement in school-community collaborations (Fan, 2001). There are several frameworks used in the research of parental involvement, but Epstein provides a comprehensive and measurable model that creates a

partnership between families, schools, and the community to help foster children's development and learning (Smith et al., 2011). These categories of involvement provide a basis for research, but often do not account for the different ways minority groups and/or low income families view and value involvement in their child's education.

The lack of research examining the Pre-Kindergarten age group is due in part to how parental involvement is measured. In this area of research, the age of students, as well as the measures, may be a contributing factor in inconsistent findings. Some studies target elementary aged students, whereas other studies focus on middle school and high school students. And because developmental changes emerge over time, the measures for academic achievement may need to take into account these changes as well (Fan, 2011). Measures of parent involvement have been researched extensively and the general findings indicate that there is a positive relationship between parental involvement and academic achievement (Topping & Wolfendale, 2017).

Globally, parent involvement is a concern that has been researched extensively. However, the focus of this research has been narrowed down to parent involvement in pre-kindergarten and the values placed on academics in the early years of education and how it affects student achievement. The following literature review will discuss research findings pertaining to parent involvement in pre-kindergarten, the benefits of parent involvement during this time, as well as barriers that hinder parent involvement in early childhood. The purpose of this study is to investigate how parent involvement affects student achievement and academic success in Pre-Kindergarten. It is hypothesized that parents who display higher levels of involvement will have children that perform better academically.

Literature Review

Although many studies examining parental involvement exist, there is limited research specifically describing parent involvement at the pre-kindergarten level. Very few studies have attempted to delve into this area of inquiry, but share the common finding that research pertaining to the longitudinal effects of parental involvement in pre-kindergarten is scarce, quantifying the need for research even more. Powell (2010) asserts that although findings from studies have found a link between children's educational outcomes and parent involvement, the quality of current evidence pertaining to long-term effects of studies, specifically small-scale, are scant and inadequate. Most small-scale studies yield inadequate results when compared to large-scale, well established studies such as Head Start, which have been implemented longer and produce statistically significant results due to larger samples (Reynolds, 2007).

Research findings suggest that parent involvement at the pre-kindergarten level is more often found in the form of involvement at home, as opposed to school. Involvement at home, such as reading books to children and interactions between parent and child, may be beneficial to preschool children's educational outcomes and contribute to early literacy skills (Powell et al., 2012; Bracken & Fischel, 2008). Researches Ramani and Siegler (2008) also indicate that low-income preschool children's experiences at home with board games associated with numbers were related to mathematical knowledge. Children's meaningful interactions in home environments at the preschool level may account for a portion of the limited research in the area of parent involvement and school-based learning (Powell et al., 2012).

Other studies have concluded that the optimal time for promoting and instilling parent-school involvement is in pre-kindergarten, which can help foster that relationship in later years

and support academic success (Ma, Shen, Krenn, Hu, & Yuan, 2016). Funding for state pre-kindergarten has recently seen rapid expansion due to the overwhelming need for pre-k programs, which could spur more research in this area. Until now, most research on pre-kindergarten programs has been carried out in Head Start (a federally funded program), which provides activities for parents, required parent involvement, in home visits, and other provisions that are not generally used in public school pre-k programs (Powell, 2009).

Benefits of Parent Involvement

Research on the benefits of parental involvement not only includes academic achievement, but success in developmental areas as well. Hill and Craft (2003) assert that social competence in children is directly linked to increased parental involvement, while Brody, Flor, and Gibson (1999) found that an increase in parental involvement contributed to an increase in social skills as well as the ability for students to manage and self-regulate their own behaviors. Furthermore, other cross-sectional and longitudinal studies have consistently shown that parental involvement is also associated with an increase in language development and skills that support academic success in early childhood (Grolnick & Slowiaczek, 1994). Parental involvement in early childhood has also been associated with higher reading and math scores, fewer attendance issues, and fewer behavioral problems in students (Hiatt-Michael, 2001).

