

THE EFFECT OF ADDING STUDENTS TO SCHOOL-PARENT COMMUNICATION TO
IMPROVE PARENTAL ATTENDANCE AT SCHOOL EVENTS

by

Amanda Sue Kirby-Hart

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

This quantitative, quasi-experimental static group comparison study aimed to determine parents' perspectives on their school involvement and the effects of student influence on parent attendance at school events when communication methods included students and parents. Communication about ways parents can become involved with their student's school is vital in improving the connection between parental involvement and student achievement. Sample participants included the parents of 381 elementary school students (Kindergarten-Fifth Grades) of one public charter school. The parent involvement events consisted of two asynchronous parent involvement videos, one for reading and one for math, delivered through the Family Involvement Questionnaire emailed to parents from the school. Questionnaire data about parents' perceived school involvement was collected via Google Forms, downloaded as an Excel spreadsheet, then uploaded to SPSS for data analysis through two independent samples *t*-tests and two Chi-squared tests. The findings suggest that when students are included in the communication about parent events, students' "pester power" positively influences parent attendance. Therefore, school personnel can improve parent attendance at parent involvement events by including students in the marketing-motivated communication about the events. The researcher recommends strengthening this study's findings by replicating the study, post-pandemic, in different settings such as in-person, synchronous, and asynchronous; rural, suburban, and urban; in districts with varying socioeconomic statuses and diverse enrollments; and in varying school district types, which provides a larger sample size.

Keywords: parent involvement, attendance at school events, pester power, school communication

Dedication

I dedicate my dissertation to my husband, P. Jayson Hart. He encouraged me to apply and begin my doctorate, and he supported me throughout these busy and tedious academic years. He listened to countless iterations of my work, asked clarifying questions of me, offered suggestions for revisions, and cared for our young family when I was tethered to the computer for countless hours of research, work, and writing.

I also dedicate my work to my two teenage children, Haley and Hagen. You probably do not remember a time when I was not researching or working on a paper. This work was a tremendous sacrifice of time and energy, and now that this work is complete, I am able to wholly and completely be here for you.

I dedicate my research to my parents, David and Linda Kirby. You instilled a belief in me from a very early age that I could do anything I set my mind from, and you always believed I would earn my doctorate someday. That day, although later than we had dreamed, has finally come. I hope I always make you proud.

Last, I dedicate my dissertation to my parents-in-law, Cecil and M. LaRue Hart, who we lost during this process. You recognized how important this was for me and encouraged and supported my family while you could. I wish you could be here to see this accomplishment. You are greatly missed by us all.

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List of Abbreviations

Elementary and Secondary Education Act (ESEA)

Every Student Succeeds Act (ESSA)

Family Involvement Questionnaire (FIQ)

Family-School Partnerships (FSP)

Information and Communication Technology (ICT)

keepin' it REAL (kiR)

Knowledge Management (KM)

Learning Management System (LMS)

Media Richness Theory (MRT)

No Child Left Behind Act (NCLB)

Parent-Teacher Association's (PTA)

Parent-Teacher Organizations (PTO)

Public Education Information Management System (PEIMS)

Statistical Package for the Social Sciences (SPSS)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this quantitative, quasi-experimental study was to determine the level of parents' perception of involvement as related to school. Chapter One provides a background for communication and its social implications within families and schools. The background also includes an overview of the theoretical framework for this study. The problem statement examines the scope of the recent literature on this topic. The purpose of this study is followed by the significance of the current study. Finally, the research questions are introduced, and definitions pertinent to this study are provided.

Background

In the race to improve parent involvement attendance, public schools must find ways to effectively communicate with their audiences. Schools must ensure that their parent communication is being distributed and received as intended, including communication through advancing technology (Svalina & Ivić, 2020). Considering the many facets of public school communication, a district that develops and maintains a communications plan, including parent communication, is invaluable to school personnel (Michela et al., 2022). Additionally, communication is vital in improving the well-researched connection between parental involvement and student achievement. One way to improve parental involvement, especially related to school events, is to include communication with the student who potentially possesses the ability to influence parental behaviors in attending those events (Triakha & Saini, 2019).

Schools need to communicate with parents to elicit action, and when parental action decreases, organizations must review their methods of communication. To understand the current communication issue, the researcher must first ascertain the historical aspect of communication

from the development of simple communication to implementation by a school to achieve desired outcomes such as increased parental involvement. Exploration of the current research on the historical context of communication indicates that humans are intrinsically motivated to achieve goals via influence over the actions of other humans.

Historical Context

Communication is the act of transferring information from one place, person, or group to another for a multitude of reasons: to influence, to change attitudes, to motivate others, and to maintain or establish relationships (Goodall, 2016). Although living beings may not communicate in the same manner, they do project an innate need to communicate. Some beings gesture or move their bodies in distinct patterns, some apply vocalization techniques, and some can develop tools to make special marks or symbols on various items to transmit information (Pustejovsky, 2018). Human communication developed beyond other beings' simple gesturing, movements, and vocalizations in that humans communicate socially to share intent (Gross, 2010).

Modern humans develop cooperative communication at approximately 12 months of age (Gross, 2010). Throughout their development, humans establish relationships with others through social bonding and "mutualistic collaborative activity" (Gross, 2010, p. 238). This behavior extends beyond humans' nearest relatives, the chimpanzees (Gross, 2010). Chimpanzees communicate via vocalizations and gestures but do not project helpfulness as humans do (Gross, 2010).

Gesturing was one mean for communicating between humans (Gross, 2010; Pustejovsky, 2018). Over time, though, vocalizations developed via the FOXP2 gene, which is also believed

to allow fine motor control for speech. (Gross, 2010). This speech ability developed approximately 150,000 years ago, adding speech to gesturing (Gross, 2010).

Human beings communicate with other humans for several reasons: to request, to inform, and to share emotions and attitudes (Gross, 2010). Humans have honed their communication skills, bringing the species to current methods of conventional communication (Pustejovsky, 2018). From rudimentary cave drawings (Goodman, 2019) and hieroglyphic writing (Strauss, 2018), humans have been developing language at rapidly changing modes in an effort to communicate more effectively.

Communication is a human, social activity connecting people. However, communication is only influential when the message is received as intended (Molen & Gramsbergen-Hoogland, 2019). Strategic and complex, human communication exists in organizations, personal relationships, politics, public information campaigns, and in schools (Dewatripont & Tirole, 2005).

In the 20th century, one-room schoolhouses were filled with children from nearby rural communities who typically walked to school (Library of Congress, n.d.). With technological advancements catalyzed by industrialization, schools have transformed into a completely new system. Today, children go to schools located in complex buildings with multiple rooms and campuses. Students are transported to these campuses by vehicles like school buses or parent cars from different locations. Additionally, attendance is now compulsory in all states in the United States; in Texas, attendance is compulsory in Texas as of 1915 (T.E.C., 2019).

In the traditional sense, communication between the teacher and parent in the 20th-century one-room schoolhouse was limited to face-to-face interactions, telephone conversations, or via paper correspondence sent home with students or through the postal system (Gauvreau &

Sandall, 2017). Many contemporary schools still employ these 20th-century modes of communication. However, with rapid technological advances, schools must now determine alternate methods of communication with parents when traditional modes are deemed ineffective (Gauvreau & Sandall, 2017).

Technological advances, including the Internet, became a widespread method of transmitting communication in homes, businesses, and schools, opening a new method for schools to communicate with families (Chena & Chena, 2015). By the start of the 21st century, email practically replaced the traditional paper mode communication (Chena & Chena, 2015). Additionally, personal device usage among the public also increased as telecommunication technology advanced (Deepa et. al, 2022). The applications of this new technology allowed information to be transmitted practically instantaneously between schools and parents (Deepa et. al, 2022). Constant and immediate communication through text, email, social media, and school applications on personal devices became possible (Thompson et al., 2015).

Although communication methods had evolved, it appeared that communication between schools and parents through email and social media had devolved. The rather impersonal nature of email, especially mass email, and the ability to remain slightly anonymous became problematic (Foley et al., 2015). Many schools tended to communicate and simply broadcast information through social media avenues, such as Facebook, X (formerly known as Twitter), and Instagram, rather than fully engaging in two-way communication with their audiences (Wang, 2017). However, according to Cox (2005), effective school-to-home communication should involve a two-way exchange of information where the school attempts to communicate information to parents and invite parents to reciprocate (Houry et al., 2019). Such two-way exchanges may include opportunities to voice concerns and questions about their child's

academic progress or to provide input about the school calendar or special events (Hourii et al., 2019).

An emerging problem was that schools did not match their communication style with their parent's communication preferences (Halsey, 2005). Schools found that sending one all-encompassing email to all parents simultaneously was more manageable than addressing each parent individually (Halsey, 2005). This one-way mass communication left parents wondering if they were simply being informed of parent events or if this mass communication served as an invitation to attend events (Halsey, 2005).

Over time, parents experienced mass communication overload, parents began avoiding school emails (Chen et al., 2012). One reason for this avoidance behavior was simply because the parents perceived the purpose of school emails as cumbersome or unexciting (Ho et al., 2013). School communication typically included a call to action, meaning an invitation or obligation to complete a task or attend an event (Ho et al., 2013; Rubin, 2013). Because of this connection between school email communication and equated to work, even the most essential school communications began to receive little parental investment or attention (Castleman & Skillman, 2017; Gilbert, 2019). Typically, the communications were often dense, text-heavy, and consisted of minimal, if any, visual design (Castleman & Skillman, 2017; Gilbert, 2019).

While school personnel believed their communication mode was appropriate for the task, in reality, parents did not receive school messages as schools had intended (Halsey, 2005). Teachers may use formal language in their communication, possibly influenced by their level of education, but parents prefer a more personal approach to communication, especially when invitations for classroom involvement were received (Halsey, 2005). This misalignment in communication styles caused both parties to become discouraged (Halsey, 2005).

Schools can improve parental involvement by improving communication by learning from the top Fortune 500 companies and how they market their products to consumers. School personnel may not fully understand that the effective communication with parents is relatively manageable, while the consequences of ineffective communication can be profound (Castleman & Skillman, 2017; Gilbert, 2019). Several critical components can be adopted by schools, including the frequency of communication, the content complexity, inclusion of simplification of language, making the audience more comfortable with information consumption (Castleman & Skillman, 2017; Gilbert, 2019). Then, schools could effectively include specific calls to action and later follow through with clear results if the audience completes the call to action (Castleman & Skillman, 2017; Gilbert, 2019).

Society-at-Large

Houri et al. (2019) indicated that there is a connection between parent involvement and student achievement. While all types of parental involvement benefit student achievement, the most significant improvements occur when “a healthy partnership exists between schools and parents” (Rice, 2011, p. 5). Parental involvement in schools manifests differently depending on the family, culture, and need (LaRocque, 2013; LaRocque et al., 2011). Houri et. al (2019) identified five significant themes regarding parental involvement and improved student academic success: (a) extensive parental involvement at home resulted in student math academic achievement, (b) parent participation with math homework resulted in positive indicators in math academic outcomes, (c) parent participation in school meetings and events lead to improved teacher relations, communication, and collaboration, (d) regular parent communication with teachers was important to build relationships and improved information exchange between

teachers and parents, and (e) active parent engagement in the child's education was desired, yet reduced due to employment, school schedules, and other time-related factors.

Improving parent involvement then should take priority with schools. Authors of consumer behavior studies have been researching familial decision-making for decades (Howard & Madrigal, 1990), and considerable research has been conducted on young children's influence on family decision-making (Chavda et al., 2005). These findings should be utilized in educational settings to influence parental behaviors (Studer-Perez & Musher-Eizenman, 2022).

A closer look at the influence children have on parent behavior is necessary. Chavda et al. (2005) sought to understand the extent to which male and female adolescents perceived their influence within the family decision-making unit, while other researchers sought to determine the extent to which adolescents and parents agreed or disagreed with the adolescent's perceived influence when purchasing products (Chavda et al., 2005). Multiple studies support the theory that children influence parents' decisions in many homes (Chavda et al., 2005; Darley & Lim, 1986). Darley & Lim (1986) determined that a child influences parent behaviors and that a child's age affects the child's influence on parental decisions. The younger the child, the more influence they have. While Darley & Lim's (1986) research demonstrated that the child's influence is product-dependent, the data also indicated partial support for influence of parental locus of control, child age influence factors, and parental type determining influence levels.

Strategies employed by children vary according to age but include asking, bargaining, persuasion, and emotional strategies such as pouting, sweet-talking, or guilt-tripping (Chavda et al., 2005). Additionally, Chaudhary and Gupta (2012) found that the most common influence strategy children applied was persuasion, followed by emotional and bargaining strategies.

Chavda et al. (2005) indicated that children perceived themselves as exerting more significant influence over their parents than the parents had perceived of their children's influence.

Borrowing from the existing marketing research, schools can begin communicating with children to affect parent behavior. As new technology develops, modes of communication are rapidly changing. The means by which school personnel attempt to connect with parents are not always as straightforward as intended. Instead of school personnel constantly competing with other communicators, such as advertisers, social media outlets, influencers, spam messages, and acquaintances, school personnel should resort to competitive communication methods that should be documented in school and/or district policy to gain a parent's attention. Many changes relate to technology, but a component of the change includes districts staffing personnel to serve in a technological position or as a communications liaison to create a communication plan that is relevant and effective for staff, parents, and students.

Many times, public school districts seek to develop an official communications plan aligning with district policy establishing effective parental and student communication protocol. Some schools devise a multi-year communication planning cycle inherent to their communication plans, including several primary components, such as the organization's mission, vision, and value statements, objectives, communication goals, the definition of internal and external audiences, frequency, communications channels, and methods for evaluating the communication plan. This communications plan should reflect board policy (Venzin, 2017). Communication plans outline the procedures for facilitating efficient and effective communication with their intended audiences through the most appropriate means and methods.

While a well-written communication plan will guide the school through research-based methods to communicate with staff and aid the school with broadcasting information to their

audience, the plan should also include a group of stakeholders who have not typically been a target of direct communication from schools – the students. By adding students to the communication plan, schools can utilize previous research about how children influence parent behaviors in an attempt to improve attendance at school events.

Theoretical Framework

Studies have indicated that children influence parents' decisions in many homes. Children influence their family's schedule during after-school hours (Darley & Lim, 1986; Studer-Perez & Musher-Eizenman, 2022). To capitalize on this phenomenon, schools should continue communicating with parents and add communication with students to determine whether their school events' attendance improves. Bronfenbrenner's ecological systems theory, an individual's social systems framework which facilitates an examination of individual relationships within communities and broader society, seemed the best framework for this study (Bronfenbrenner, 1979). According to Onwuegbuzie et al. (2013), "... Bronfenbrenner's theory can be used to identify and to plan research studies representing all three traditions across the social, behavioral, and health sciences" (p. 4).

Bronfenbrenner's (1979) ecological systems theory posits that an individual is psychologically influenced by up to four different systems represented by concentric circles, including the microsystem, mesosystem, exosystem, and macrosystem, and the effects of time through the chronosystem, while, in the center is the individual being influenced. The microsystem or the immediate environment includes the home, friend's home, neighborhood, school, classroom, playground, and religious facilities (Onwuegbuzie et al., 2013). The mesosystem comprises the student's relationship with school and family, neighborhood, and peer experiences (Onwuegbuzie et al., 2013). The exosystem connects the student's social settings

with actions that influence their context but by which the student exerts no active role in influencing (Onwuegbuzie et al., 2013). The macrosystem affects individual culture on a broader scale, including society's belief system in which the student lives, cultural norms, laws, policies, or ideologies (Onwuegbuzie et al., 2013). Bronfenbrenner's ecological systems theory allows the researcher to visualize the interrelatedness of the relationships that exist within society as it relates to the educational system's communication between students, parents, and a school.

Problem Statement

Communication methods rapidly evolve as new technology is introduced into the market (Svalina & Ivić, 2020). Effective communication between schools, families, and stakeholders is not always as clear, and schools struggle to persevere. Enacting improvements would include, providing multiple research based technology methods, and the communication requirements established by the local school district (Pettersson, 2021). Most researchers have studied the unidirectional link from parent to child and have addressed students as passive recipients (Meunier et al., 2010), yet complex social and communicative interplay between the child and the parent has only just recently been explored (Zapf et al., 2023).

Contemporary schools must consider that parents expect them to communicate through the most modern modes, including digital and mobile applications. Schools must meet the expectation, even under strict budgeting constraints, to disseminate broadcast communication in a timely manner (Michela et al., 2022). Typically, websites, school notification systems, mobile apps, and social media form the foundation of this broadcasting and emergency communication (Gu, 2017; Kahan & McKenzie, 2021). In Texas, school districts are required by federal and state law to maintain a website to house numerous required publications. One publication required by Texas law to be posted to a campus' website is a link to the campus' Family

Engagement Plan (T.A.C., 2020). Schools should include more than the legally required publications if they wish to provide full communication with parents. For a school website, Miller et al. (2005, as cited in Kahan & McKenzie, 2021) recommended 16 specific elements be included: school mission, curriculum standards, news, rules and policies, announcements and events, after-school activities and schedules, activity and program pages, teacher biographies and contact information, calendar, cafeteria menus, grade-level resources, and homework assignments, schedules, parenting information, parent-teacher organization information, information about Internet use and safety, and student work.

Children influence parental behaviors, as evidenced by marketing strategies (Studer-Perez & Musher-Eizenman, 2022). However, the lack of research of schools utilizing children's influence, or "kidfluence," over parental behaviors indicates a gap in research (Triखा & Saini, 2019). Schools have established research-based practices to improve parental involvement in school events. Still, the effect of student influence on parent behavior to attend school events has yet to be thoroughly studied. The methods a school employs to communicate with parents could improve future attendance at school events (Laxton et al., 2021). The researcher seeks to address the gap in the literature by determining if there is a difference between levels of parental attendance (Hackworth et al., 2018) when students are included in communication when compared to instances where students are omitted from communication. Literature has not fully addressed traditional communication methods between schools and parents (Bordalba & Bochaca, 2019), which may not always result in students' inclusion in communication when students may be more influential in soliciting a response from parents (Swindle et al., 2020), thus potentially empowering students to apply their theoretical influence in increasing parental attendance at school events.