Involvement in school is equally beneficial for parents as well; they are more aware of the educational needs of their children, develop more positive relationships and attitudes towards teachers, and seek higher educational opportunities for their children (Larocque, Kleiman & Darling, 2011). Because the demand for parent accountability is greater than ever in the realm of education, it is vital that schools and families share the responsibility and create partnerships to ensure that every child is successful (Hill & Taylor, 2004).

Barriers to Parent Involvement

Although parental involvement is crucial to the academic success of students, there are factors that create barriers and inhibit parents from being involved in their children's education. Federal policy has sought to strengthen parental involvement, particularly in urban, low-income and disadvantaged communities, but barriers continue to subsist (Smith et al., 2011). These barriers include poverty/socioeconomic status (SES), race/ethnicity and cultural differences, language barriers, parents' level of education, and logistical limitations.

Parents who come from poverty and low SES backgrounds are often faced with work schedules that do not allow for involvement; lack the resources needed to be involved, such as money or how to help; unreliable transportation; and stressors stemming from living in disadvantaged and unsafe neighborhoods. Poverty is often accompanied by stressors such as struggling to make ends meet and mental health issues that may negatively impact parent's self-perceptions, or feelings about themselves and their ability to parent, which can indirectly affect their ability to become involved when they are struggling to support their family (Mayo & Siraj, 2015). Poverty can have an effect on mental health, which in turn can have an effect on how involved and aware parents are—their focus may be on how they are going to provide the basic needs for their children, rather than how they are performing academically in school (Hill & Taylor, 2004).

Research has shown that parent involvement may look different in families from diverse or ethnic backgrounds, but may not be universally recognized as involvement; their predispositions and perceptions of involvement may vary from the norm (Lee & Bowen, 2006). Several researchers have found that sociocultural values and cultural narratives are a form of involvement in some diverse cultural/ethnic groups, and that these families often use strategies

unfamiliar to others that are supportive of their children's educational achievement. For example, minority families may view teaching their children how to work and help support the family a form of involvement. This type of parent involvement may be underrepresented and not readily understood by mainstream society (Lopez, 2001). Language barriers make it difficult for non-English speaking families to communicate with teachers and schools. This barrier can be associated with a lack of involvement within families, but may really just be overwhelming and intimidating for these families (LaRocque et al, 2011). Advocacy for translators and bilingual staff can ease the frustration and help facilitate communication between families and teachers/schools.

The parents' levels of education can also pose as a barrier to involvement in their children's achievement. Parents may not place value in education due to their own upbringing or lack of success in school themselves (LaRocque et al, 2011). Or, parents may have a negative view of school from their own experiences (Lee & Bowen, 2006). This can lead to avoidance of school, which may be associated with their hesitance to question teachers or schools because they feel inferior (Lareau, 1996).

Logistical barriers such as inflexible work schedules can physically inhibit parents from being involved. Families are dependent on their jobs for income, health insurance, and other benefits, therefore making it difficult to take time off for fear of jeopardizing their employment (LaRocque et al., 2011). Employment barriers may also limit their involvement making it difficult for them to be involved during school hours and inhibiting the amount of participation, unlike their counterparts who may have more stable, salaried employment (LaRocque et al, 2011). In turn, parents that are less able to participate in school functions and less visible may be deemed as uncaring or uninvolved, which may present negative attitudes towards parents and

students (Lee & Bowen, 2006). Researchers Hill and Craft (2003) assert that teacher perceptions indicate that parents that are involved at school place value on education, whereas the opposite

conclusion could likely be placed upon parents that are unable to attend school functions or volunteer their time.

Child Development and the Importance of Pre-Kindergarten

Pre-kindergarten and early childhood education is the foundation and basis for learning and development. Studying children's development during early childhood is important because this is the time children develop basic and foundational skills that will carry them throughout their academic career and future learning. Research has evidenced that early childhood experiences help shape the construction of the developing brain. "Because skills are acquired hierarchically (i.e., complex skills build on simpler ones), early learning experiences influence the brain's capacity to benefit from future ones" (Perez-Johnson & Maynard, 2007, p. 590). Closing and offsetting these early developmental gaps may be more easily accomplished during the preschool years, as they become harder and may compound at a higher rate in later years (Perez-Johnson & Maynard, 2007). Children acquire important developmental skills at this age that can benefit future academic skills and learning. Cognitively, children begin to understand and explore their world through discovering their environment and making meaning of these experiences. They begin to use symbols in their learning and play that help develop literacy, math, and science skills that start to emerge (Driscoll & Nagel, 2008). Skills such as understanding their own feelings and the feelings of others, the ability to establish and maintain peer and adult relationships, and the ability to regulate and monitor their own behavior are all important aspects of social and emotional development that children can acquire during early childhood and carry over into later life (Gormley, Phillips, Newmark, Welti, & Adelstein, 2011). Children also acquire language comprehension in early childhood that can support interactions and negotiations with peers and adults. Expressive and receptive language development during the preschool years present an important foundation for later success in reading, particularly reading comprehension. Longitudinal studies reveal

a link between preschool language acquisition and reading comprehension in later elementary years (Mashburn, Justice, Downer, & Pianta, 2009).

Theoretically, Bronfenbrenner's (1989) Ecological Systems Theory accurately describes the relationship among home, school, and community that support development in these early years. Bronfenbrenner's mesosystem incorporates the complex characteristics of home, school, and environment that can influence children's development (Lee & Bowen, 2006). Specifically, individual parent characteristics, child characteristics, school and community standards, and cultural norms and beliefs are all factors that can impact parent involvement (LaRocque, Kleiman, & Darling, 2011). The home and school environments are two important components of the child's microsystem where parent involvement in school functions as the connection between the two elements (Lee & Bowen, 2006).

Parent Perceptions of Involvement

Because involvement may appear differently in families, it is important to assess how parents view their role in relation to their children's academic success and learning. The current study seeks to uncover and understand parent perceptions of involvement by evaluating involvement through measures of parent self-efficacy, their decision to become involved, role construction, and their perceptions of general invitations from school. Self-efficacy can be described as how effective they perceive themselves to be in relation to their children's learning—how successful are they in influencing their children's academic outcomes (Hoover-Dempsey, Bassler, & Brissie, 1992). Parents' decision to be involved refers to what they believe should do and can do in regards to their child's education. (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). In deciding to become involved parents need to understand their roles. Parents' role construction is defined as what parents believe they need to do in relation to their child's educational outcomes. Role construction incorporates their beliefs about child-development and support at home and how it influences their child's academic success. Role

construction also takes into consideration parents' experiences with people and groups outside of the home, particularly school-related individuals (Green, Walker, Hoover-Dempsey, & Sandler, 2007). Parent perceptions of invitations from school refer to the school climate—how welcome they feel, how responsive are school-related individuals, how informed they are of school events and student progress. A positive, welcoming, and trustworthy school environment has been found to foster and support parent involvement (Green, Walker, Hoover-Dempsey, & Sandler, 2007).

Research Question and Hypothesis

It is evident that the literature boasts an abundance of research pertaining to parent involvement in elementary, middle, and high school, but there is clearly a lack of research and usable data on pre-k and early childhood parent involvement. The implications for a study such as this is evident and warrants investigation, which leads to the research questions posited for this study: What is the impact of parental involvement in early childhood on student achievement? It is hypothesized that children whose parents report higher levels of or perceptions of involvement will demonstrate greater academic achievement.

Methodology

Participants

The participants in this study were comprised of 26 preschool children ages 4 and 5 years and their parents. The 26 children attend a half day pre-kindergarten program at an urban, Midwestern preschool serving at-risk and special needs children. The demographics of the classroom are as follows: 14 African American, 1 Caucasian, and 3 Hispanic/Latino students.

This neighborhood preschool is located in Northeast Wichita, and serves many children in the surrounding area. All students enrolled meet one of the seven at-risk criteria listed, per state guidelines for pre-kindergarten: poverty, single parent family, Department for Children and Families (DCF)

referral, teen parents, one or both parents lacks a high school diploma or GED, qualification for migrant status, and limited English proficiency (State Pre-Kindergarten Program Standards and Requirements, 2013).