Purpose Statement

The purpose of this quantitative, quasi-experimental static group comparison design is to investigate whether differences between potential level of parents' perception of parental involvement as related to school exists and to determine parents' perspectives on the effects of student influence on their attending school events and parent attendance when students are included in the parent communication method (Gall et al., 2007). Control and treatment groups were formulated via parent video content for reading and math. These groupings allowed the researcher to regulate communication consumption for the experimental student group to receive only content for the math parent involvement event video. An intervention consisting of communication about a math parent involvement event is provided to the treatment group. In contrast, no communication is provided to the control group about a reading parent involvement event video (Gall et al., 2007).

The researcher seeks to identify the difference between two groups of individuals the inclusion of students in the math parent event communication, the independent variable, and the inclusion of parents in both math and reading parent event communication, the control (Gall et al., 2007). Critical to the quasi-experimental, static group comparison design is the dependent variable, the family involvement scores of parents of elementary school students who are included in the communication methods as to when students are omitted from the communication methods (Gall et al., 2007).

Significance of the Study

Applying Bronfenbrenner's ecological systems theory to understand the social effects of the various layers of influence on individuals, the researcher seeks to add to the existing body of knowledge on how children's influence affects parental behaviors, parental involvement's

connection with student achievement and effective communication influenced by a communication plan between the school, parents, and student. Effective communication was defined by Goodall (2016) as the process of transferring information from one person to another for various reasons in an attempt to exert influence. In the school setting, communication has evolved from being limited to face-to-face contact, telephone conversations, or via written communication sent home with students or mailed through the postal system (Gauvreau & Sandall, 2017) to current digital communication: text, email, social media, and school apps (Thompson et al., 2015).

Communication with the teacher regarding learning, parent participation in school events, and engagement with academics at home increases the potential for the student to be more likely to attain measurable academic gains (Alreshidi et al., 2022; Houry et al., 2019). Therefore, applying effective, appropriate, and engaging communication is needed to involve parents in school events. Additionally, the improved parent attendance at school events is potentially indicative of parental engagement, as defined in the literature. Powell et al. (2010) and Wang, et al. (2014) indicated that parents who are engaged in their children's learning, as demonstrated by participation in school-based activities, are more likely to parent students who demonstrate more outstanding academic achievements and outcomes (Houry et al., 2019).

Improvement in parental involvement with their children's schools could increase with a plan for communication. One potential method for improving parental attendance at school events is through harnessing the well-researched influence of children over parental behavior, which could be exerted to the school's advantage (Howard & Madrigal, 1990). Therefore, the effects of the school's communication intervention, the addition of students to communication, could result in improved attendance at school events.

Research Questions

RQ1: Is there a difference in parents' school-based involvement scores between parents whose younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when parents of students are omitted from communication methods?

RQ2: Is there a difference in parents' school-based involvement scores between parents whose older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

RQ3: Is there a difference in the number of parents who attend a school event when younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when students who are omitted from communication methods?

RQ4: Is there a difference in the number of parents who attend a school event when older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

Definitions

1. *Communication* - Communication is the act of transferring information from one place, person, or group to another for a multitude of reasons: to influence others, to change the attitude of others, to motivate those around us, and to maintain or establish relationships (Goodall, 2016).
2. *Communication chain* – The connection(s) between a talker (source) and a listener (receiver) via an auditory, a visual, and/or an electric channel (Gibbon et al., 1997).
3. *Compulsory attendance* – Attendance required by law; mandatory (T.E.C., 2019).

4. *Family involvement score* – Multi-dimensional scale of family involvement in early childhood education (Fantuzzo et al., 2000).
5. *Parental Engagement* – The engagement in children’s lives to influence the children’s overall actions (Goodall, 2017).
6. *School Events* – Any event being hosted by the teacher, school, or district (Barger et al., 2019; Camacho-Thompson et al., 2016; Foley et al., 2015; Hill & Tyson, 2009; Keith & Lichtman, 1994; Marschall & Shah, 2020).

CHAPTER TWO: LITERATURE REVIEW

Overview

The purpose of this literature review is to present the essential elements of parent involvement, the ability of students to influence parent behaviors, and the types of communication schools use to elicit parent attendance at school events. The chapter opens with the theoretical frameworks. This study is grounded first in Bronfenbrenner's (1979) ecological systems theory describing how a person's social environment affects their development. In addition, Epstein's (2016) overlapping spheres of influence identify how parents, students, and teachers interact. Last, Epstein's (2002) framework of six types of family involvement identifies levels of parent involvement. A thorough review of the literature pertinent to elements of parent involvement, the ability of students to influence parent behaviors, and types of communication schools use to elicit parent attendance at school which completes the chapter ending with a summary.

Theoretical Frameworks

The foundation of this research includes three theoretical frameworks: Bronfenbrenner's (1979) ecological systems theory, Epstein's (2016) overlapping spheres of influence, and Epstein's (2002) framework of six types of family involvement. Bronfenbrenner's theory looks at societal systems from a psychological point of view, while Epstein's theories take a sociological view. These theories posit that individuals are influenced by their social influences.

Bronfenbrenner's Ecological Systems Theory

The primary framework for this study is Bronfenbrenner's (1979) ecological systems theory, describing how a person's social environment affects his or her development. The theory describes how school engagement is influenced by environmental situations and personal

influences (Bronfenbrenner, 1979). Bronfenbrenner's theory, published in 1979, continues to be promoted as a framework for research since its publication (Bronfenbrenner, 1979). According to Onwuegbuzie et al. (2013), "... Bronfenbrenner's theory can be applied to identify and to plan research studies representing all three traditions across the social, behavioral, and health sciences" (p. 4).

The ecological systems theory posits that an individual is psychologically influenced by up to four different systems depicted by concentric circles. These circles represent the microsystem, mesosystem, exosystem, and macrosystem. The effects of time on the child's growth processes are illustrated through the chronosystem. In the center is the individual, or in this case, the student, experiencing the effects of influence originating from the outer circles (Bronfenbrenner, 1979).

In the center of the ecological system's theory is the developing individual or child, and the individual interacts with entities in the outer circles such as family, school personnel, peers, neighbors, religious affiliation, workplace, as well as broader entities such as industry, mass media, local politics, social services, and the influence of culture. The microsystem is dedicated to forming connections between the individual and those closest to the individual (Carter & Dasson, 2017). Since one aspect of this research focuses on parent engagement with their student's school, Bronfenbrenner's ecological systems theory (1979) applied in that social context is critical to school-based engagement for K-12 students navigating through their experiences in a school setting while encountering various emotional and social changes and growth (Bronfenbrenner, 1979; Yusof et al., 2018).

Bronfenbrenner (1979) identified the home and school relationships as the most critical influence on a child's development. Thus, effective communication is attained when the parent

and teacher demonstrate a collaborative effort to communicate, connecting the microsystem with the child through a balance of power and influence (Barger et al., 2019; Hourii et al., 2019; J. S. Lee & Bowen, 2006; Powell et al., 2010). According to Bronfenbrenner (1979), the definition of microsystem is "...a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics" (p. 22). Thus, the center of Bronfenbrenner's ecological systems theory, with the addition of the following two concentric circles, the microsystem and mesosystem, will serve as the primary theory of this research.

Figure 1

Bronfenbrenner's ecological systems model

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Note. Bronfenbrenner's ecological systems theory (Guy-Evans, 2020)

Bronfenbrenner's ecological systems theory represents how the various entities within his theoretical systems mutually influence the individual or child and direct how they are affected. It is conceivable that communication regarding a school event sent directly to a child could result in that child exerting influence over their parents, which would enact a change in the parents' behavior to become involved in the school event addressed in the communication as illustrated in Bronfenbrenner's theory (1979).

Bronfenbrenner's (1979) theory is exemplified by Shin et al.'s (2019) narrative-based communication intervention study, in which the researcher studied the influence of a school's curriculum on the communication patterns between parent and student. Bronfenbrenner's ecological systems theory demonstrates how a family's microsystem (e.g., school, peers, and family members) are mutually influenced and explains how a school-based intervention or treatment could influence family processes even without a specific call to action, such as a request for communication between student and parent (Shin et al., 2019).

Shin et al. (2019) found that a school-based substance abuse prevention program, "keepin' it REAL" (kiR), affected adolescent substance abuse rates, reducing alcohol, tobacco, and marijuana use at the 14-month follow-up in a previous group's randomized trial (Hecht et al., 2006). In the study, Growth Modeling Results for Composite Recent Substance Use Index, Model 1 (intercept), shows the intervention versus control at ($est = -0.060$) ($se = -0.018$). For Model 2 (slope), the intervention versus control was ($est = -0.026$) and ($se = 0.009$) (Hecht et al., 2006). The kiR model also initiated conversations between parents and their children (Shin et al., 2019).

The study included a control group and a treatment group in 39 schools where the control group received the standard school curriculum about drug prevention. In contrast, the treatment

group received four kiR curriculum “waves” consisting of an initial survey response (pre-survey), followed by survey responses in the Spring semester of seventh, eighth, and ninth grades over a three-year term (Shin et al., 2019). Neither curriculum, kiR, nor the standard school curriculum included information asking students to communicate with their parents about substances or substance use (Shin et al., 2019). Data were collected via a survey based on Miller-Day and Dodd’s model of Parent-Offspring Drug Talks (Shin et al., 2019). The Likert-style survey included scenarios to which the student must respond (Shin et al., 2019). The researchers implemented a latent transition analysis to identify response patterns. The data indicated that, over time, “talk styles” changed as the students aged, meaning students were more open at a younger age to initiating discussion with their parents about the topic even though the curriculum did not specifically address parent communication (Shin et al., 2019). This study reflects the connection between student-to-parent communication from a school-directed program.

Epstein’s Parental Involvement Framework

Epstein’s parental involvement framework (1995) defined the following activities as parental involvement: volunteering at school, attending extracurricular activities or school meetings, participation at home with homework, attending parent-teacher conferences, participating in Parent-Teacher Association (PTA) meetings, and communicating between parents and school personnel (Epstein, 1995). Epstein’s six types of involvement (1995) expand upon and include (a) parenting, (b) communicating, (c) volunteering, (d) learning at home, (e) decision-making, and (f) collaborating with the community (Epstein, 1995). Epstein (1995), continually refining and editing her theory, developed the user-friendly, six-part framework, Epstein’s Framework of six types of involvement, including sample practices, challenges, redefinitions, and expected results as found in Powell et al. (2010) and Shin et al. (2019).

Epstein's (2002) framework's purpose is to help the researcher determine if schools can affect parental attendance at school events by including students in communication, consisting of parent conferences with language translators as needed, an introduction of portfolio folders filled with student work to send home for review by parents, in-person retrieval of report cards to initiate conversations about ways to improve grades, regular scheduling of communication (notices, memos, phone calls, newsletters, and other communication), and clear information on courses, programs, activity information, policies, programs, reforms, and transitions. This communication initiates reciprocal responses within the spheres of influence.

Epstein's Overlapping Spheres of Influence

Epstein (2016) developed the theory of overlapping spheres of influence, which identified three components of society that depend upon one another to affect student learning: (a) school, (b) family, and (c) community partnerships. Considering both Bronfenbrenner (1979) and Epstein (1995), student achievement can be influenced when the school, family, and community cooperate with the goal of student academic achievement in mind. Therefore, Epstein's (2016) theory of overlapping spheres of influence applies to this study.

Figure 2

Epstein's Theory of Overlapping Spheres of Influence

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Note. Model of Epstein's 'Spheres of Influence' (Smith, 2019)

Epstein's parental involvement framework (1995) is bolstered by other studies, such as Powell et al. (2010) and Shin et al. (2019), in which the following activities were defined as parental involvement: volunteering at school, attending extracurricular activities or school meetings, involvement at home with homework, attending parent-teacher conferences, participating in PTA meetings, and communication between parents and school personnel (Camacho-Thompson et al., 2016). Powell et al. (2010) specifically defined parent involvement as attending parent-teacher conferences, volunteering in their child's classroom, observing in their child's classroom, helping with a classroom field trip, preparing and delivering material or newsletters, attending school social events, attending workshops or meetings, participating in planning groups, participating in fundraising, preparing food for events or in the classroom, and calling another parent.

Related Literature

Scholars have documented the connections between parent involvement, effective schools, and student achievement for decades (Marschall & Shah, 2020), and these scholars have recognized the influence of parent involvement on student achievement (Kuru Cetin & Taskin, 2016). Research indicates that student academic performance improves when their parents are involved in their children's school, regardless of the level of involvement (Bordalba & Bochaca, 2019; Chena & Chena, 2015). To involve parents in schools, schools must create a repertoire of strategies to involve parents (Jabar, 2020). One strategy is teaching parents how to support student learning at home. School personnel involved in communicating with parents must consider several variables: methods and styles of communication, technology platforms, ways to overcome previous communication issues, and maintaining up-to-date policies and procedures.

Parents receive the communication to become involved with the school, which produces, in theory, improved student academic achievement.

Parental Involvement in School Events

While one goal for schools is improving parent engagement and involvement, the reasons and ways schools invite parents to engage can vary. Best practice indicates that parental involvement is fundamental to conducting school, and schools are bound by federal law to involve parents in school events. The most efficient way to invite parents to become involved, as well as identifying acts of involvement, has been defined through previous studies.

Legal Regulations

When considering student academic outcomes, an understanding of federal law is necessary. To start, the federal government enacted efforts to ensure civil rights were universally applied in schools in the United States during the 1960s. President Lyndon Baines Johnson signed the *Elementary and Secondary Education Act* (ESEA) into law in 1965 (U.S. Department of Education, n.d.). ESEA offered support for schools serving students from low-income homes and provided funds for textbooks and library books, special education funding, and college scholarships (U.S. Department of Education, n.d.). ESEA also provided federal grants to state educational agencies to improve the quality of K-12 education (U.S. Department of Education, n.d.).

To support federal measures enacted in 1965, the *No Child Left Behind Act* (NCLB), officially known as Public Law 107-110, was signed into law in 2002 (No Child Left Behind, 2002). This law required schools to be accountable for student outcomes, emphasizing high-stakes standardized testing (No Child Left Behind, 2002). Additionally, NCLB required Title I-A

schools and local educational agencies to develop parental involvement policies and school-parent compacts (No Child Left Behind, 2002).

In 2015, NCLB was replaced by the *Every Student Succeeds Act* (ESSA), signed by President Barack Obama (U.S. Department of Education, n.d.). While ESSA replaced NCLB, some elements of NCLB were retained, such as the mandate to report on the progress of traditionally underserved students (Lee, 2015). Much of the educational decision-making power shifted to the states, with the federal government still providing a framework for school accountability, setting school goals, and evaluating that progress (U.S. Department of Education, n.d.).

The Texas Education Agency's ESSA consolidation plan was approved in 2018 (Texas Education Agency, n.d.). Part of the state's plan included direction on disseminating information to parents via parent-friendly communications based on their student's standardized testing proficiency levels (Texas Education Agency, n.d.). This communication included strategies to help parents support their children's improvement in both mathematics and reading academic concepts and skills (Texas Education Agency, n.d.).

Schools effectively communicate with parents in a manner and language appropriate to the audience to elicit parental involvement (Morris, 2016). Communicating with parents may seem simple; however, many schools find it difficult to communicate effectively with families, leaving many families unaware of methods of involvement in their student's academics without precise guidance (Chena & Chena, 2015).

Research indicates there are many types and levels of parental involvement that influence student achievement. According to Cotton and Wikelund (1989), the Northwest Regional Educational Laboratory website suggested that one form of parental involvement is superior for

student success outcomes over the other. Active and personal involvement (Cotton & Wikelund, 1989) is when parents work with their children to re-teach, practice, or help with homework at home, attend and actively support school activities, and volunteer in classrooms or on field trips.

Continuing to define parental involvement, Radojlović et al. (2015) indicated that active parental involvement includes providing help with homework, while passive parental involvement includes encouraging children to study and complete homework. Many parents desire to be actively involved with their student's academics, but they find themselves frustrated due to barriers such as time-related factors, employment requirements, scheduled home activities, and differing school schedules for multiple children in one household (Alreshidi et al., 2022). An increase in frustration couples time-related factors with barriers to successful active involvement, such as the lack of books or specific detailed math instructions for homework assignments (Houry et al., 2019). Cotton and Wikelund (1989) posited that while passive forms of parental involvement are better than no involvement, active parent involvement is the most beneficial. Powell et al. (2010) stated that the only method for parents to be actively involved is to communicate and work with educators to influence student achievement.

Support for Parenting

An additional component of parental involvement includes schools providing support for parents and the act of parenting. According to Epstein (2002) schools guide families in learning how to establish supportive home environments for their students by suggesting home conditions that advance learning at all levels. Epstein (2002) also established that parental support on rearing children at all levels via a series of parent education workshops should be provided by schools. Family support programs to assist families with health, nutrition, and other services are also important ways to connect with families (Epstein, 2002). Home visits or neighborhood

meetings to help transition students to preschool, elementary, middle, and high school are also important ways to connect with families, relevant to Epstein's (2002) theory of overlapping spheres of influence. Information shared in workshops and neighborhood meetings should be readily available to parents in formats conducive to their ability to consume communication (Epstein, 2002).

Communicating

Communication is defined as two-way, three-way, and many-way communication channels connecting schools, families, students, and the community (Epstein, 1995). According to Kuru Cetin & Taskin (2016), parents mainly communicate with the school to evaluate their student's academic success and personal development. Effective communication between home and school considers how schools provide notice about all school components and events, including school programs, academic progress, websites, and text blasts (Castleman & Skillman, 2017; Epstein, 1995; Gilbert, 2019; Gu, 2017).