Materials and Measures

Parent measure. The researcher utilized a modified version of the *Parent Involvement Project Questionnaire (PIPQ)* adopted from original researchers, Whetsel, Hoover-Dempsey, Sandler & Walker (2002) to assess parental report of involvement. To assess the effect parent involvement had on student achievement, the responses given on the *PIPQ* were used to measure reports of parental involvement and scored accordingly using a standardized scale of measurement.

The *PIPQ* was designed to assess parents' attitudes and perceptions towards involvement and how parent involvement influences student achievement. The questionnaire consisted of 4 scales, each containing a Likert-scale response format, with varying responses ranging from *disagree very strongly (1) to agree very strongly (6), never (1) to daily (6), and very unlikely (1) to very likely (4)*. The four scales addressed were *Parent's Perceptions of Self-Efficacy for Helping the Child Succeed, Parent's Decision to Become Involved, Parent's Role Construction,* and *Parent's Perceptions of General Invitations for Involvement from the School. Parent's Perceptions of Self-Efficacy* refers to how parents perceive their own abilities in helping their children and how their actions influence academic outcomes. *Parents Decision to Become Involved* is defined as what factors influence how and why they become involved in their child's education. *Parent's Role Construction* refers to parent's beliefs and responsibilities in relation to their child's academic success. The role construction scale is divided into three subscales: *Parent-Focused Role Construction, School-Focused Role Construction,* and *Partnership-Focused Role Construction*. Parent-focused role construction reflects beliefs that parents see themselves ultimately responsible for academic success. The second subscale, school-focused role

construction, reflects parent's belief that the school is ultimately responsible for student academic success. And the third subscale, partnership-focused role construction reflects parent's beliefs that the parents and school are equally responsible for educational outcomes. *Parent's Perceptions of General Invitations for Involvement from the School* refers to general invitations from school that conveys to the parents that they are welcome, valued, respected, and that their involvement is useful and supports their child's education and academic success. This scale consists of three subscales: *School-Focused Invitations, Empowerment-Focused Invitations, and Communication-Focused Invitations*. The first subscale refers to how parents feel they are treated and if they feel welcome and appreciated at school. The second subscale indicates how well the school conveys to parents how they can help, and invitations to meetings and school events. The third subscale denotes the amount of communication and feedback from school and staff. (Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). A copy of the questionnaire can be found in the Appendix.

Child measure. As a measure of child academic achievement, the researcher utilized *AIMSweb,* a curriculum based measurement that provides progress monitoring and screening, to assess foundational skills of reading and math (*AIMSweb.com,* 2012). Because *AIMSweb* assessments begin in Kindergarten and do not provide Pre-K measures, they offer 3rd party reporting and charting for *IGDI'*s **(Indicators of Individual Growth and Development for Infants and Toddlers), which are Pre-K measures (*AIMSweb.com,* 2012*). IGDI'*s was developed to monitor and measure early literacy development in preschool children in the fundamental literacy domains of oral language, phonological awareness, alphabet knowledge, and comprehension (**McConnell, Bradfield & Wackerle-Hollman, 2013**). Assessment measures of oral language are done through Picture Naming Fluency (student names the picture), Phonological Awareness is measured using rhyming (student selects the picture that rhymes with the target picture) and alliteration (student selects**

the picture that begins with the same initial sound as the target picture), Alphabet Knowledge is measured using sound identification (student points to the letter that makes the sound identified by assessment administrator), and lastly Comprehension uses "Which One Doesn't Belong" (student identifies the picture that does not belong) as the assessment measurement (McConnell, Bradfield & Wackerle-Hollman, 2013).