School communication scaffolds are designed through the school's meticulous evaluation of the selected communication modes' readability, which considers the language and reading level, quality of all significant communication, and the establishment of clear two-way communication channels between home and school (Epstein, 1995). Consideration for the design of annual parent conference materials, school provision of language translators when necessary, allowing student work to be brought home for review and comments, facilitating of report card improvement conferences, provision of precise information on school, course, program, and activity choices, as well as offering clear information on any other facets of school functioning relevant to parents (Epstein, 1995). Implementing strategies to communicate clearly and effectively could significantly influence student achievement and increase parent participation.

Figure 3*Effectiveness of communication***REMOVED TO COMPLY WITH COPYRIGHT**

Note. Different types of communication media have varying channel richness (Lumen Learning, n.d.)

Thompson et al. (2015) conducted a four research question study about parents' preferred communication modes. Research question three detailed the rationale for choosing certain modes for specific topics, including open-ended questioning at the end of a survey, Thompson et al. (2015) posed the following three questions to 1,349 parents of students from a school district in the Midwestern United States: (1) "Why do you choose certain modes over others for communicating about certain issues with your child's teacher(s)? Are certain modes better for certain tasks? Please explain and provide examples to illustrate your thoughts." (2) "What, if any, combination of modes have you found work most effectively for communicating with your child's teacher(s)?" and (3) "What other modes of communication, if any, do you use to communicate with your child's teachers?" (Thompson et al., 2015, p. 193).

Thompson et al.'s (2015) qualitative results indicated that the communication mode preference identified by parents was emailing. Out of 1,028 responses, 848 respondents chose email as their preferred mode of communication with teachers, with the top ten reasons as asynchronous nature, ease, quick, convenience, access to a computer at work, the time factor, written documentation, the fit with work schedule, and being less intrusive (Ku et al., 2021; Thompson et al., 2015). Data for three other modes follow: 96 parents preferred face-to-face communication, 69 preferred text messaging, and 25 preferred phone calls.

Volunteering

Volunteering is an active process of parent involvement where parents participate in activities to improve the school by supporting the school's goals. Volunteering can assume many forms, including working in a parent room or facilitating work in a family center, meetings, and developing resources for families, serving as the class parent responsible for the classroom needs and communication between parents, identifying other methods to provide families with information, or serving in safety positions such as parent traffic patrols, or school programs' safety and operation (Epstein, 1995; Jabar, 2020; Marschall & Shah, 2020). Research indicates that, as a student ages, some parents are not comfortable involving themselves in visible school participation with parent-teacher conferences, volunteering, or conducting personal relationships with the teachers, and, instead, they are involved in the home-based activity of checking work and homework (Benner et al., 2016; Daniel, 2015).

When considering Epstein's theory of overlapping circles, if the parent becomes less involved or removes himself or herself from the school-community-home, the child loses part of his or her triangulated influence or support (Smith, 2019). Therefore, schools must adopt effective volunteering methods that will support their students throughout the duration of their

education. In a qualitative study conducted by Puigdellívol et al. (2017), themes emerged indicating that when family volunteers to support teachers with educational tasks in the classroom, not only did student performance improve, but students also felt happiness and support (Puigdellívol et al., 2017). Additionally, educational support extended beyond the school since the family volunteers better understood how to help their children at home (Puigdellívol et al., 2017).

Learning at Home

In a double-blind experiment by Hourí et al. (2019), parental behavioral and relational engagement changed before and after intervention implementation was measured. Data indicated that students demonstrated improved parent-teacher relationships ($F[1, 49] 13.01, p = .001, n2 = 0.210$). Additionally, students' academic achievement and long-term outcomes improved when their parents assisted with their studies at home (Alreshidi et al., 2022; Hourí et al., 2019). However, Benner et al. (2016) posited that parents who assist their children by helping students at home with homework can compromise achievement.

Therefore, a role that schools assume includes providing balanced guidance to families about how to help, encourage, listen, react, praise, guide, monitor, and discuss with their child their homework and group work, and other curriculum-related activities while in the home environment (Epstein, 2002; Kuru Cetin & Taskin, 2016)

- Information on school decisions and academic planning as their student progresses through the grade levels (Epstein, 2002; Kuru Cetin & Taskin, 2016)
- Information on homework policies, monitoring and discussing schoolwork at home (Epstein, 2002; Kuru Cetin & Taskin, 2016)

- Education on state standards or student skills required in all subjects at each grade level (Epstein, 2002; Kuru Cetin & Taskin, 2016)
- Assisting students in improving classroom skills on classwork and assessments (Epstein, 2002; Kuru Cetin & Taskin, 2016)

Kuru Cetin and Taskin (2016) conducted a qualitative phenomenological study pertaining to parent involvement in education. Researchers categorized teacher, administrator, and parent opinions into themes based on how parents were encouraged, both systematic and spontaneous, to support their students with learning at home and the kind of support provided for parents. Opinions recorded in the Kuru Cetin and Taskin (2016) study noted that the guidance they received from the school, both daily and weekly regarding learning at home, focused on how parents can help their student with individualized homework in a planned way within the scope of the learning program conducted by the guidance counselor (Kuru Cetin & Taskin, 2016). In schools with no guidance counselor, opinion statements indicated that parents received unsystematic and unplanned information from the teachers through face-to-face parent meetings and were then informed on how their students should complete their learning at home (Kuru Cetin & Taskin, 2016). No matter the method, schools must explain to parents how and why they should be involved in the education process and offer opportunities for parent involvement (Kuru Cetin & Taskin, 2016).

Schools adopted various strategies involving parents in children's education at home and school (Jabar, 2020). Families were provided with activity calendars, including a regular homework schedule requiring students to discuss and interact with their families, authentically connecting schoolwork (Epstein, 2016). Families were also invited to participate in math, science, and reading activities at school and receive summer learning packets or activities to

extend knowledge and skill retention while school is out of session. (Epstein, 2016).

Additionally, schools must also work with families as students matriculate through grade levels to establish student goals each year and plan for college or career paths (Epstein, 2016). In districts where schools and teachers maintained rigorous standards, parents continually assist their children with schoolwork and learning at home (Marschall & Shah, 2020). Epstein's (2002) Type 4 - Learning at Home strategy is most appropriate for engaging parents for this study.

Decision-Making

Parent involvement in decision-making is written into legislation in the United States. United States Code states that parents have the right to assist in their child's education and are considered full partners (U.S.C. § 7801-31-C, 2011). According to Epstein (1995), decision-making is a process of partnership between parents and schools, which involves: schools including parents in school decisions, developing parent leaders and representatives, offering active parent-teacher organizations (PTO), and seating parents on advisory councils and various committees.

According to Kuru Cetin and Taskin (2016), decision-making could be defined as the enabling of parents to participate at the highest level in the decision-making process at school; however, parents indicated through the qualitative study parent interview, wherein participant answers were categorized according to Epstein's (2002) six categories of parental involvement, that involvement in the decision-making process only occurred when the school asked for their opinion (Kuru Cetin & Taskin, 2016). Parents can participate in district-level meetings to improve family and community involvement and provide representative information on specific elections and networks connecting all families with parent representatives (Epstein, 1995). One

way schools can involve parents beyond the campus property is by having them lobby for school reform through independent advocacy groups to affect systemic change.

Collaboration With the Community

Effective schools recruit their communities as partners to strengthen their school programs, family practices, and student learning and development (Epstein, 2002). All interested parties, including alums, local religious affiliations, and voluntary and congressionally chartered organizations, pool resources to provide information for students and families on community support programs and services focused on health, cultural, and recreational opportunities to improve overall community wellness (Epstein, 2002). Community entities foster student achievement by providing programs and service opportunities that combine learning abilities with growth junctures (Epstein, 2002).

In a phenomenological study conducted by Kuru Cetin and Taskin (2016), the aim was to reveal and interpret individual perceptions towards a particular phenomenon: the involvement of parents in the education process in terms of their socio-economic status. Participants responded that collaboration with the community included health fairs, university training and seminars, free family literacy and exam prep courses, and social aid from municipalities and welfare institutions for families originating from low-income circumstances (Kuru Cetin & Taskin, 2016). Community partnerships can elicit family support for students, motivating them to develop proper behavioral conduct and increase academic performance (Epstein, 1995).

Students Influence Parent Behaviors

Research demonstrates that children influence parent decisions, such as where to stay for vacation, which products to purchase, or which foods to include in creating a menu (Boyland et al., 2021; Darley & Lim, 1986). Schools that struggle to engage parents adequately could apply

the available research connecting children's influence over parental decision-making (Chavda et al., 2005) with marketing strategies to consolidate children's influence over parents to improve parent attendance at school events. According to a meta-analysis of studies involving parental involvement (Fan & Chen, 2001), the average correlation between parental involvement and achievement produced a medium effect ($r = .30$), indicating that parental involvement potentially affects education outcomes.

Using Marketing/Advertisers/Mass Media Strategies

Researchers have been studying consumer behavior for decades to understand how to influence their purchasing power. The consumer socialization process manipulates the family context of interpersonal relationships and communication to influence purchasing behaviors through mass-media advertising (Chavda et al., 2005). Theoretical models have highlighted the interactional nature of parent-child relationships (Bell, 1968; Bronfenbrenner, 1979; Patterson, 1982; Pettit & Lollis, 1997). Bell's (1968) research outlining the importance of examining the interactional or bidirectional parent-child effects in developmental research stands as one of the earliest and most influential studies (Meunier et al., 2010).

The business industry explored the phenomenon of families' decision-making strategies in direct advertising and marketing to increase the industry's economic advantage (Howard & Madrigal, 1990). Chavda et al. (2005) found in their quantitative study on adolescents' influence on family decision-making that adolescents influence some purchasing decisions in the family. Applying a Pearson's product-moment correlation, the closer the product was to the adolescent's personal use, the more perceived influence on the purchasing decision. Research results included correlations of clothing ($r = 1.000$) and entertainment ($r = 0.745$) versus parents' clothing ($r = .696$) and significant purchases ($r = .546$) (Chavda et al., 2005). The most influential behavior

children exert over their parents is “pester power,” whereby children pester their parents to buy the latest products (Chavda et al., 2005, p. 70). Children exert influence on family choices through pester power from the decision on the family car purchased to the movie they patronize and the family vacation destination (Boylard et al., 2021; John, 1999). Therefore, determining how to harness the belief in pester power is thought to be the marketing key to influencing parents’ spending on products or services (John, 1999).

Advertisers started leveraging the influence of pester power to their advantage, aiming to impact decision-making within families by directly marketing to children, potentially working against the interests of parents (Chavda et al., 2005; Howard & Madrigal, 1990). Companies employed television advertisements to communicate with children, encouraging them to request products and even persuading their parents to buy them (Chavda et al., 2005). The field of advertising and marketing has been utilizing this social phenomenon for years to promote its products, especially in the food and beverage industries. Howard and Madrigal (1990) suggested that schools should implement similar strategies to encourage parental involvement to positively influence student achievement.

Relationships Influence Behavior

Howard and Madrigal (1990) posed three research questions regarding family influence. First, their research compared the perceived decision-making influence between the father, mother, and child. Data from the study indicated that the mother (mean rank=2.44) and child (mean rank=2.13) appeared to share purchasing authority over the father (mean rank=1.42) (Howard & Madrigal, 1990). The results of the second research question included the comparison of three children’s age groups, preschool ($n=25$, $M=28.5$, $SE = 5.5$), elementary ($n=80$, $M=38.0$, $SE=3.5$), and middle school ($n=20$, $M=45.3$, $SE=6.8$). It was discovered that a

clear directional tendency toward an increased decision, while not statistically significant, is influenced by the child's age (Howard & Madrigal, 1990), possibly due to the study's number of participants and age ranges. The results pertaining to the third question included the measurement of the child's influence on single-parent households ($n=21$, $M=34.52$, $SE = 5.33$) and dual-parent households ($n=104$, $M=37.84$, $SE=3.14$) as well as in homes where one parent works ($n=42$, $M=38.71$, $SE=4.97$) and both parents work ($n=60$, $M=36.32$, $SE=4.15$). Data indicated that children from dual-parent households were perceived to exert more significant relative influence in parents' final decision-making ($p=0.66$) than children from single-parent homes ($p=0.71$) (Howard & Madrigal, 1990).

Age of Influence (Agitation)

Studies indicate that the child's age directly influences parents' decision-making (Chen, 2020; Darley & Lim, 1986; Howard & Madrigal, 1990; Larsson et al., 2008). Chaudhary and Gupta (2012) discovered a relationship between the child's developmental stage and his or her pester power relative to the parent. The study noted that even very young children request specific products; children as young as two years of age request desired objects; by four years of age, they make their own in-store selections; and by the age of eight, they can make independent purchases. It has been suggested that a child's ability to influence his or her parents is more substantial in early childhood due to the greater level of agitation a child in this developmental stage can elicit (Chen, 2020; Shaw et al., 2000).

Methods Practiced by Children to Influence Parents

Chavda et al. (2005) administered a Likert-type scale questionnaire to note children's different methods employed to influence their parents' behavior. The researchers indicated that influential strategies implemented by adolescents varied according to age: bargaining strategies

(e.g., dealing in exchange for getting one's way), persuasion strategies (e.g., attempting to influence parents by argument, appeal, or disapproval to a belief, position, or course of action by expressing an opinion on a product, insisting that this is what the child wants, or begging), competition strategies (e.g., propose fair competition to win a prize), emotional strategies (e.g., acting affectionately through verbal or behavioral expression by being unnaturally friendly to parents or feigning illness, pouting, guilt-tripping), aggressive strategies (e.g., displaying verbal or nonverbal aggression by refusing to eat or acting stubbornly), and playing a trick (e.g., attempting to trick or deceive their parents by hiding items in a shopping cart). Chaudhary and Gupta (2012) discovered that the most common influence strategy employed by children was persuasion, expressing an opinion on a product (child mean score 3.02, Rank 1; parent mean score 2.91, rank 2) followed by emotional, being unnaturally friendly to a parent (child mean score 2.60, rank 4; parent mean score 2.42, rank 10) and bargaining strategies, offering deals (child mean score 2.59, rank 5; parent mean score 2.27, rank 11).

Current marketing strategies apply these influence tactics to control children's behaviors and how they influence parents (Studer-Perez & Musher-Eizenman, 2022). Mediano Stoltze et al. (2019) studied grocery stores' breakfast cereal aisles. Many cereal companies promoting cereals with poor nutrient content containing significant quantities of sugar employ child-directed marketing strategies related to packaging, including fun characters, collectible gifts or games inside boxes, toy references, school references, child words, and cross-promotions (Mediano Stoltze et al., 2019).

Basch and Rajan (2014) and Mediano Stoltze et al. (2019) found that marketing strategies and warning label characteristics on children's toothpaste indicated a focus on aggressive marketing specifically directed at children. Some strategies toothpaste companies implemented

included animated characters, a picture of a food item, statements about the flavor, and pictures of a full, adult-size swirl of toothpaste (Basch & Rajan, 2014; Mediano Stoltze et al., 2019).

Opposing the current high-yielding marketing strategies employed by food and beverage companies, Castleman and Skillman (2017) determined that even the most critical school communications received little parental investment or attention because the communications were often too dense, text-heavy, and had minimal if any, visual design. Additionally, the method of communication does not always match the parents' expectations (Halsey, 2005). For schools to attract the necessary attention to their communication about parent events, they could implement similar strategies as high-yielding companies apply to bring attention to their product, service, or event.

School Communication

Schools attempt to communicate with their families for many reasons. One reason is to transfer information about events or to persuade families to attend school events. Dewatripont and Tirole (2005) determined that communication is only influential when the intended audience appropriately receives the message, and sometimes the transfer of information through one-way communication sometimes leads to the receiver's request for a specific action.

Structure of Communication

Successful communication requires the presence of a sender and receiver of information as well as a message. When the message is organized into a clear structure and distributed through a channel most preferred by the receiver, the message is typically received as intended, especially when schools invite parents to school events. Schools must intentionally find the perfect communication combination between methods and styles for calling parents to action.

Definition

According to Goodall (2016), communication is the act of transferring information from one place, person, or group to another for a multitude of reasons: to influence, change the attitude of, and motivate those nearby and to maintain or establish relationships. To connect schools, students, and their families, Epstein (1995) defined school communication regarding school programs and student progress like two-way, three-way, and many-way communication channels.

A shift from the institutional communication style to an individual one may improve attendance at school events (Castleman & Skillman, 2017; Gilbert, 2019). Most school communication is transferred to the receivers (parents) via mass email or social media posts. However, Halsey (2005) determined through a qualitative study, that parents preferred a more personal communication approach with individualized invitations from schools when being asked to become involved. However, communicative methods tended to remain institutional (Halsey, 2005). Schools and parents became discouraged by one another's communication styles, and attendance at school events began to decline (Halsey, 2005). Even so, schools continued to communicate via the institutional route in a one-way or through simple broadcasting manner. However, if some parents are responding by attending events, this style of communication cannot be considered a complete failure (Epstein et al., 1987).

Methods

Organizations communicate through various methods that encompass different styles such as face-to-face, broadcast media, mobile, electronic, and written communication. Chena and Chena (2015) suggested that specific communication tasks should align with the appropriate method, and schools need to develop practical methods to effectively communicate with parents.

However, some parents maintain negative perceptions about the communication methods chosen by schools when requesting their involvement in education (Gilbert, 2019; Gu, 2017). Schools must strategically select the appropriate method for given communication tasks. Influential brands and cultural icons leverage marketing principles that schools can adopt, with the first principle being to communicate through the medium most accessed by the audience (Castleman & Skillman, 2017; Gilbert, 2019).

Face-to-face methods involve physical presence, allowing message receivers to decode messages using tone and facial expressions. However, due to COVID-19 restrictions by the Centers for Disease Control (CDC, 2021), physical presence on school campuses was limited for a time. An alternative to physical face-to-face interaction is the implementation of video or web-conferencing via Zoom, Webex, Teams, or other available programs. Gillies (2008) found that students perceive face-to-face interaction as the ideal form of social presence, with video conferencing lacking some aspects of body language. Therefore, interaction is necessary to maintain interest when video conferencing (Gillies, 2008).