For the purposes of this study, the *IGDI*'s data was used to measure students' oral language performance in the area of picture naming fluency (number of correctly identified pictures). Picture naming fluency (PNF) assesses expressive language development through identification of picture cards that are typically recognized and found in the student's home (e.g., cake, sink), school (e.g., glue, book), and community environment (e.g., rabbit, train) (Gischlar, 2009; Missall & McConnell, 2004). This assessment measure provides an indicator for early literacy skills and language development.

Research on Curriculum-Based Measurement (CBM) has reported substantial evidence of reliability and validity. The use of continuous assessment, monitoring, and established benchmarks provides reliable data and information that is highly accurate. CBM is researched based and was developed as an assessment tool using years of data to meet state standard requirements (kentuckyliteracy.org). The National Center on Response to Intervention gave *AIMSweb* the highest rating for reliability and validity of assessments and monitoring tools and providing rigorous and accurate assessment (rti4success.org, 2009)

Procedure

Parents/caregivers were given the questionnaire during parent/teacher conferences in the child's classroom. The participants completed the survey in the classroom after the parent/teacher conference and submitted it when they finished. They were told what the study was about, that it was strictly voluntary, and were given a consent form to fill out. Questionnaires translated in Spanish were also be

provided if necessary. Once consent was given they were administered the questionnaire that took

approximately 15 to 20 minutes.

Upon return of the questionnaires, assessment data taken from *AIMSweb* and *IGDI*'s was

generally compared to the data found in the questionnaires and evaluated using statistical analysis to

determine if the level of parent involvement impacted student achievement.

The *IGDI's* measure was administered one-on-one with each child particicpant in a quiet

classroom setting. Administering the PNF assessment includes a demonstration of the task using four

sample picture cards to confirm that the student understands the task, presenting the student with the

picture cards, and asking them to name as many pictures as they can. The number of correctly identified

pictures in one minute is the student's score (Missall & McConnell, 2004) Benchmark scores, which

was correctly identifying 21 pictures correctly, of the PNF assessment were used as the standardized

measurement for this study.

Results

To examine the relationship between parental involvement and student academic achievement,

several analyses were conducted. First, descriptive statistics are reported for student *IGDI*'s data (Picture

Naming Fluency) and parental report of involvement (See Table 1).

Table 1

Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
IGDI	6.00	35.00	20.50	7.62
Self-Efficacy	37.00	60.00	49.19	4.74
Decision to be Involved	18.00	36.00	31.12	4.61
Role Construction	59.00	89.00	75.15	9.34

| Invitation from School | 54.00 | 66.00 | 60.85 | 4.69 |

Note. N=26

To determine if the subscales on the parental involvement survey were related to each other, bivariate correlations were computed. Results are found in Table 2.

Finally, to determine if student achievement is related to parental involvement, bivariate correlations were computed among *IGDI*'s data and the four subscales from the parental involvement survey. Results are reported in Table 2 and indicate that, as aforementioned, invitation from school was statistically correlated with role construction ($r = .58, p < .01$) and self-efficacy ($r = .45, p < .01$). However, student achievement was not statistically correlated with any of the subscales from the parental involvement survey.

Table 2

Bivariate Correlations Between Student Achievement and Parental Involvement

Variable	1	2	3	4	5
1. *IGDI*	--				
2. Self-Efficacy	.33	--			
3. Decision to be Involved	.09	.07	--		
4. Role Construction	-.23	.28	.05	--	
5. Invitation from School	.18	.45**	.17	.58**	--

Note. **$p < .01$.

Discussion

This study sought to examine the relationship between student achievement and parental involvement. It was hypothesized that the children whose parents reported higher levels of or

perceptions of involvement would demonstrate greater academic achievement. Because the results were based on self-report and thus may be subjective in nature, the outcomes of the study may be skewed and not accurately represent the general findings of the majority of published studies pertaining to parent involvement and student achievement. Results are based off of parent perceptions of involvement, which may not present itself as objective or impartial. Results may also be due to the fact that this study examined younger children who may not be reliable participants due to their age. Another reason that possibly played a role in the results is that not all pre-kindergarten aged students attend pre-kindergarten. In order to find a truly representative sample, examination of preschool aged children at home, where parent involvement also plays a strong role, as well as school-based involvement may generate different outcomes. Each type of environment incorporates parent involvement, yet the dynamics are different and could potentially yield interesting results. And finally, correlations may not have been found between *IGDI*'s scores and parent involvement because students are already "at risk," resulting in less variation in scores.