The broadcast media method stands out as a cost-effective means of communication, particularly when messages can be presented visually or auditorily and are intended for a broad audience. Educational institutions commonly rely on broadcasting communication methods, such as websites, emails, newsletters, and telephone calls, to communicate with parents, communities, and the general public (Wang, 2017). Digital media supplements these traditional communication methods. Bordialba and Bochaca's (2019) research revealed that parents and teachers considered digital information inefficient in communication, often getting lost within school walls where some parents lacked information and communication technology (ICT). To

address this challenge, a recommended approach involves combining traditional communication methods with social media tools.

Mobile communication methods, such as texting and communication platforms like Remind, ClassDojo, or Bloomz, can be effective when an interactive exchange is warranted. Chen et al. (2012) noted that educators experience some success with texting students and families about participation in academic activities, from parents reading with their children to students completing required academic tasks, such as assisting with homework, time spent in home activities with the child, communication with teachers, participation in school events, educational discussions with the child, and time volunteered in school (Epstein, 2002). However, perceived information overload may lead some parents to favor texting over school emails (Chen et al., 2012).

Some parents may opt to avoid school emails, citing a perceived issue of information overload (Chen et al., 2012). Literature suggests that this perception of information overload commonly stems from challenges in three main areas: the quantity of information (excessive data from the internet, online discussions, and assigned course readings), the quality of information (complex learning materials, text density that is open to interpretation, and redundant information), and the medium interface (the hypertext structures of online databases, the intricate structure of online discussion systems, and the presence of multiple conference spaces) (Chun-Yin et al., 2012).

According to the theory of pester power, parents cannot easily disregard their children's requests as they might overlook a school email or a text message (Chavda et al., 2005). Children tend to be persistent (Chaudhary & Gupta, 2012). Consequently, texting is increasingly emerging as a preferred method of communication (Castleman & Skillman, 2017; Gilbert, 2019).

Electronic communications methods, including email, internet, and social media platforms, can be employed for one-on-one, group, or mass communication. Although less personal, this method is highly efficient for schools, and school personnel is traditionally slow to adopt new technologies, depending on the user's attitude ($R\text{-square} = 0.847$) toward technology (Ho et al., 2013). Wang et al. (2017) performed a content analysis within X (formerly known as Twitter), to identify that the largest 100 schools and superintendents in the United States implemented social media (e.g., Facebook, YouTube, and Instagram) in one-way communication simply for information broadcasting (Wang, 2017).

In Bordalba and Bochaca's (2019) research, twenty schools were chosen, and, on average, five parents and five teachers from each school were interviewed. Some parents and teachers, especially those in non-ICT schools, prefer a traditional communication method, including printed messages sent home to students and school-to-home notebooks (Bordalba & Bochaca, 2019). Face-to-face conversations are also considered traditional communication methods and may not be considered the most efficient form of mass communication (Bordalba & Bochaca, 2019). When no interaction is needed, it is perceived that written methods of communication are preferred.

Communication Styles

The appropriate communication style must match the specific communication task to be effective. In Epstein's theory of overlapping spheres of influence, two types of communication between schools and families emerge, institutional and individual (Epstein et al., 1987). Institutional communication can be defined as communication originating from an organization focused on and delivered to all parents of that institution or grade level that contains general information, like a mass mailer (Epstein et al., 1987). In contrast, individual communication can

be defined as communication involving individual teachers or families on the topic of a specific child and is communication designed to be personal (Epstein et al., 1987).

School's Use of Communication

Schools inform families about upcoming, important events and dates and utilize communication to elicit family responses (Epstein et al., 1987). One tactic employed by advertising agencies includes direct and targeted communication, wherein companies target specific customers based on prior buying habits, inviting them via direct mail, email, telemarketing, and online marketing to purchase items, register for discounts, or win prizes in sweepstakes (Naseri & Elliott, 2011). These tactics could offer the possibility of a more targeted approach to schools' information dissemination (such as to the parents of seniors or to specific clubs) or specific and personal communication (email and individual texts) (Goodall, 2016).

Several vital principles advertising companies promote in communication include (a) communicating in the medium most applied by the audience, (b) sharing in amounts and through layouts that the audience is willing to ingest, (c) selecting language the audience will understand, (d) including a call to action the audience can answer, (e) providing an exact result the audience both desires and can achieve if they follow through on the call to action (Castleman & Skillman, 2017; Gilbert, 2019). These various advertising principles depend on the audience and the reason for communication.

When communicators select the appropriate medium with the proper level of richness, vagueness is avoided, leading to the likelihood of shared meaning (Thompson et al., 2015). The media richness theory (MRT), introduced by Richard L. Daft and Robert H. Lengel in 1986, attempts to define and explain a communication medium's richness (Daft & Lengel, 1986). MRT is a framework that ranks and evaluates the richness of face-to-face, synchronous, unified, and

electronic communication (Thompson et al., 2015). Daft and Lengel (1986) noted that four components determine the richness of a medium:

1. Capability for immediate feedback.
2. Capacity for multiple cues, including auditory and visual cues and physical presence.
3. Level of natural language to assist in explaining an idea.
4. Ability to personalize a message

Daft and Lengel (1986) suggested that email, a leaner medium, would not be as effective in communicating complex or sensitive information as there is delayed feedback, nonverbal cues, and a lack of personal focus (Thompson et al., 2015). X (formerly known as Twitter), is another example of electronic communication that violates Daft and Lengel's (1986) four MRT components, which are defined as a medium and system that enables the construction and consumption of messages (Wang, 2017).

Considering Daft and Lengel's (1986) four components of richness, X (formerly known as Twitter) has demonstrated the capability for immediate feedback without the capacity for multiple cues, the ability to construct a level of natural language, and a limited ability to personalize a message leading parents and teachers to maintain a specific set of beliefs or opinions about the medium and ideas about the perceived context and setting (Bordalba & Bochaca, 2019). Barriers to implementing digital media include the degree of difficulty accessing the medium, based on the difficulty of the passwords, log-in session features, (Bordalba & Bochaca, 2019), and speed of connectivity.

Some school districts dissuade their administrators from choosing the modes and methods of communication and, instead, choose to hire communication specialists. In these instances, the communication specialist's role is to determine the channels for better

communication, choosing the most suitable medium according to the message's nature and purpose (Bordalba & Bochaca, 2019).

Communication Changes in Schools Over Time

Communication between schools and families has changed significantly since the turn of the century. Before WiFi and cell phones were common, communication with parents was limited to face-to-face contact, telephone conversations, or via paper correspondence sent home with students or through the postal service (Gauvreau & Sandall, 2017). When these traditional modes of communication became ineffective, as evidenced in the Bordalba and Bochaca (2019) study, schools had to determine which communication modes were the most effective. Schools had to consider other communication methods beyond individualized contacts and learn to incorporate technology into their communication plans (Gauvreau & Sandall, 2017; Halsey, 2005).

Problems with School Communication

In Halsey's (2005) qualitative study on parent involvement in junior high, interview data indicated that even though schools send invitations for parental involvement opportunities via email, parents' preferred method of communication, schools experienced limited participation in parent involvement and attendance at school events due to the impersonal nature of the communication (Halsey, 2005). Additionally, the study found that parents misunderstood the differences between what parents and teachers considered an invitation for parent involvement (Halsey, 2005).

Schools can assume that communication is not delivered to the intended recipient in an intended way if parent involvement decreases (Halsey, 2005). In the study, communication preferences had misaligned (Halsey, 2005). While educators perceived their mode of parent

communication via email was appropriate to the task (Halsey, 2005). The educators' message was not always received by parents as intended, if at all (Halsey, 2005). For example, data from parent interviews revealed that the email about the annual open house and monthly school newsletters (containing event announcements) sent to parent emails left them wondering if they were simply being informed of events or were actually invited to attend events (Halsey, 2005).

Communication between educational institutions and the families they serve must be direct and targeted (Bordalba & Bochaca, 2019). In Halsey's (2005) study, parents indicated that many school emails were delivered to junk folders or that they had just ignored the emails (Halsey, 2005). Parents often receive school emails with a specific call to action, such as sending items to school or attending events in-person. These actions are typically linked to fostering a relationship with the school and involve contributing to or participating in school-related activities (Epstein et al., 1987; Rubin, 2013). According to Epstein et al. (1987), complying with requests to send items to school or attending in-person events is considered a form of parental involvement, and while improving communication may seem like a trivial issue for schools, ineffective communication costs can be profound (Castleman & Skillman, 2017; Gilbert, 2019). To improve communication and parental involvement, schools can borrow from the methods employed by the major consumer brands market (Castleman & Skillman, 2017; Gilbert, 2019).

School Communication Policy and Procedures

Many school districts evaluate their communication policies annually and intentionally to determine communication effectiveness. They also conduct reviews of their current communication procedures and consider revamping and updating the policies to include multiple-language messages and increasing the audience from parents only to parents and

students (Castleman & Skillman, 2017; Gilbert, 2019). Omitting the most critical communication recipients, the students, can influence parent involvement at school events.

Schools can communicate with their students via the school's online learning management system (LMS), if one is present. Most offer options by which schools or teachers may communicate directly with students via direct messaging or announcements. Examples of more popular LMS platforms include Google Classroom, PowerSchool, and the state-provided (Texas) Schoology.

Schools should identify the critical events where communication is most important and determine what communication methods are most effective for communication with their intended audience (Thompson et al., 2015). For example, future educational planning (e.g., high school course selections and dual-credit course selections) requires schools to develop concise and precise, well-designed communications (Castleman & Skillman, 2017; Gilbert, 2019). Also, school leaders should have access to response data. Many digital communications platforms are pre-designed with analytics packages (Peuler & McCallister, 2019). Data can be collected regarding the types of communication distributed and recipient responses received and should influence the decisions for and adjustments of all future communications in schools (Castleman & Skillman, 2017; Gilbert, 2019).

Process for Improving Parental Communication

Establishing strong communication with parents can potentially improve parent relations and behavioral engagement. One way to strengthen this communication is by establishing two-way, school-to-home and home-to-school communication with parents (Houri et al., 2019). Castleman and Skillman (2017) recommended following a set of concrete steps to strengthen communication with students and families. The first step is to complete an audit of current

communications efforts by compiling all previously administered communication materials (Castleman & Skillman, 2017; Gilbert, 2019).

Before school personnel can strengthen communication, they must ascertain where communication is weak. Bourdieu's (1977, as cited in Marschall & Shah, 2020) theory of cultural capital described social class differences between school personnel and parents which may hinder effective communication and mutual understanding. Lareau (1987, as cited in Marschall & Shah, 2020) indicated that parents of students originating from lower-socioeconomic statuses and of color are disadvantaged because some school communication causes parents to feel insufficient and intimidates them; thus, they avoid responding to school requests and invitations.

Language can present barriers to school communication (Houri et al., 2019), and, as a result, many parents, predominantly immigrant and refugee parents, may appear to dismiss the school communication and miss school events and meetings when they simply cannot understand the language. Language barriers is a theme underscored in a qualitative study conducted by Yoder and Lopez (2013). Vocabulary and comprehension should be presented at a level where content is understandable to parents of all educational backgrounds and cognitive functions (Epstein et al., 1987). According to the National Center for Educational Statistics (n.d.), only about 48% of American adults can read at a third-grade level or greater, which is considered a functional reading level. Thus, the verbiage must be precise yet comprehensible.

In addition to language issues, the timeliness of communication can also be problematic. Parents revealed they could not attend certain school functions as the information regarding the event was often received too late to rearrange their work schedules (Baker et al., 2016). Families

where only one parent works, encounter challenges in participating in school-based activities and events as well (Marschall & Shah, 2020).

Parent Involvement and Perceptions

Parent involvement influences student achievement and is a well-researched topic, as evidenced by the number of available peer-reviewed scholarly articles. The literature indicates that one specific, individual-level parental involvement strategy includes parent participation in school events (Day & Dotterer, 2018; Marschall & Shah, 2020). Attending school meetings or events is the leading form of parent participation, and school events are offered to parents so that their behaviors might be influenced to improve student success (Marschall & Shah, 2020; Rice, 2011).

Schools define direct involvement as parent participation and support of students through various school activities such as programs, meetings, and formal school-based activities, including social events, fundraising activities, classroom, and school-level volunteering, workshops on curriculum and learning areas (e.g., family math), PTA, school building-level advisory governance councils, and parent-teacher conferences, as well as events such as open houses, attending extracurricular activities, and communicating with parents and school personnel (Benner et al., 2016; Camacho-Thompson et al., 2016; Hill & Tyson, 2009; Keith & Lichtman, 1994; Marschall & Shah, 2020, Powell et al., 2010). The relationship between the school and the parent is primarily defined by parent participation in school events (Hill & Taylor, 2004; Powell et al., 2010).

Another aspect of parent involvement is a parent's perception of their own academic abilities to help their students at home, which plays a role in student achievement. Khanolainen et al. (2020) completed a study with mothers (n=1590) and fathers (n=1507) who reported on

their own reading and math difficulties as well as their academic involvement with their Kindergarten children at home. Predictions in student's reading and math fluency could be predicted based on parent's perception of their own reading and mathematical difficulties (Khanolainen et al., 2020).

Jay et al. (2018) found that parents' confidence and perceived ability with math impacts their at-home involvement of working with their children on work sent home. Data indicated that school-centered mathematical approaches rather than parent-centered approaches play a role in parents' understanding of how they can support mathematics learning in the home (Jay et al., 2018). Parents' mathematical ability plays a role in parents feeling a sense of powerlessness when communicating with teachers who are the experts and possessors of math content (Civil & Bernier, 2006; Harris & Goodall, 2008). Additionally, as students matriculate through the grade levels, parent confidence in math decreases and their involvement decreases (Jay et al., 2018; Riberio et al., 2021).

School Events

The universal definition of a school event is an activity hosted by a school where parents, students, and/or community attend a specific function at the school building where information is presented and received (Barger et al., 2019; Camacho-Thompson et al., 2016; Foley et al., 2015; Hill & Tyson, 2009; Keith & Lichtman, 1994; Marschall & Shah, 2020). Recent technological advancements have expanded this definition to also include specific school-based events where parents, students, and/or the community send and receive information via telecommunication, such as video conferencing, web conferencing, and webinars.

Yotyodying et al. (2020) stated that the PTA Standards for Family-School Partnerships (FSP) were evaluated to develop a measurement instrument to assess the four FSPs from parent

perspectives. These quality features are: (a) welcoming and meeting culture, (b) various and respectful communication, (c) educational cooperation, and (d) parent participation, and the connection between the quality features of FSP and parent-child communication about school were evaluated (Yotyodying et al., 2020). Quality features in schools indicate that the following two standards were reported relatively high by parents: (a) welcoming and meeting culture ($M = 3.06$, $SD = 0.54$), and (b) various and respectful communication ($M = 2.90$, $SD = 0.58$). However, the results of this study also revealed that parents reported the other two standards, which follow relatively low: (c) educational cooperation ($M = 2.31$, $SD = 0.64$), and (d) parent participation ($M = 2.31$, $SD = 0.68$) (Yotyodying et al., 2020). Parents who perceive a high level of various and respectful communication also become more involved in their children's education at home (Yotyodying et al., 2020).

There is a parallel correlation throughout the literature provided in many different researchers' definitions of 'school events' (see Appendix A). Parent involvement at the school level improves student achievement when school programs, family, and community partnerships communicate and work collaboratively (Higgins & Katsipataki, 2015). One of the most important methods for improving parent participation is for educational leaders to create a parent forum designed to maximize communication and seek perceptions on parents' definitions, expectations, and views on school-sponsored events to maximize parent participation (Higgins & Katsipataki, 2015). When educational leaders know the perceptions that exist about school events, they can then plan school events accordingly.

In a case study conducted by Bower and Griffin (2011), data indicated that parents who originate from low-socioeconomic means experience the most difficulty attending school events due to a lack of time and resources. Many encounter employment requirements, working evening

jobs, or maintaining familial responsibilities that they deem more important than attending school events (Camacho-Thompson et al., 2016). Scheduling becomes difficult, but these parents genuinely desire to participate actively in their student's education but cannot be based on specific time-related factors (Camacho-Thompson et al., 2016).

Families experience more challenges participating in school events when both parents are working, attending school, or in single-parent homes (Marschall & Shah, 2020). Even though schools attempt to plan school events where most parents can attend, Camacho-Thompson et al. (2016) found that parents from homes where there is a financial strain ($M = 2.76, SE = .71$) or significant family events ($M = .67, SE = .87$) were not as involved in school events and did not become as active in school involvement. Some parents encounter barriers when attempting to participate in school activities due to various conflicts, which, if addressed, would allow parents opportunities to schedule opportunities to volunteer, especially if food is provided during events (Camacho-Thompson et al., 2016). Established educational leaders will schedule an in-person single-topic event multiple times throughout the week to accommodate as many parents as possible (Camacho-Thompson et al., 2016). For example, when an event is scheduled, the event is scheduled on both the weekday and weekends as well as during the workday and after school to maximize the number of parents attending (Camacho-Thompson et al., 2016).

Effective school-to-home communication is essential for school events. Hourii et al. (2019) conducted a double-blind experiment for which data indicated that parent relations could be strengthened by establishing two-way, home-to-school communication. Cox (2005) defined two-way, home-to-school communication improvement through parent-teacher action research teams and through involving communication between school and home via daily report cards and school-to-home notes.

Communication problems still exist between schools and families, and in an attempt to rectify this issue, schools attempt to employ technology to their advantage by establishing and updating websites (Epstein et al., 1987). Parajuli (2007, as cited in Gu, 2017) stated that a school's website was a crucial element of usability, enabling parents to stay current with school activities and upcoming school events. The timeliness of school notifications to parents about school events was also identified as another problem with communication. According to Baker et al. (2016), schools were sending notices of school events to parents, often too late for parents to rearrange their work schedules to attend the event.