There is little research that supports the notion that parent involvement and student achievement are not linked. Conversely, findings from the literature indicate that home-based parent involvement plays an integral role in the success and achievement of students, especially during the early years. Because home-based parent involvement is difficult to quantify and study, researchers may typically focus on school-based parent involvement. School-based parent involvement and greater student achievement have been positively linked in different levels of schooling. However, in early childhood, parent involvement at home may be more beneficial and implemented during this time. Researchers Grolnick and Slowiaczek (1994) found that parent practices such as reading the newspaper to their child and going to the library, that are not generally school related involvement, have a positive effect on academic success in school. This form of involvement can be referred to as intellectual enrichment—

providing children with enriching activities outside of school that can contribute to success in the classroom (Pomerantz, Moorman, & Litwack, 2007). Investigations into the types of involvement at home may be more beneficial to this form of present study. Researchers Pomerantz, Moorman, and Litwack (2007) also assert that while increasing the extent of involvement is important, it is equally important to look at how and why parents become involved. Getting parents involved in their children's academic success is important, but it is equally important to understand the effects that the quality of the involvement has on success and the role it plays.

Results from this study refute those studies that indicate there is a link between parent involvement and greater student achievement. There is an abundance of literature pertaining to the positive effects that parent involvement has on student achievement and success in the early years. Early intervention studies such as The Perry Project, Carolina Abecedarian Project, and The Chicago Child-Parent Centers (CPC) were all longitudinal studies that investigated the impact of a high-quality intervention program targeted towards disadvantaged and low income families (Perez-Johnson & Maynard, 2007). Each of these studies indicated required parent involvement, making it a key focus of each of the programs.

Limitations

Results of the current study do not support the aforementioned hypothesis that levels of or perceptions of parental involvement have an impact on student academic success. There are a few limitations to this study that may account for these results. First, the sample size is relatively small, limiting generalizability. Implications for future research could include sampling more than one pre-k classroom in the same school as well as different schools to obtain a larger, more diverse sample size. Second, the measure used as academic achievement really only measures expressive language and is not comprehensive in nature. A more sensitive measurement tool may provide additional information that is

related to parental involvement   Future research could also include the implementation of more than one pre-k measure and incorporate assessments that evaluate cognitive development, social-emotional development, as well as language development in order to encompass more than one area of growth in young children. Also younger children are difficult to assess and are often unreliable "test takers" due to rapid development and influences from their environment and experiences (Epstein, Schweinhart, DeBruin-Parecki, & Robin, 2004). Results may not predict achievement in pre-k, but it may predict achievement in later years where reliability is more identifiable. Another limitation is that the measure of parental involvement is based on self-report. An objective, school-based measure (e.g., attendance at conferences, teacher reports) might provide different information, leading to different results.

Implications

Classroom implications that stem from this study include strategies that teachers can utilize to increase the quantity and quality of parent involvement. It is important for teachers and schools to provide activities that encourage and promote engagement and involvement, such as being a guest reader to the class or a family night at the school. It is also important to accommodate the work schedules and other factors of families as well. Frequent communication is another vital strategy that can help strengthen parent involvement at school and at home. Providing a variety of methods of communication such as email, phone, newsletters, notes in the agenda, and weekly progress reports can assist in keeping the lines of communication between teacher and families open. Providing flexibility and resources for parents can also help encourage and promote parent involvement. Families often have diverse work schedules that warrant flexibility from the classroom teacher, such as scheduling parent-teacher conferences at times that are convenient for them. Offering resources can assist families and educate them on various topics relevant to their child's educational needs. Teachers can also help

families by providing tools and information on how to effectively support their children at home in order to help them be successful at school.

Future Directions

Future research includes investigating the quality of the parent involvement rather than the quantity. Parents may report the amount of time they spend being involved, but what is the quality of the involvement? Home studies that investigate the type, quality, and amount of home involvement may help researchers better understand what parents need outside of school in order to help their children at home, which in turn can benefit them at school. Research such as this would be beneficial to parents, as well as educators. Teacher reports regarding parent involvement could also be beneficial to future research, as parent self-reports may not accurately represent the quality and quantity of involvement that they themselves report. The current study sought to find a positive correlation between parent involvement and student achievement. It is clear from the results of the study that there are many more aspects to measuring parent involvement than simply self-reports and assessment measures. Parent involvement is multi-dimensional, with the quality of involvement being at the forefront for future research. Understanding the quality of involvement can further benefit early intervention programs and student success and educational outcomes.

References

*AIMS*web: Curriculum Based Measurement. (2012). *NCS Pearson, Inc.* Retrieved from:

http://www.aimsweb.com/about/curriculum-based-measurement on June 12, 2013.

Bower, H. A., & Griffin, D. (2011). Can the Epstein model of parental involvement work in

a high-minority, high poverty elementary school? A case study. *Professional School*

Counseling, *15*(2), 77–87.

Bracken, S. S., & Fischel, J. E. (2008). Family reading behavior and early literacy skills

in preschool children from low-income backgrounds. *Early Education and*

Development, 19, 45-67.

Brody, G. H., Flor, D. L., & Gibson, N. M. (1999). Linking maternal efficacy beliefs,

development goals, parenting practices, and child competence in rural single parent

african american families. *Child Development*, *70*, 1197–1208.

Collaborative Center for Literacy Development (2013). Retrieved from:

http://www.kentuckyliteracy.org/sites/ccldzen/files/literacy_tool/tools/1.03%20AIMSweb.pdf on

June 12, 2013.

Driscoll, A., & Nagel, N. G. (2008). *Early childhood education, birth-8: The world of children,*

families, and educators. Boston: Pearson.

Epstein, A. S., Schweinhart, L. J., De-Bruin-Parecki, A., Robin, K.B. (2004). *Preschool*

Assessment: A Guide to Developing a Balanced Approach. Retrieved from:

http://nieer.org/resources/factsheets/12.pdf on September 24, 2013.

Epstein, J.L. (1996). Perspectives and previews on research and policy for school, family,

and community partnerships. In A. Booth & J.F. Dunn (Eds.), *Family-school links:*

How do they affect educational outcomes? (pp. 209-246). Mahwah, NJ: Erlbaum.

Fan, X. (2001). Parent involvement and students' academic achievement: A growth modeling

    analysis. *The Journal of Experimental Education*, *70*(1), 27–61.

Gischlar, K. L. (2011). Efficiency and Economy in the Assessment of Emergent Literacy

    Skills. *Proquest, UMI Dissertation Publishing.*

Gormley, W. T., Phillips, D. A., Newmark, K., Welti, K., & Adelstein, S. (2011). Social-

    emotional effects of early childhood programs in Tulsa. *Child Development, 82*(6),

    2095-2109.

Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. (2007). Parents'

    motivations for involvement in children's education: An empirical test of a theoretical

    model of parental involvement. *Journal of Educational Psychology. 99*, 532-544.

Grolnick, W. S., & Slowiaczek, M. L. (1994). Parent's involvement in children's schooling:

    A multidimensional conceptualization and motivation model. *Child Development*, *65*,

    237–252.

Hiatt-Michael, D. B. (2001). Schools as learning communities: A vision for organic school

    reform. *School Community Journal*, *11*, 93–112.

Hill, N. E., & Craft, S. A. (2003). Parent-school involvement and school performance:

    Mediated pathways among socioeconomically comparable African American and

    euro-american families. *Journal of Educational Psychology*, *95*, 74–83.

Hoover-Dempsey, K.V., Bassler, O.C., & Brissie, J.S. (1992). Explorations in parent-school

    relations. *Journal of Educational Research, 85, (5),* 287-294.