The predominant language spoken in a home directly affects how a parent becomes involved in school events. The language barrier is problematic in homes where a language other than English is spoken (Soutullo et al., 2016). These parents may seem unresponsive to school events and meeting invitations simply because the school's invitation is not easily translatable (Soutullo et al., 2016).

Additionally, the types of programs offered to parents during school events should be planned to provide relevant topics for families (Ankrum, 2016). Not all school events need to be academic. According to parent recommendations, nonacademic events also strengthen relationships between families and the school community (Hall, 2016). Another factor is to consider student perceptions of school events. According to Yusof et al. (2018), students enjoyed participating when school activities and events were engaging. Epstein et al. (1987) stated that when students engage in and enjoy activities and events, they gain knowledge and build cultural connections (Epstein et al., 1987).

Perez-Soltero et al. (2019) proposed organizing school events successfully through a series of Knowledge Management (KM) tools supported by those in the organization. School

employees have experienced positive and negative attitudes about organizing past school events, so utilizing their knowledge can allow schools to avoid previous errors (Perez-Soltero et al., 2019). Utilizing KM to organize school events, including a detailed description of the events, activities, people in charge, spaces, and the repeated events schools host, such as academic contests, educational fairs, sporting events, and talent shows, is an example of how technology benefits the organizational culture (Perez-Soltero et al., 2019).

Summary

Research indicates that parental involvement directly affects student academic performance. Thus, to improve student achievement, school personnel must exercise the utmost care in addressing the importance of utilizing previous research to improve parent involvement. Understanding that a person's social environment affects his or her development, school personnel may strategically plan to develop parent involvement strategies (Bronfenbrenner, 1979; Epstein, 2016).

Since most families' schedules are not sufficiently flexible to allow parents to become involved as robustly as they would like, schools employ multiple communication methods to inform parents of school events. Effective communication based on sound policy and procedures is fundamental to improving parent involvement. Communication between school personnel and parents and between school personnel and students is necessary because, as parents can influence student achievement, students can theoretically influence parental behaviors.

One of the many strategies inherent to research involves parents working at home with their students. School personnel can educate parents on how to be involved in their student's academic endeavors to influence student achievement (Epstein, 2002). Parental involvement can

improve if the communication method addresses students' influence over parental behaviors by including students in the communication about school events.

The present study was designed to investigate the potential level of parents' perception of parental involvement as related to school and if adding students to the communication chain about school events improves parent attendance. Control and "treatment" groups were formulated via parent video content, reading content and math content, which allowed the researcher to regulate communication consumption for the experimental student group to receive only content for the math parent involvement event video. This influence could increase parental attendance at school events.

CHAPTER THREE: METHODS

Overview

This chapter presents the methods and procedures of the quantitative, quasi-experimental study to investigate whether differences between potential level of parents' perception of parental involvement as related to school exists and if adding students to communication can affect parental attendance at school events. A description of the participants, instrumentation, research design, and an explanation of the study procedures are presented. This chapter outlines the method of data collection and the process of data analysis.

Design

This study employed a quantitative, quasi-experimental, static group comparison design (Gall et al., 2007). The two static groups involved in the study were parents involved in school-based events whose students were included in communication about the event and parents involved in school-based events whose students were excluded from communication about the event. The static group comparison design used two preexisting or static groups, only one of which was exposed to the experimental treatment. Although the design uses two groups for comparison, it is flawed because the subjects were not randomly assigned to the groups, and no pretest was used. The groups are assumed to be equivalent in all relevant aspects before the study begins and differ only in the exposure to the experimental treatment. To attempt to assess the effects of the experimental treatment, the researcher compared the groups on the dependent variable measure (Ary et al., 2017).

Control and treatment groups were created using parent video content for reading and math, which allowed the researcher to regulate communication consumption for the experimental student group to receive only content for the math parent involvement event video. The non-

randomized participation parameters also served to avoid overlapping data caused by parental responses to communication materials complicated by multiple-child households. When randomization is not applied in a quasi-experimental study, it limits the study's ability to conclude a causal association potential between an intervention and an outcome, which is a significant disadvantage (Schweizer et al., 2016).

An intervention consisting of communication about a math parent involvement event was provided to the treatment group. In contrast, no communication was provided to the control group about a reading parent involvement event (Gall et al., 2007). The independent variable was the inclusion of students in the communication, compared to including only parents in the communication (Gall et al., 2007). The dependent variable was the family involvement scores, as assessed by the Family Involvement Questionnaire (FIQ), consisting of three dimensions: home-based involvement, school-based involvement, and home-school conferencing (Fantuzzo et al., 2000). The family involvement scores included parents of elementary school students who were included in the communication methods as to when students were omitted from the communication methods (Gall et al., 2007).

Research Questions

RQ1: Is there a difference in parents' school-based involvement scores between parents whose younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when parents of students are omitted from communication methods?

RQ2: Is there a difference in parents' school-based involvement scores between parents whose older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

RQ3: Is there a difference in the number of parents who attend a school event when younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when students who are omitted from communication methods?

RQ4: Is there a difference in the number of parents who attend a school event when older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

Hypotheses

H₀₁: There is no statistically significant difference in parents' school-based involvement score for parents whose younger elementary school students (Kindergarten-First Grades) are included in the communication methods as compared to when students are omitted from the communication methods.

H₀₂: There is no statistically significant difference in parents' school-based involvement score for parents whose older elementary school students (Second-Fifth Grades) are included in the communication methods as compared to when students are omitted from the communication methods.

H₀₃: There is no statistically significant difference in the number of parents who attend a school event when younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to students who are omitted from communication methods.

H₀₄: There is no statistically significant difference in the number of parents who attend a school event when older elementary school students (Second-Fifth Grades) are included in communication methods as compared to students who are omitted from communication methods.

Participants and Setting

The following sections contain information on the population of the study. Next, a description of the participants is provided with demographic details at the student level. The section concludes with a description of the setting and groups.

Population

The school selected for this study is located within a city with a population of 114,582 per the 2020 census (29.8% under age 18), making it the 28th-most populous city in Texas (U.S. Census Bureau, 2021). The city is the principal city of the metropolitan statistical area, which includes all cities represented in the county (U.S. Census Bureau, 2021). 13% of the population lives in poverty; the median household income as of 2020 was \$63,829, with a per capita income of \$30,182 (U.S. Census Bureau, 2021). The gender breakdown of the city is 49.7% male and 50.3% female. The demographics of the population consists of 5.9% African American, 59% Hispanic, 32.4% White, 0.8% American Indian, 1.6% Asian, 0.1% Pacific Islander, and 7.7% of the population is of two or more races, which includes races reported in the other categories.

The Anonymous Texas Charter Academy, a K-12 district in Texas, serves 792 students through one elementary campus, one middle school campus, and one high school campus. The district operates as a public charter school under open enrollment, defined by a simple applicant lottery system. This study's sample participants were selected from one public charter school enrollment. One elementary school, broken into two age groups as per the FIQ: younger (Kindergarten-First Grades) and older (Second-Fifth Grades), was chosen from the school district via a convenience sampling. This school was selected because of the near similarity in economic and demographic data with the city. The study was introduced to the sample population through their elementary homeroom teacher.

Participants

For this study, the number of participants sampled was the parents of 381 students, which according to Gall et al. (2007, p. 145), exceeded the required minimum for a medium effect size with statistical power 0.7 and $\alpha = .05$ (Gall et al., 2007). According to Gall et al. (2007), the minimum sample size is 100, which is evenly divided between the control and treatment groups. The district demographic composition includes African American 2.27%, Hispanic 48.36%, White 44.82%, American Indian 0.38%, Asian 1.26%, Pacific Islander 0.38%, and two or more races 2.53% (Texas Education Agency, 2019). The program composition at the district level includes 40.40% at-risk, 0.00% bilingual, 43.15% CTE, 19.95% economically disadvantaged, 3.16% ESL, 6.57% gifted and talented, 3.03% LEP, 0.00% migrant, 5.68% special education, and 5.56% section 504 of the Rehabilitation Act.

Setting

The parent involvement event consisted of two asynchronous parent involvement videos, one for reading and one for math, delivered after the completion of the parent involvement survey (FIQ) that was emailed to parents by the school's administrative assistant. Attendance and survey data were collected for seven days once the event became accessible for parent attendees. All students at the elementary school (K-fifth grade) served as the treatment, as they were only given information about the math parent involvement event. The control group consisted of parents of elementary aged students received information about both parent involvement events.

Groups

The sample group consisted of all students enrolled in Kindergarten-Fifth Grades. The treatment group included all students enrolled in Kindergarten-Fifth Grades invited to a math

event. The control group consisted of all students enrolled in Kindergarten-First Grades not invited to a reading event.

Table 1

Enrollment for Lower Elementary and Upper Elementary at The Anonymous Texas Charter Academy 2022-2023

	Lower Elementary (K-1)	Upper Elementary (2-5)	Total	% of total population
Enrollment	191	190	381	100%
Male	106	111	217	57%
Female	85	79	164	43%
African American	8	4	12	3%
Hispanic	96	89	185	49%
White	71	90	161	42%
American Indian	1	1	2	0.5%
Asian	7	1	8	2%
Pacific Islander	1	1	2	0.5%
Two or more Races	7	4	11	3%

The study was divided into two groups: a parent event where the parent only was invited and a parent event where the parent and student were invited. Additionally, the data was recorded for two sets of grade levels: lower elementary (Kindergarten-First Grades) and upper elementary school (Second-Fifth Grades), where the treatment group was defined as Kindergarten-Fifth Grades students invited to a parent involvement event for math. The control

group was defined as students in Kindergarten-Fifth Grades who were not invited to a parent-involvement event for reading.

Instrumentation

Instrumentation consisted of two parent involvement videos (see Appendix B) and parent involvement surveys (see Appendix C). The two parent involvement videos instructed parents on how to become involved with their children at home in math and reading, an issue described by Grinshtain and Harpaz (2021) and Jay et al. (2018). The parent involvement survey, the Family Involvement Questionnaire (FIQ), solicited parent responses to questions about their involvement with their children for school events, including school events occurring at home, and the completion of the survey measured parent attendance (see Appendix C). Other researchers who implemented the FIQ in their studies include Vasiljević-Prodanović et al. (2021), Xia et al. (2021), and Garbacz and Sheridan (2011).

Parent Involvement Videos

This study consisted of two similar parent involvement events at The Anonymous Texas Charter Academy for reading and math. The parent involvement events were intended to educate parents about supporting their student's reading and math academics outside of the classroom and serve as part of the Title I required annual parent meetings. Current restrictions on the number of participants permitted to congregate due to the COVID-19 pandemic mandated that both parent involvement events would be conducted as two asynchronous, pre-recorded 10-minute videos. The production methods, delivery formats, and data collection for both the reading and math parent involvement events were similar.

Attendance data and survey responses to the FIQ were collected at the two similar parent involvement events: one for reading and one for math during the spring semester. Each

asynchronous parent involvement event video was accessed via Google drive through a link provided in a parent email from the school. To access the videos, parents completed the FIQ parent involvement survey before they were provided access to the two videos (see Appendix C). The videos were stored on the school district's Google drive. Transcripts for both videos can be found in Appendix D.

Family Involvement Questionnaire

The Family Involvement Questionnaire (FIQ) (see Appendix E) was developed by Fantuzzo, Tighe, and Childs (2000) in a large urban school district in the northeastern United States in partnership with parents and teachers and was included in a larger research project designed to assess family involvement in young students' education across the school district's Preschool, Kindergarten, and First-Grade designations. The FIQ development committee was composed of university researchers, school administrators, teachers, and parent leaders who met during a six-month period to design the six major parent involvement categories based on Epstein's (1995) model.

Questionnaire items were drafted along with a standard response format after selecting the most relevant behaviors from the most frequent and valued family behaviors as defined by the committee. The selected items were field tested with several groups of parents to support the cultural validity of the scale, helping to ensure that parents understood the items and that the items represented an accurate reflection of parent-child experiences related to school and learning. The development process resulted in a 42-item scale. The instrument was administered in numerous studies, such as Ghahdarijani and Rahimi, 2021; Vasiljević-Prodanović et al., 2021; Xia et al., 2021.

During the survey development, Fantuzzo et al. (2000) administered the FIQ (see Appendix E) to the selected parents of children enrolled in identified early childhood programs. The instrument was designed to measure parents' perceptions about the nature and extent of their involvement in their children's educational experiences.

To determine the construct validity of the original 42-item FIQ (see Appendix E), a series of three-factor analyses satisfying standard multiple criteria for retention were conducted with varimax, equamax, and promax solutions, and the proposed solution was psychologically meaningful and compatible with existing theoretical models (Fantuzzo et al., 2000). The following constructs and reliability statistics were created after the three-factor solution was evaluated:

Table 2

FIQ Constructs and Reliability Statistics

FIQ Constructs	Cronbach's Alpha
school-based involvement	0.85
home-based involvement	0.85
home-school conferencing	0.81

Note: Fantuzzo et al., 2000

Each construct was found to be highly reliable based on Cronbach's alphas. The 42-question survey was then condensed to a 34-question survey, as there were double-loading and non-loading items. The School-Based Involvement factor was defined by parent engagement with their children at school based on parent behaviors and activities, such as volunteering in the classroom, going on class trips, and meeting with and planning events with other parents in or

out of school, fundraisers, and so on (Fantuzzo et al., 2000). Home-Based Involvement included parent behaviors actively promoting an at-home learning environment for children, including providing a home location for learning materials, actively initiating, and participating in learning activities at home with children, and creating learning experiences for children in their community (Fantuzzo et al., 2000). Home-School Conferencing described communication about a child's educational experience and progress between parents and school personnel, including discussions with the teacher about a child's difficulties at school, learning behavior, accomplishments, and homework practice (Fantuzzo et al., 2000). Each survey question was evaluated and listed the reliability constructs (see Appendix F).

The researcher administered the FIQ (see Appendix E) constructed by Fantuzzo et al. (2000). The total number of questions on the FIQ is 34 questions (see Appendix E). There are no reverse questions. There are 10 questions for School-Based Involvement, 13 for Home-Based Involvement, and 11 for Home-School Conferencing.

FIQ (see Appendix E) participant responses were recorded via a four-point Likert format (1 = rarely, 2 = sometimes, 3 = often, 4 = always). The combined possible score on the FIQ (see Appendix E) ranged from 34 to 136 points. A score of 34 points was the lowest possible score meaning that the parent was rarely involved with their child's school, and a score of 136 was the highest, meaning that the parent was always involved with their child's school. The research assistants hand scored the questionnaire. However, for this study, the researcher will collect score data from completed questionnaires through Google Forms and export the data to Google Sheets to be scored electronically.

Validity was achieved via factor analysis, with results presented via varimax and promax rotations for each factor. A series of common factor analyses were performed with both

orthogonal (varimax, equamax) and oblique (promax) solutions to determine the construct validity of the FIQ (see Appendix E) (Fantuzzo et al., 2000). A three-factor varimax solution was chosen to satisfy standard criteria for retention (Fantuzzo et al., 2000). The retained factors included the constraints indicated by Cattell's (1966) scree plot and parallel analysis (Fantuzzo et al., 2000). Each factor accounted for greater than 5% of the total variance, and each factor demonstrated adequate internal consistency with alpha coefficients of $>.70$ (Fantuzzo et al., 2000). The final proposed solution, which minimized the intercorrelation of retained unit-weighted factors and items with salient loadings on multiple factors, was psychologically meaningful and compatible with existing theoretical models (Fantuzzo et al., 2000).

Permission to use the FIQ instrument was requested by emailing the authors and permission was granted (see Appendix G). Although Fantuzzo et al. (2000) did not include information about the amount of time the survey was designed to consume, the researcher anticipated the survey to take 10-20 minutes for completion. Once the survey was submitted and parents were given video links, the reading video was estimated to consume approximately 5 minutes, while the math video was estimated to take 8 minutes. In total, it is expected that parents will spend approximately 15-30 minutes to complete the survey and watch the video per each subject (reading and math).

Procedures

This section outlines the steps taken by the researcher to start and complete the study. Following a brief description of the proposed study, the researcher secured approval to conduct the study by obtaining written permission from the district superintendent (see Appendix H). Additionally, the researcher secured approval to conduct the research from The Anonymous Texas Charter Academy's IRB (see Appendix I) and Liberty University's IRB (see Appendix J).

Training

In this study, the researcher established a control group consisting of parents who received information about attending two digital parent involvement events focused on reading strategies scaffolded across grade levels. The reading-themed parent involvement event did not receive the treatment established by the researcher and identified as the inclusion of students in school communication with parents regarding parent events.

The researcher established the treatment group of students and their parents attending a digital parent involvement event involving scaffolded math skills across grade levels. The treatment consisted of parents who received information about attending the math parent involvement event and whose children were included in the communication process through their homeroom classes. The math-themed parent involvement event received the treatment established by the researcher, identified as the inclusion of students in school communication along with parents regarding information about parent events.

The district superintendent designated the school's reading and math coordinators and elementary principal to collaborate with the researcher during the video creation portion and served as liaisons between the researcher and other necessary school personnel (elementary teachers, clerks, department leaders) involved in the study as needed (see Appendix K). The district superintendent emailed this designation directly to the reading and math coordinators responsible for hosting content-related, school-wide parent involvement events in the spring academic semester (see Appendix K). The researcher met and collaborated with the school district's reading and math coordinators to determine how to best execute the proposed study, which intended to examine the possible child influence on increasing parental attendance of

school events via consistent inclusion of students to the communication method employed by the school.