Lareau, A. (1996). Assessing parent involvement in schooling: A critical analysis. In A. Booth

    & J.F. Dunn (Eds.), Family-school links: How do they affect educational outcomes.,

    57–64.

Larocque, M., Kleiman, I., & Darling, S. M. (2011). Parental involvement: The missing link

    in school achievement. *Preventing School Failure*, *55*(3), 115–122.

Lee, J., & Bowen, N. K. (2006). Parent involvement, cultural capital, and the achievement

    gap among elementary school children. *American Research Journal*, *43*(2), 193–218.

Lopez, G. R. (2001). The value of hard work: Lessons on parent involvement from an

    immigrant household. *Harvard Educational Review*, *71*(3), 416–437.

Ma, X., Shen, J., Krenn, H., Hu, S., & Yuan, J. (2016). A meta-analysis of the relationship between

    learning outcomes and parental involvement during early childhood education and early

    elementary education. *Educational Psychology Review, 28*(4), 771-801.

Mashburn, J. A., Justice, L. M., Downer, J. T., & Pianta, R. C. (2009). Peer effects on

    children's language achievement during pre-kindergarten. *Child Development,*
80(3), 686-702.

Mayo, A., & Siraj, I. (2015). Parenting practices and children's academic success in low-SES families.

    Oxford Review of Education, 41(1), 47-63.

McConnell, S., Bradfield, T., & Wackerle-Hollman, A. (2013). MyIGDI's: Early childhood

    Assessments for RTI, CBM, and progress monitoring. Retrieved from: http://www.myigdis.com/
    on October 2, 2013.

Missall, K. N., & McConnell, S. R. (2004). Psychometric characteristics of individual growth

    and development indicators: Picture naming, rhyming, and alliteration. *Center for Early*
Education and Development, 1-24.

National Center on Response to Intervention (2009). Retrieved from: http://www.rti4success.org

    on June 12, 2013.

Perez-Johnson, I., & Maynard, R. (2007). The case for early, targeted interventions to prevent

academic failure. *Peabody Journal of Education, 82*(4), 587-616.

Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom, and why of

parents' involvement in children's academic lives: More is not always better. *Review of*

Educational Research, 77(3), 373-410.

Powell, D. R. (2009). The Head Start program. In J. Roopnarine, & J.E. Johnson (Eds.),

Approaches to early childhood education (pp. 48-67). 5th ed. Upper Saddle River,

NJ: Merrill/Pearson.

Powell, D. R., Son, S. H., File, N., & Froiland, J. M. (2012). Changes in parent involvement

across the transitions from public school pre-kindergarten to first grade and children's

academic outcomes. *The Elementary School Journal*, *113*, 276–300.

Powell, D. R., Son, S. H., File, N., & San Juan, R. R. (2010). Parent-school relationships

and children's academic and social outcomes in public school pre-kindergarten.

Journal of School Psychology, *48*, 269–292.

Ramani, G. B., & Siegler, R. S. (2008). Promoting broad and stable improvements in low-

income children's numerical knowledge through playing number board games. *Child*

Development, 79, 375-394.

Smith, J., Wohlstetter, P., Kuzin, C. A., & De Pedro, K. (2011). Parent involvement in

urban charter schools: New strategies for increasing participation. *The School*

Community Journal, *21*(1), 71–94.

State Pre-Kindergarten Program Standards. Retrieved from:

http://www.ksde.org/LinkClick.aspx?fileticket=vDJi3mDLMA0%3d&tabid=3293&mid=8262

on June 12, 2013.

Topping, K., & Wolfendale, S. (2017). *Parental involvement in children's reading*. New York, NY: Routledge.

Walker, J. M. T., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *The Elementary School Journal, 106*(2), 85-104.

Whetsel, D., Hoover-Dempsey, K., Sandler, H., & Walker, J. (2002). Parent Involvement Project (PIP) Parent and Teacher Questionnaires: Study 1. Department of Psychology and Human Development, Vanderbilt University.