The researcher also met with the Public Education Information Management System (PEIMS) clerk to identify the most efficient way for the researcher to receive the necessary demographic data from the school's student enrollment for the study. The PEIMS clerk provided the researcher with de-identified student demographic data via a password-protected Microsoft Excel spreadsheet. Additionally, the PEIMS clerk worked with the researcher to determine how to connect the parent attendance data from the two parent involvement events with the corresponding student grade level data. The PEIMS clerk determined that homeroom class rosters for Kindergarten-Fifth Grades would offer the best solution for performing this task. With the addition of a question in the survey asking for the first names of students attending the school, the PEIMS clerk was able to easily connect parent attendance with homeroom rosters.

During the study, regular and routine parent communication and information dissemination continued as usual for all parents. Typical parent communication from the school district consisted of digital monthly newsletters emailed to all parents, including links to the newsletters posted on the school's website, weekly parent email reminders about events, and social media posts to Facebook, X (formerly known as Twitter), and Instagram by the administrative assistant. Social media posts were also shared via the school's PTO Facebook page by the school's PTO. These frequencies, methods, and modes of communication were standard for the school.

Description of Procedures

Reading and math content was needed for the two parent-involvement event presentations; so, the researcher located appropriate parent-involvement articles for math and

reading online (see Appendix L). The math article included methods for reinforcing math skills at home, while the reading article included strategies for reinforcing reading at home. Both articles were adapted to a video script for the two pre-recorded parental involvement events.

Each pre-recorded parent involvement event video script (see Appendix D) included steps on interacting with children at home that were adapted from the two online articles (see Appendix L). The scripts (see Appendix D) were emailed to and approved by the reading and math coordinators and superintendent via returned email (see Appendix M). Once approved, the researcher provided finalized digital copies to the reading and math coordinators.

When the parent involvement event scripts were complete, the researcher developed a PowerPoint presentation with images matching the content and then recorded and imbedded the verbiage for each slide. Both math and reading PowerPoints were exported as mp4 files. The researcher delivered the two completed mp4 recordings, one each for reading and math, to the reading and math coordinators via a Google folder accessible through an email link for approval.

Next, the researcher developed direct student communication about the math parent involvement events through a free-to-use, web-based, poster-building tool entitled PosterMyWall, which allows users to create an account and then modify or create flyers, posters, brochures, and other digitally created products through editing text fields and insertion of visuals (see Appendix N).

The digital parent involvement event flyer was designed to encourage students to communicate with their parents about the participation details of the parent involvement event. Once created, the direct communication flyer was emailed to the math coordinator for approval. The math coordinator approved the direct student communication.

The math parent involvement event flyer was distributed via student LMS by homeroom teachers during the study. The purpose of the digital flyer served to apply current, effective marketing strategies designed to precisely target consumers, specifically children and adolescents. The inclusion of a cartoon character within the advertisement was intended to elicit the attention of younger target consumers (Basch & Rajan, 2014; Mediano Stoltze et al., 2019).

Next, the researcher developed a Google Form containing the FIQ survey questions to deliver the parent event content and survey to parents. Upon survey submission by the parents, the content video link appeared as a hyperlink (see Appendix C). The Google Form included a section for parents to input family data, including their student(s) first name, the number of children in the household that attended the charter school, and checkboxes for each child's grade level. Parents were asked to submit their students' first names to aid in correlating student homeroom rosters and parent attendance for the events. Next, parents answered the FIQ questions and pressed the submit button to progress to the confirmation message with hyperlinks for the parent involvement event video recordings. When the parents clicked the hyperlink, they were taken to the corresponding video.

Teacher roles were defined next. With the input of the reading and math coordinators, the researcher prepared a teacher workshop presentation (see Appendix O) with all elementary teachers, Kindergarten-Fifth grades, where the study and researcher were introduced, and the teacher roles were defined. This workshop was conducted via recorded video created by the researcher and uploaded to the school's Google drive that was then disseminated to teachers via email by the administrative assistant. The approved digital parent involvement event flyer (see Appendix N) and the teacher script were also included in the training received via teacher email (see Appendix O). The elementary principal notified elementary teachers to disseminate the

information about the math parent involvement event through their homeroom classes during the study's designated week.

Links to the Google Forms for the parent involvement event were sent to the administrative assistant via email to be included in the scheduled parent emails for when the parent involvement event opened. Verbiage for a parent email (see Appendix P) was provided to the school's administrative assistant to be sent to parents at the start of the study via parent-submitted, on-file email addresses, housed in Ascender, a web-based software for schools that provides parents access to grades, attendance, and discipline. It also provides school personnel access to student and parent information, such as parent contact information (Texas Computer Cooperative, 2014). The email correspondence sent by the school's administrative assistant to parents included information for accessing the parent involvement event survey, which then linked to the pre-recorded parent involvement event video recordings.

On the first day the asynchronous parent involvement event became accessible for parent attendees, the district sent event information and the parent involvement event form via email to each parent with elementary students enrolled in the district. At the launch of the dedicated week for the study's duration, teachers uploaded the digital parent involvement event flyer to the student LMS platform, Google Classroom. Students were directed to the communication by their teachers' in-class instructions. Teachers read the scripts (see Appendix O) from the teacher workshop materials and discussed the event's purpose with students in homeroom class. Teachers then discussed the digital announcement and the event's purpose with students in their homeroom classes and continued to reference the digital announcement loaded in the student LMS daily for the rest of the week. Teachers adhered to their collective role outlined in the teacher workshop

and workshop materials and refrained from discussing or uploading any information related to the reading parent involvement event.

On the fifth day the parent involvement event was accessible to parent attendees, the teachers displayed the digital announcement to all students. Teachers verbally discussed details of the math event in their homeroom classes. Students were notified that it was the last day for parents to view the parent involvement event video.

Survey and attendance data from the reading and math parent involvement events were collected Monday through Sunday for seven consecutive days. Upon the culmination of the seventh day of the study, the attendance data for both parent involvement events attendance and survey results were accessed by opening the Google Form, clicking "Responses" at the top, and then clicking on the green spreadsheet icon to export responses into Google Sheets. During the week following the parent involvement event, after the closing of access to the parent involvement events, data was exported to Microsoft Excel and was password protected. Parent attendance data was aligned with printed class rosters for homeroom classes. The data connecting parent attendance to student homeroom class rosters were de-identified, student names and identification numbers were removed, and the Excel spreadsheet was password protected. The researcher received the Excel spreadsheet via email and formatted the data into an applicable table and exported the data into Statistical Package for the Social Sciences version 24 (SPSS), a statistical software suite developed by IBM for data management for data analysis (Field, 2009).

All paper copies of information, including any printed data, were stored with the administrative assistant in a fireproof filing cabinet in the school's secured data office. The district superintendent and the school's administrative assistant maintained the only key to the

room and filing cabinet. Documents were shredded by the administrative assistant in compliance with legal requirements one year after the completion of the study.

Data Analysis

Research questions one and two were analyzed via two independent-samples *t*-tests (Gall et al., 2007) which were conducted to determine the difference between the mean family involvement scores of parents of elementary school students who are included in the communication methods and the scores of parents when students are omitted from the communication methods. Measures of central tendency are presented in the results for both groups in the results section for each of the hypotheses. There was an equal proportion within the treatment (50%, $n = 136$) and the control group (50%, $n = 136$). Assumption testing included box and whisker plots to check for outliers. Independent sample *t*-tests analysis requires that the independent variable, the family involvement scores of parents of elementary school students who are included in the communication methods as compared to the scores of parents of students who are omitted from the communication methods as measured by the FIQ, be measured using continuous equal interval scale of measurement.

The independent variable, the involvement of students in the communication methods, consists of two static categories or groups. The observations or involvement of each group must be independent of the other (Gall et al., 2007). Other studies employing *t*-tests similarly include Sulimani-Aidan and Paldi (2020), El Nokali et al. (2010), and Marschall and Shah (2020). The *p*-value ($p = 0.025$) was reestablished via a Bonferroni correction with *p* divided by the number of *t*-tests ($.05/2 = .025$) (Warner, 2013).

The data were visually inspected for missing data points and inaccuracies. Additionally, the data were visually screened and confirmed via box and whisker plots to test for extreme

outliers. An outlier refers to an observation that significantly deviates from other occurrences in the sample (Warner, 2013). Assumption testing included tests for normal distribution. The homogeneity of variance was tested through the Levene's test of equality of variances. The Shapiro-Wilk Test of Normality was conducted to measure the assumption of normally distributed data or normality, $p > .05$ (Gall et al., 2007).

Research questions three and four were analyzed via the Chi-square test of independence, which measured a potential association between two static groups comprised of parents who did or did not attend and when students were included or omitted in the communication methods. The sample size was greater than the total number of cells multiplied by three, as the Chi-square test requires. Assumptions include that 80% of the contingency cells must present an expected value greater than 3. No cell in the contingency table can include an expected value of less than 2. Furthermore, both groups must be independent of one another. The categories in the contingency tables are mutually exclusive. Each observation can appear in one category exclusively. The data are measured or expressed as frequencies.

The effect size was reported via Cohen's d for the continuous variable research questions RQ1 and RQ2 (Ary et al., 2017). In keeping with Warner (2013) and Gall et al. (2007), the sample size for RQ1 and RQ2 of 138 was greater than the 100 minimum, evenly divided, when assuming a medium effect size with .7 statistical power, $\alpha = .05$. All null hypotheses are rejected at the 95% confidence level.

CHAPTER FOUR: FINDINGS

Overview

Chapter Four includes the results of the quantitative, quasi-experimental study to investigate whether differences between potential level of parents' perception of parental involvement as related to school exists and if adding students to communication can affect parental attendance at school events. This chapter lists the descriptive statistics for each research question, results from the independent *t*-test or chi-square, analyzes the assumptions of each research question, and explains their effect size. Chapter Four also contains charts that depict the descriptive statistics for each research question, graphs that show each test's distribution, and box plots that note outliers for each test.

Research Questions

RQ1: Is there a difference in parents' school-based involvement scores between parents whose younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when parents of students are omitted from communication methods?

RQ2: Is there a difference in parents' school-based involvement scores between parents whose older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

RQ3: Is there a difference in the number of parents who attend a school event when younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when students who are omitted from communication methods?

RQ4: Is there a difference in the number of parents who attend a school event when older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

Null Hypotheses

H₀1: There is no statistically significant difference in parents' school-based involvement score for parents whose younger elementary school students (Kindergarten-First Grades) are included in the communication methods as compared to when students are omitted from the communication methods.

H₀2: There is no statistically significant difference in parents' school-based involvement score for parents whose older elementary school students (Second-Fifth Grades) are included in the communication methods as compared to when students are omitted from the communication methods.

H₀3: There is no statistically significant difference in the number of parents who attend a school event when younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to students who are omitted from communication methods.

H₀4: There is no statistically significant difference in the number of parents who attend a school event when older elementary school students (Second-Fifth Grades) are included in communication methods as compared to students who are omitted from communication methods.

Results

Null Hypothesis One

For hypothesis one, an independent samples *t*-test was generated to determine if there was a statistically significant difference in parents' school-based involvement score for parents

whose younger elementary school students (Kindergarten-First Grades) are included in the communication methods as compared to when students are omitted from the communication methods. A total of 40 participants attended the parent events for reading and math and completed the FIQ survey.

Descriptive Statistics

Descriptive statistics were obtained on the dependent variable, the addition of students in the communication chain about a parent event, for each group (see Table 3).

Table 3

Descriptive Statistics for Parent Involvement Scores for Younger Students (Kindergarten-First Grades)

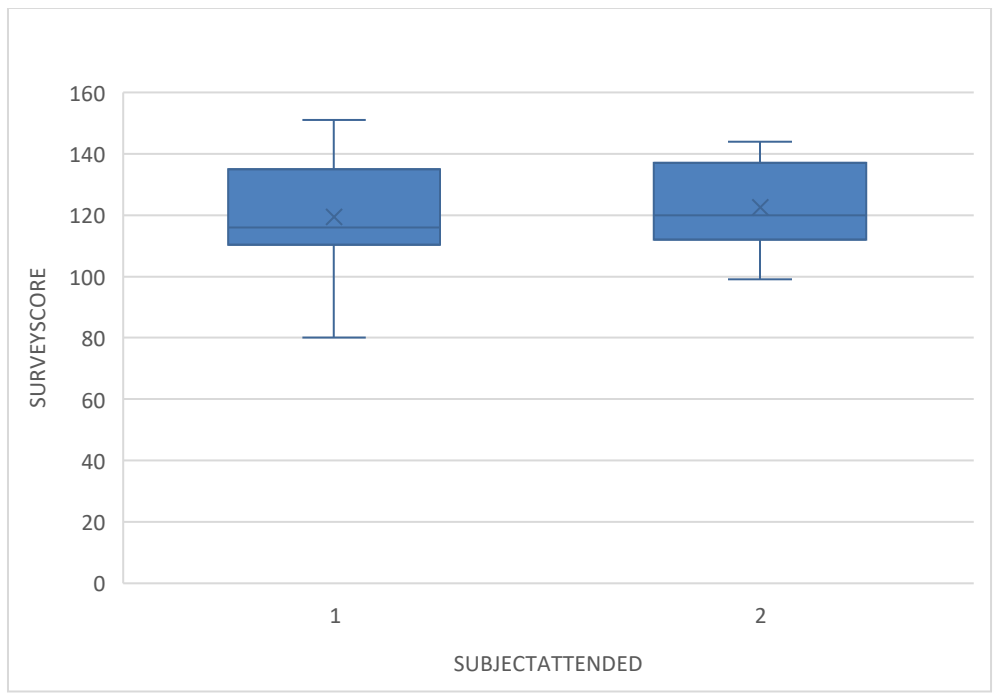
Group	<i>n</i>	<i>M</i>	<i>SD</i>
Math event (students included in communication)	28	122.58	14.91
Reading event (students not included in communication)	12	119.43	17.59

Data screening

Data screening was conducted on each dependent variable. The researcher sorted the data on each variable and scanned for inconsistencies. No data errors or inconsistencies were identified. Box and whiskers plots were generated to detect outliers on each dependent variable. No outliers were identified. Figure 4 provides the box and whisker plots for the Parent's School-Based Involvement Scores between Math (1) and Reading (2) Events

Figure 4

Box and Whisker Plot Results for Younger (Kindergarten-First Grades) Parent's School-Based Involvement Scores between Math (1) and Reading (2) Events



Assumptions

An independent samples *t*-test was generated to test the null hypothesis. The *t*-test required that the assumptions of normality and homogeneity of variance are met. Normality was examined using a Shapiro-Wilk Test of Normality. The Shapiro-Wilk test is a more appropriate method for small sample sizes to determine if data is distributed normally. No violations of normality were found, $p > .05$. Table 5 provides the results for the Test of Normality.

Table 4

Shapiro-Wilk Test of Normality for Younger (Kindergarten-First Grades) Parent's School-Based Involvement Scores for Reading and Math Events

	Statistic	<i>df</i>	Sig.
Math Survey Score	.951	28	.210
Reading Survey Score	.174	12	.452

The assumption of homogeneity of variance was examined using the Levene's test (see Table 5). No violation was found where $p > .025$. The assumption of homogeneity of variance was tenable.

Table 5

Levene Test of Equality of Error of Variance for Younger (Kindergarten-First Grades) Parent's School-Based Involvement Scores for Reading and Math Events

	Levene Statistic	<i>df1</i>	<i>df2</i>	Sig.
Based on Mean	.147	1	38	.703
Based on Median	.074	1	38	.788

Results for Null Hypothesis One

A *t*-test was generated to test the null hypothesis regarding school-based involvement scores for parents of Kindergarten-First Grade students (see Table 6). Equal variance was assumed. The Bonferroni correction, used during multiple comparison testing, compensated for

Type 1 error. The alpha level, usually set at .05, was divided in half: $p < .025$. The researcher failed to reject H_0 at a 95% confidence level where $t(38) = -.542$, $p = .591$, two-tailed. Cohen's $d = -.157$, indicating a small effect size. Omission of students in communication/math event ($M = 122.58$, $SD = 14.91$) had no significant difference in family involvement questionnaire scores compared to the addition of students added to communication/reading event ($M = 119.43$, $SD = 17.59$).

Table 6

t-test Results for Younger (Kindergarten-First Grades) Parent's School-Based Involvement Scores between Reading and Math Events

	<i>t</i>	<i>df</i>	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
			One-Sided <i>p</i>	Two-Sided <i>p</i>			Lower	Upper
Equal variances assumed	-.542	38	.295	.591	-3.155	5.818	-14.932	8.623
Equal variances not assumed	-.580	24.484	.284	.567	-3.155	5.440	-14.370	8.061

Null Hypothesis Two

For hypothesis two, an independent samples *t*-test was generated to determine if there was a statistically significant difference in parents' school-based involvement score for parents whose older elementary school students (Second-Fifth Grades) are included in the communication methods as compared to when students are omitted from the communication methods. A total of 98 participants attended the parent events for reading and math and completed the FIQ survey.

Descriptive Statistics

Descriptive statistics were obtained on the dependent variable, the addition of students in the communication chain about a parent event, for each group (see Table 7).

Table 7

Descriptive Statistics for Parent Involvement Scores for Older Students (Second-Fifth Grades)

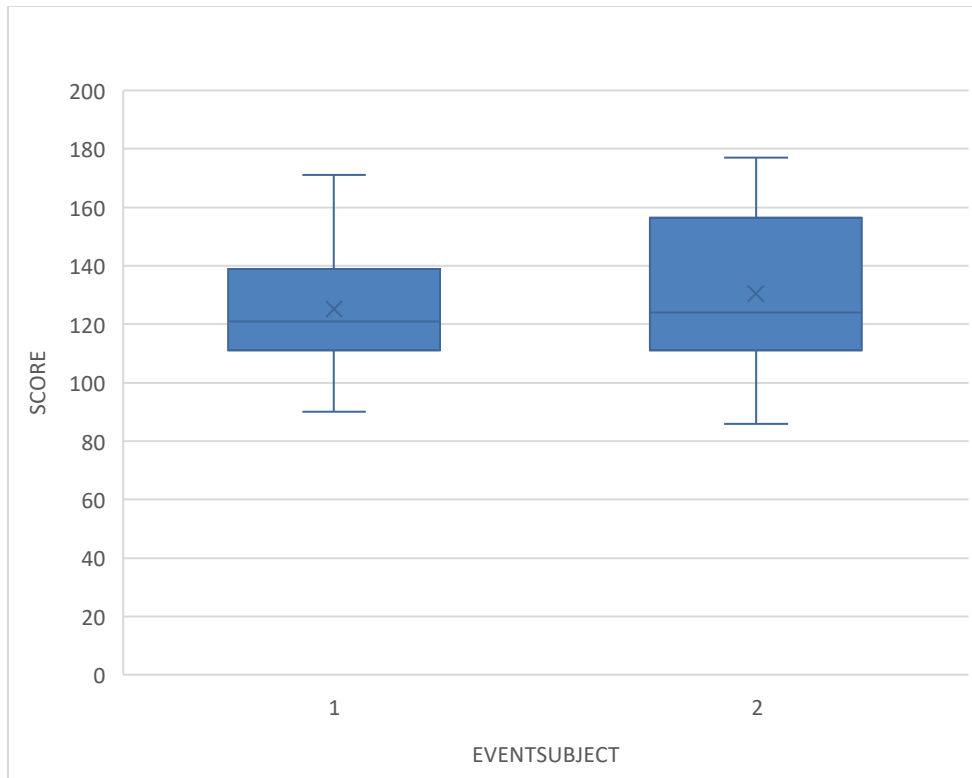
Group	<i>n</i>	<i>M</i>	<i>SD</i>
Math event (students included in communication)	65	130.42	26.11
Reading event (students not included in communication)	33	125.26	20.55

Data screening

Data screening was conducted on each dependent variable. The researcher sorted the data on each variable and scanned for inconsistencies. No data errors or inconsistencies were identified. Box and whiskers plots were generated to detect outliers on each dependent variable. No outliers were identified. Figure 5 provides the box and whisker plots for the Parent's School-Based Involvement Scores between Math (1) and Reading (2) Events.

Figure 5

Box and Whisker Plot Results for Older (Second-Fifth Grades) Parent's School-Based Involvement Scores between Math (1) and Reading (2) Events



Assumptions

An independent samples *t*-test was generated to test the null hypothesis. The *t*-test required that the assumptions of normality and homogeneity of variance are met. Normality was examined using a Shapiro-Wilk Test of Normality. The Shapiro-Wilk test is a more appropriate method for small sample sizes to determine if data is distributed normally. A violation of normality was found where the Math Survey Score data indicate $p < .05$, meaning the distribution is not normal. Table 8 provides the results for the Test of Normality.

Table 8

Shapiro-Wilk Test of Normality for Older (Second-Fifth Grades) Parent's School-Based Involvement Scores for Reading and Math Events

	Shapiro-Wilk		
	Statistic	<i>df</i>	Sig.
Math Survey Score	.956	65	.021
Reading Survey Score	.951	33	.144

The assumption of homogeneity of variance was examined using the Levene's test. To limit the risk of a Type I error, the Bonferroni procedure, used during multiple comparison testing, was applied to half the normal alpha level of .05 to an alpha level of .025. A violation was found where $p = .025$ (see Table 9). Although the assumption of equal variances was not tenable. The t -test is robust and can provide accurate estimate of statistical significance even under conditions of substantial violation of these assumptions (Gall et al., 2007).

Table 9

Levene Test of Equality of Error of Variance for Older (Second-Fifth Grades) Parent's School-Based Involvement Scores for Reading and Math Events

	Levene Statistic	<i>df1</i>	<i>df2</i>	Sig.
Based on Mean	5.149	1	96	.025
Based on Median	3.751	1	96	.056

Results for Null Hypothesis Two

A *t*-test was generated to test the null hypothesis regarding differences of the school-based involvement scores for parents of Second-Fifth Grade students (see Table 10). The assumption of equal variance was not tenable. The Bonferroni correction, used during multiple comparison testing, compensated for Type 1 error. The alpha level, usually set at .05, was divided in half: $p < .025$. The null hypothesis was rejected at a 95% confidence level where $t(52.69) = .991, p = .326$, two-tailed. The effect size was medium as Cohen's $d = .212$. Omission of students in communication/math event ($M = 130.42, SD = 26.11$) had no significant difference in family involvement questionnaire scores compared to the addition of students added to communication/reading event ($M = 125.26, SD = 20.55$).

Table 10

t-test Results for Older (Second-Fifth Grades) Parent's School-Based Involvement Scores between Reading and Math Events

	<i>t</i>	<i>df</i>	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
			One-Sided <i>p</i>	Two-Sided <i>p</i>			Lower	Upper
Equal variances assumed	-1.071	96	.143	.287	-5.163	4.822	-14.734	4.408
Equal variances not assumed	-.991	52.693	.163	.326	-5.163	5.211	-15.617	5.291

Null Hypothesis Three

For hypothesis three, a chi-square test for independence was conducted to determine the potential for a statistically significant difference in the number of parents who attend a school

event when younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to students who are omitted from communication methods. A total of 30 participants attended the parent events for reading and math and completed the FIQ survey.

Descriptive Statistics

Descriptive statistics were obtained on the dependent variable, the addition of students in the communication chain about a parent event, for each group (see Table 11).

Table 11

Descriptive Statistics for Parent Attendance for Younger Students (Kindergarten-First Grades)

Group	<i>n</i>	<i>M</i>	<i>SD</i>
Students included in communication (Math event)	28	119.42	17.59
Students not included in communication (Reading event)	12	122.58	14.92

Data screening

Data screening was conducted on each dependent variable. The researcher sorted the data on each variable and scanned for inconsistencies. No data errors or inconsistencies were identified.

Assumptions

Assumption testing included verifying there were two categorical variables that were either nominal or ordinal. Additionally, independent observations were assumed, meaning there is no relationship between the observations in each group of the categorical variables or between

the groups. All but one cell included expected counts greater than five per the crosstabulation procedures (see Table 12).

Table 12

Crosstabulation for Younger (Kindergarten-First Grades) Parent's Attendance at School Events

	Math Parent Event	Reading Parent Event	<i>N</i>
Attended 1 meeting	18	2	20
Attended 2 meetings	5	5	10
Total	23	7	30

Results for Null Hypothesis Three

The Pearson chi-square results were $\chi^2 (df=2, N=30) = 30, p < .001$ (see Table 13). In chi-square tests of significance, if $p < 0.05$, there was a statistically significant relationship between the two variables. The null hypothesis was rejected.

Table 13

Chi-Square Test of Independence for Younger (Kindergarten-First Grades) Parent's Attendance at School Events

	Value	<i>df</i>	Asymptotic Significance (2-sided)
Pearson Chi-Square	30.000	2	<.001
Likelihood Ratio	38.191	2	<.001
Linear-by-Linear Association	26.982	1	<.001
<i>N</i> of Valid Cases	30		

Null Hypothesis Four

For hypothesis four, a chi-square test for independence was conducted to determine the potential for a statistically significant difference in the number of parents who attend a school event when older elementary school students (*Second-Fifth Grades*) are included in communication methods as compared to students who are omitted from communication methods. A total of 67 participants attended the parent events for reading and math and completed the FIQ survey.

Descriptive Statistics

Descriptive statistics were obtained on the dependent variable, the addition of students in the communication chain about a parent event, for each group (see Table 14).

Table 14*Descriptive Statistics for Parent Attendance for Older Students (Second-Fifth Grades)*

Group	<i>n</i>	<i>M</i>	<i>SD</i>
Students included in communication (Math event)	65	125.26	20.55
Students not included in communication (Reading event)	33	130.42	26.11

Data screening

Data screening was conducted on each dependent variable. The researcher sorted the data on each variable and scanned for inconsistencies. No data errors or inconsistencies were identified.

Assumptions

Assumption testing included verifying there were two categorical variables that were either nominal or ordinal. Additionally, independent observations were assumed, meaning there is no relationship between the observations in each group of the categorical variables or between the groups. All but one cell included expected counts greater than five per the crosstabulation procedures (see Table 15).

Table 15*Crosstabulation for Older (Second-Fifth Grades) Parent's Attendance at School Events*

	Math Parent Event	Reading Parent Event	<i>N</i>
Attended 1 meeting	29	2	31
Attended 2 meetings	18	18	36
Total	47	20	67

Results for Null Hypothesis Four

The Pearson chi-square results were reported in Table 16, $\chi^2 (df=2, N=67) = 67, p < .001$.

In chi-square tests of significance, if $p < 0.05$, there is a statistically significant relationship between the two variables. The null hypothesis was rejected.

Table 16

Chi-Square Test of Independence for Older (Second-Fifth Grades) Parent's Attendance at School Events

	Value	<i>df</i>	Asymptotic Significance (2-sided)
Pearson Chi-Square	55.998	2	<.001
Likelihood Ratio	72.215	2	<.001
Linear-by-Linear Association	53.556	1	<.001
<i>N</i> of Valid Cases	67		

CHAPTER FIVE: CONCLUSIONS

Overview

Chapter Five includes the conclusions of a quantitative, quasi-experimental parent involvement perception study and the effects of adding students to communication about parent involvement events on parent attendance. This chapter contains a discussion of topics related to the study and the implications of the study results of the data, the effects of limitations on the results of the study, the application of the information to the field of education, and recommendations for further research.

Discussion

The study's purpose was to determine the level of parents' perception of involvement as related to school events and whether adding students to the school-parent communication chain affects parent attendance at parent involvement events. Clearly communicating the ways in which parents can engage with their child's school is crucial for enhancing the link between parental involvement and student achievement. Additionally, when students are included in the communication about parent events, students' "pester power" positively influences parent attendance. Therefore, school personnel can effectively improve parent attendance at parent involvement events by including students in the communication about the events.

RQ1: Is there a difference in parents' school-based involvement scores between parents whose younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when parents of students are omitted from communication methods?

Research indicates that parent involvement directly affects student achievement (Alreshidi et al., 2022; Houry et al., 2019). Discussion about the influence on student

achievement appears in Epstein's (1995) research on School-Family-Community partnerships, indicating that student achievement improves when the school, family, and community cooperate with the goal of student academic achievement in mind. Unfortunately, research also indicates that parent involvement begins to decline as students advance through grade levels (Jay et al., 2018; Riberio et al., 2021). Some parents become uncomfortable involving themselves in visible school participation as students advance through grade levels (Benner et al., 2016; Daniel, 2015). Nonetheless, schools' best practices should include parent involvement components influencing pre-Kindergarten-Twelfth Grade students. To fulfill these best practice expectations, schools must adopt various strategies involving parents in children's education at home and school (Jabar, 2020).

One role of schools in communities is to serve as educators to families. According to Epstein (2002), a role schools fulfill in the community is to guide families in learning how to establish supportive home environments for their students by suggesting home conditions that advance learning at all levels. How schools fulfill this role varies. Some schools conduct in-person training in the evenings, while some schools provide links to educational videos via parent email or newsletter, among other efforts. No matter the method, schools must provide guidance and training regarding parent involvement at home, educating parents on how to help, encourage, listen, react, praise, guide, monitor, and discuss with their child their homework and group work, and other content-related activities (Epstein, 2002; Kigobe et al., 2021; Kuru Cetin & Taskin, 2016).

Because parent involvement connects to student achievement (Alreshidi et al., 2022; Hourri et al., 2019), it is crucial to discover parents' perceptions of their academic abilities to help their students at home. Many schools utilize targeted parent involvement events to equip parents

with strategies and information about increasing their academic competencies and confidence while working with their children on academics at home. The intended effect is that student achievement improves. Schools can begin scheduling future parent involvement events based on parent perception results from self-reporting surveys like the FIQ administered in this study.

Another area of particular interest is parents' self-efficacy in reading and math. Mathematic ability is the area more parents report needing more certainty with helping their students at home. Working at home with students in math has created many barriers to parents' involvement due to parents' confidence and perceived ability (Grinshtain & Harpaz, 2021; Jay et al., 2018). Parents also experienced efficacy issues while working with their students at home due to the increased content difficulty as students matriculate through grade levels (Jay et al., 2018; Khanolainen et al., 2020; Riberio et al., 2021).

The importance of equipping parents with skills to help their students in math and reading cannot be understated, as Khanolainen et al. (2020) found that students' reading and math fluency predictions could be forecasted based on parents' reading and mathematical difficulties perceptions. Therefore, it was of utmost importance to determine if there were any statistical differences between parents' self-reporting of their parent involvement in the reading and math events. Math and reading were selected based on the Khanolainen et al. study (2020) involving parents' perceptions of their confidence and academic abilities. According to the FIQ results for this study, parents of older students reported being more involved than parents of younger students. The self-reporting parent involvement data from the FIQ is contrary to the earlier findings of Benner et al. (2016) and Daniel (2015) claiming that parents become less involved as students matriculate through grade levels.

Not all parents know how to approach learning at home with their students. Thus, schools must address ways to educate parents on how to help their students at home. There are two perspectives originating from the research. Houry et al. (2019) indicated that after parent involvement intervention, students' academic achievement and long-term outcomes improved when their parents assisted with their children's homework at home. Conversely, Benner et al. (2016) posited that parents who assist their children with homework can compromise achievement.

The COVID-19 pandemic temporarily ceased in-person attendance at school (some states reverted to in-person attendance at school before other states), and student learning and achievement continue to be negatively affected, especially in math and reading. To educate parents on strategies they could implement at home for math and reading, per Houry et al. (2019), the researcher created two parent-involvement videos. Each video demonstrated explicit examples of what parents can say and how to help students with their math and reading work homework. Because of the COVID-19 pandemic, Epstein's (2002) *Learning at Home* strategy in delivering instruction to parents for at-home involvement via recorded video was most appropriate in engaging parents for this study.

RQ2: Is there a difference in parents' school-based involvement scores between parents whose older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

Research findings suggest a direct link between parent involvement and student achievement (Alreshidi et al., 2022; Houry et al., 2019). Epstein's (1995) research on School-Family-Community partnerships underscores the positive influence on student achievement when schools, families, and communities collaborate with the shared goal of enhancing student

academic performance. However, it is disheartening to note that parent involvement tends to decrease as students progress through various grade levels (Jay et al., 2018; Riberio et al., 2021). Some parents may become less inclined to participate visibly in school activities as their children advance academically (Benner et al., 2016; Daniel, 2015). Nevertheless, best practices in schools should encompass strategies for engaging parents from pre-Kindergarten-Twelfth Grades in their children's education both at home and at school (Jabar, 2020).

One of the roles of schools within the community is to serve as educators for families. As described by Epstein (2002), schools play a vital role in guiding families on how to establish supportive home environments that foster learning at all educational levels. The methods employed by schools to fulfill this role can vary, from in-person evening training sessions to providing links to educational videos through parent emails or newsletters, among other efforts. Regardless of the approach, schools must offer guidance and training on parent involvement at home, educating parents on how to support, encourage, listen, respond, praise, guide, monitor, and discuss homework and other content-related activities with their children (Epstein, 2002; Kigobe et al., 2021; Kuru Cetin & Taskin, 2016).

Given the connection between parent involvement and student achievement (Alreshidi et al., 2022; Hourri et al., 2019), it is imperative to understand parents' perceptions of their ability to support their children academically at home. Many schools organize targeted parent involvement events aimed at equipping parents with strategies and information to enhance their academic competence and confidence when assisting their children with academics at home. The desired outcome is improved student achievement. Schools can use the results of self-reporting surveys like the Family Involvement Questionnaire (FIQ) administered in this study to schedule future parent involvement events based on parents' perceptions.

Of particular interest is parents' self-efficacy in reading and math. Math, in particular, is an area where more parents report needing additional confidence when it comes to assisting their children at home. The complexity of math can create barriers for parents, impacting their involvement (Grinshtain & Harpaz, 2021; Jay et al., 2018). Parents may also face efficacy challenges as their children progress through higher grade levels (Jay et al., 2018; Khanolainen et al., 2020; Riberio et al., 2021).

The significance of equipping parents with the skills to support their children in math and reading cannot be overstated, as Khanolainen et al. (2020) found a correlation between parents' perceptions of their reading and mathematical difficulties and students' reading and math fluency predictions. Therefore, it was of utmost importance to investigate whether there were any statistical differences in parents' self-reported involvement in reading and math events. Math and reading were chosen based on the study by Khanolainen et al. (2020) that examined parents' confidence and academic abilities. According to the FIQ results in this study, parents of older students reported greater involvement compared to parents of younger students. This self-reported data contradicts the earlier findings of Benner et al. (2016) and Daniel (2015), who suggested that parents become less involved as students progress through grade levels.

Not all parents possess the knowledge and skills to support learning at home with their children. Therefore, schools must address ways to educate parents on how to assist their children with their learning at home. Research offers two contrasting perspectives: Hourri et al. (2019) suggested that after parent involvement interventions, students' academic achievements and long-term outcomes improved when parents assisted with their children's homework at home, while Benner et al. (2016) argued that parents who help with homework could potentially hinder their children's achievement.

The COVID-19 pandemic disrupted in-person school attendance, and its effects on student learning and achievement, especially in math and reading, continue to be pronounced. To educate parents on strategies they could implement at home for math and reading, as suggested by Hourii et al. (2019), the researcher created two instructional videos for parent involvement. These videos demonstrated specific examples of how parents can assist their children with math and reading work at home. Given the pandemic's circumstances, Epstein's (2002) *Learning at Home* strategy, delivering instructional content to parents through recorded videos, was the most suitable approach for engaging parents in this study.

RQ3: Is there a difference in the number of parents who attend a school event when younger elementary school students (Kindergarten-First Grades) are included in communication methods as compared to when students who are omitted from communication methods?

The researcher, a classroom teacher of more than twenty years, noticed that when students were informed about parent involvement events, it appeared that parent participation improved for those classes when students were added to the school-parent communication. The researcher then investigated the literature to determine if studies or data provided conclusive evidence that the addition of students in the communication about parent involvement events improved or influenced parent attendance at those parent events. No academic articles or publications explored this concept or even mentioned the addition of students to the communication chain.

Instead, the researcher discovered articles and publications in the literature addressing the topics included in this study: the school's role in educating parents how to become involved academically with their students at home, school-home-student communication, parent perception of their parent involvement, the application of marketing strategies which entice

students to communicate with parents via pester power (children's ability to nag/influence adults into action), student influence on parent attendance at parent involvement events, and the influence younger versus older children have on their parents.

Effective communication between school and home considers how schools provide notice about all school components and events. Schools should communicate in the medium (e.g. print, photo, video, digital, etc.) the audience most often accesses (Castleman & Skillman, 2017; Gilbert, 2019), evaluate the selected communication modes' readability or ease of reading (Epstein, 1995), and choose communication methods (e.g. verbal, non-verbal, listening, written, visual, etc.) parents favor when asked to be involved in education (Gilbert, 2019; Gu, 2017). To solicit parent involvement in school events, communication mediums and modes must fit the school's audience.

While there are many modes of communication, schools must determine which mode parents perceive is the most effective and most accessible (Castleman & Skillman, 2017; Gilbert, 2019). Thompson et al. (2015) identified that parents' communication mode preference was receiving emails from their children's schools due to their asynchronous nature, ease, convenience, access to a computer at work, the time factor, written documentation, and fit with work schedules. Additionally, email makes communications less intrusive (Ku et al., 2021). For this study, parents were invited via email to participate in parent involvement events, one for math and one for reading.

Additionally, adding students to the school-parent communication chain could influence parent attendance at parent involvement events. Chaudhary and Gupta's (2012, p. 1157) definition of influence indicated, "Influence occurs any time a source (children) attempt to change a receiver's (parents) thoughts, feelings or behaviors." The current study's results indicate

that adding students to the communication chain about parent involvement events improves parent attendance at parent involvement events. Not only does adding students to the school-parent communication chain improve attendance for parents of younger students (Kindergarten-First Grades) but adding students to the school-parent communication chain also improves attendance for parents of older students (Second-Fifth Grades).

An addition to the empirical literature is a school's implementation of marketing strategies through graphical communication and invoking a student's pester power to influence parent behavior to attend parent involvement events. One strategy marketing consistently implements is including a cartoon character within the advertisement intended to elicit the attention of younger consumers (Basch & Rajan, 2014; Mediano Stoltze et al., 2019). For this study, the researcher included the marketing strategy of adding a cartoon character to the student's digital math event announcement to capture the students' attention.

Once marketing captured the students' attention, advertisers intended to elicit a child's pester power to influence their parents' behavior. Children harness great power, pester power, that advertisers have leveraged for years. This clever marketing strategy aimed to cause children to pester and influence their parents' behavior to purchase a product (Boyland et al., 2021). Advertisers influence children through product marketing which in turn causes the child to influence parents' behaviors (Studer-Perez & Musher-Eizenman, 2022), such as spending money on toys or food, influencing the location of a vacation, or even begging to be taken to a movie, etc. (Chavda et al., 2005; Howard & Madrigal, 1990; and John, 1999). For this study, the student's digital math parent involvement event announcement hoped to gain the student's attention, resulting in improved parent attendance via student influence or pester power. Results

from this study indicate that this strategy improved parent attendance for younger and older students.

Not only do children harness influential power over their parents, but research also indicates that the effectiveness of a child's influence is directly related to the child's age. According to Shaw et al. (2000), a child's ability to influence his or her parents is more substantial in early childhood. Younger children can elicit a greater level of agitation than older children (Chen, 2020). Consider a hungry baby trying to influence a parent to feed him or her by crying or throwing fits. As a child ages, he or she begins to access words to agitate parents into action. For example, children will directly request, bargain, persuade, nag or whine, become physically aggressive, cry, give gifts, perform favors, or employ an emotional strategy such as pouting, sweet talking, or eliciting guilt trips on their parents to agitate them into action (Chaudhary & Gupta, 2012; Chen, 2020).

The current study separated the student population into younger (Kindergarten-First Grades) and older (Second-Fifth Grades). Based on the research, the expectation was that more parents of younger students would attend the math event. However, in contrast to Shaw et al. (2000), wherein younger children harness more influence over their parents through pester power, the current study's results do not indicate that a child's age directly influenced parents' decision-making to attend the math parent involvement event. Instead, results suggest that pester power and influence between student and parent increased instead of declined as the student aged as parents of older students attended the math event at higher rates than parents of younger students.

RQ4: Is there a difference in the number of parents who attend a school event when older elementary school students (Second-Fifth Grades) are included in communication methods as compared to when students are omitted from communication methods?

The researcher, an experienced classroom teacher with over two decades of teaching, observed that when students were informed about events involving parental participation, there seemed to be an improvement in parental involvement for those grade levels that included students in the school-parent communication process. The researcher proceeded to review existing literature to determine if any studies or data conclusively supported the idea that involving students in communicating about parent involvement events had a positive impact on parental attendance. Surprisingly, there were no academic articles or publications that delved into this concept or even mentioned the role of students in the communication process.

Instead, the researcher found articles and publications in the literature that addressed the following topics in this study: the school's role in educating parents on how to engage academically with their children at home, school-home-student communication, parental perceptions of their involvement, the use of marketing strategies to encourage students to communicate with their parents through what's known as "pester power" (the ability of children to influence adults into taking action), the impact of students on parental attendance at events related to parental involvement, and the differing influence that younger and older children have on their parents.

Effective communication between schools and families involves considering how schools provide information about all school components and events. Schools should use the medium (e.g., print, photos, videos, digital channels, etc.) that their audience most frequently uses, assess the readability of chosen communication methods, and select the modes of communication (e.g.,

verbal, non-verbal, written, visual, etc.) that parents prefer when engaging in their child's education. To encourage parental involvement in school events, communication mediums and methods must align with the preferences of the school's audience.

While various communication modes exist, schools must identify the mode that parents perceive as the most effective and accessible. Thompson et al. (2015) found that parents preferred receiving emails from their children's schools due to their asynchronous nature, ease of access, convenience, compatibility with their work schedules, and the non-intrusive nature of email communication (Ku et al., 2021). For this study, parents were invited via email to participate in two parent involvement events, one for math and one for reading.

Additionally, involving students in the school-parent communication process could influence parental attendance at parent involvement events. Chaudhary and Gupta's (2012) definition of influence is, "Influence occurs when a source (children) attempts to change a receiver's (parents) thoughts, feelings, or behaviors." The results of the current study suggest that involving students in the communication about parent involvement events enhances parental attendance. This enhancement is not limited to parents of younger students (Kindergarten-First Grades) but also extends to parents of older students (Second-Fifth Grades).

An addition to the existing body of research is the school's utilization of marketing strategies, including graphical communication and leveraging students' "pester power" to influence parental behavior and encourage attendance at parent involvement events. A common marketing strategy involves incorporating cartoon characters in advertisements to capture the attention of younger consumers. For this study, the researcher included the marketing strategy of introducing a cartoon character in the digital math event announcement to attract students' attention.

Once students' attention was captured through marketing, advertisers aimed to use a child's "pester power" to influence their parents' behavior. Children possess a remarkable ability to influence their parents, which marketers have capitalized on for years. This marketing strategy aimed to encourage children to pester and influence their parents' behavior, whether it be to purchase a product or participate in an event. Results from this study indicate that this strategy improved parental attendance for both younger and older students.

Furthermore, research suggests that the effectiveness of a child's influence is closely tied to the child's age. According to Shaw et al. (2000), younger children have a more substantial ability to influence their parents, and younger children can elicit a higher level of agitation compared to older children. However, the current study's results do not align with Shaw et al. (2000). In contrast, the findings suggest that a child's age does not directly impact parental decision-making to attend the math parent involvement event. Instead, the study indicates that pester power and the influence between students and parents increase as the child gets older, with parents of older students attending the math event at higher rates than parents of younger students.

Implications

The implications of this study potentially influence empirical research, theory, and practical application. First, the researcher sought to address the literature gap by determining if there was a difference between levels of parental attendance at parent involvement events (Hackworth et al., 2018), including students in communication methods versus omitting students from communication. The issue is that schools need to leverage student influence over parent behaviors to improve event attendance. The problem is that there was no literature discussing

improved parent attendance at parent events when including students in the communication until this study.

Students' inclusion in communication may be more influential in soliciting a response from parents (Swindle et al., 2020) than only inviting parents directly to parent involvement events. Empowering students to apply their theoretical influence (Bronfenbrenner, 1979) to affect parental behaviors could improve parent attendance at school events, as indicated by the present study: To positively influence parent attendance, include students in communication about parent involvement events. These findings suggest that if school personnel wish to improve parent attendance at parent involvement events, they should include students in the communication about the events and ensure the school's communication policy is updated to reflect the addition of students to the communication chain.

Another research application is that schools can construct intentional school-wide communication policies that include students in parent involvement invitational correspondence. Currently, most schools communicate only to parents about parent involvement events via email or newsletter. Schools may also access social media to promote attendance at parent-involvement events. The problem is that the empirical literature needs to fully address communication between schools, parents, and students (Bordalba & Bochaca, 2019) to include students in parent communication about events. Understanding that a student's social environment affects his or her development, school personnel may strategically develop parent-involvement attendance strategies (Bronfenbrenner, 1979; Epstein, 2016) to include students in the communication.

Schools that struggle to adequately engage parents could apply the available research connecting children's influence over parental decision-making (Chavda et al., 2005) with marketing strategies to consolidate children's influence over parents to improve parent

attendance at school events, as exemplified by the current study's results. Howard and Madrigal (1990) suggested that schools should implement advertising strategies, such as those in the food and beverage industries, to elicit student interest, thereby influencing improved parental involvement. When designing future communication, a school should include research-motivated marketing strategies that are proven to work.

To improve student achievement, especially after the COVID-19 pandemic, schools could leverage parent involvement events to help educate parents on effective interactions with their students at home. However, conducting one parent meeting per year would not be sufficient. A series of well-planned parent involvement meetings could directly influence student achievement.

Last, per the current study's findings, if school administration implements strategies to communicate clearly and effectively with parents and students, student influence could significantly increase parent participation. The inclusion of the students' role in the empirical literature in school communication should be considered. School communication methods, a school's communication application, and written policies and procedures, including a process for improving parental communication through students, are needed.

Limitations

Study limitations include factors that may affect the findings of a study. While this study significantly contributes to the empirical literature, future study replications might resolve several identified limitations. Known limitations involved government-enforced pandemic procedures, randomization issues, violated assumptions, generalizability, limited sample sizes, possible problems with parent honesty to the FIQ survey, and restrictions of the quantitative study.

Due to a global pandemic, in-person meetings were not allowed. Therefore, this study's original intent of conducting two in-person parent involvement meetings had to be revised. Instead of in-person events, the researcher conducted two concurrent, asynchronous, online parent involvement meetings; this posed a limitation for several reasons. The school's parents had never experienced a parent involvement event conducted in this manner. Research indicates that face-to-face meetings are the preferred method for conveying information to parents, and the impersonal setting of the online, asynchronous events could prevent some parents from participating (Thompson et al., 2015).

Additionally, this study did not utilize randomization in treatment. Not applying randomization in a quasi-experimental study limits the study's ability to conclude a causal association potential between an intervention and an outcome, which is a significant disadvantage (Schweizer et al., 2016). All students in Kindergarten-Fifth Grades were assigned to receive the intervention. Replicating this study in multiple schools of similar demographics could resolve randomization issues in this study.

Research questions three and four exhibited violated assumptions, which indicates that the analyzed results may be incorrect or misleading. These violations can affect test result validity and cause problems with interpreting the data results as the results may be inaccurate. There could be a need for more independence in the study. Replication of the study may improve or solve the issues these violations caused.

Next, the study's results may be categorized as a generalizability limitation. The study's results may not apply to many different types of schools (e.g. charter, traditional, private), demographics, or age groups. Resolution of generalizability issues can improve through study replications with different types of schools, demographics, and age groups.

A limited sample size challenged the study. The sample size as a limitation reduces the power of a study's results, and the margin of error can increase. Unfortunately, a limited sample size could render the study insignificant. The study should be replicated in a school setting with a larger enrollment or in multiple schools with similar demographics to increase the sample size to alleviate the shortcoming of a limited sample size.

Parents may not have responded honestly to the FIQ survey questions. The researcher can only assume that parents answered the survey questions honestly through this quantitative study. One way to bolster this study would be to approach the study qualitatively, wherein the researcher interviews parents directly to receive quality and honest answers to the questions about parent involvement. The quantitative approach may be a limitation that adding a qualitative component can solve.

Recommendations for Further Research

The findings of this study lead to several recommendations bolstering the study.

1. **Replicate the Study:** Conduct a follow-up study in the post-pandemic environment to strengthen the findings.
2. **Improve Randomization:** Overcome randomization limitations by replicating the study in various settings and with different audiences, including rural and urban settings, small and large enrollment, and different socioeconomic situations.
3. **Increase Sample Size:** Enhance the study's statistical power by including a larger and more diverse sample, addressing issues related to assumptions and generalizability.
4. **Compare Attendance Formats:** Conduct future studies to compare attendance rates in in-person and online asynchronous parent involvement events throughout the school year.

5. **Continual Updates and Replication:** Regularly update and replicate the study as new research becomes available to have an impact on policy, practice, theory, and subsequent research.
6. **Add Qualitative Component:** Improve the survey by adding a qualitative component to address concerns about parent honesty in the FIQ survey.
7. **Investigate Marketing Strategies:** Explore how current marketing strategies capture students' attention and positively influence parent behavior.
8. **Explore Digital Marketing:** Investigate and incorporate contemporary digital marketing strategies.
9. **Create Marketing Best Practices:** Develop and share recommendations for schools regarding the best practices for including marketing strategies in their communications.

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APPENDIX or APPENDICES

Appendix A: Definition of School Events by Study

Appendix B: Parent Involvement Videos

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Appendix L: Reading and Math Online Articles

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Appendix O: Teacher Workshop Presentation

Appendix P: Parent E-mail to Participate

APPENDIX A: DEFINITION OF SCHOOL EVENTS BY STUDY

Example Parental Behaviors	Study
Classroom observation	Hill & Taylor (2004); Jabar (2020); Powell et al. (2010)
Extracurricular activity attendance	Camacho-Thompson et al. (2016); Hill & Tyson (2009); Keith & Lichtman (1994)
Field trip assistance	Barger et al. (2019); Powell et al. (2010)
Food preparation for events or classroom	Powell et al. (2010)
Fundraising event participation	Powell et al. (2010)
Informational meeting attendance	Foley et al. (2015)
Newsletter/material preparation and delivery	Powell et al. (2010)
Open house or parent/teacher night attendance	Barger et al. (2019); Camacho-Thompson et al. (2016); Foley et al. (2015); Hill & Tyson (2009); Keith & Lichtman (1994); Marschall & Shah (2020)
Parent-teacher association/organization membership	Camacho-Thompson et al. (2016); Hill & Tyson (2009); Keith & Lichtman (1994)

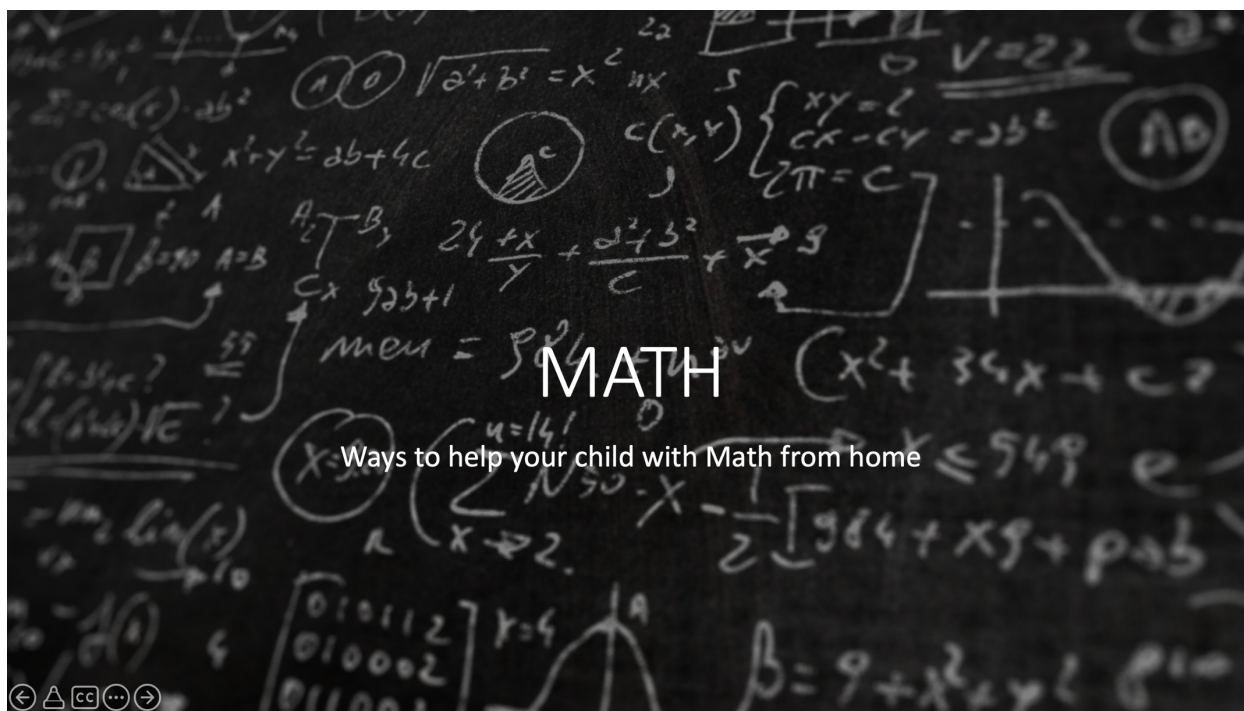
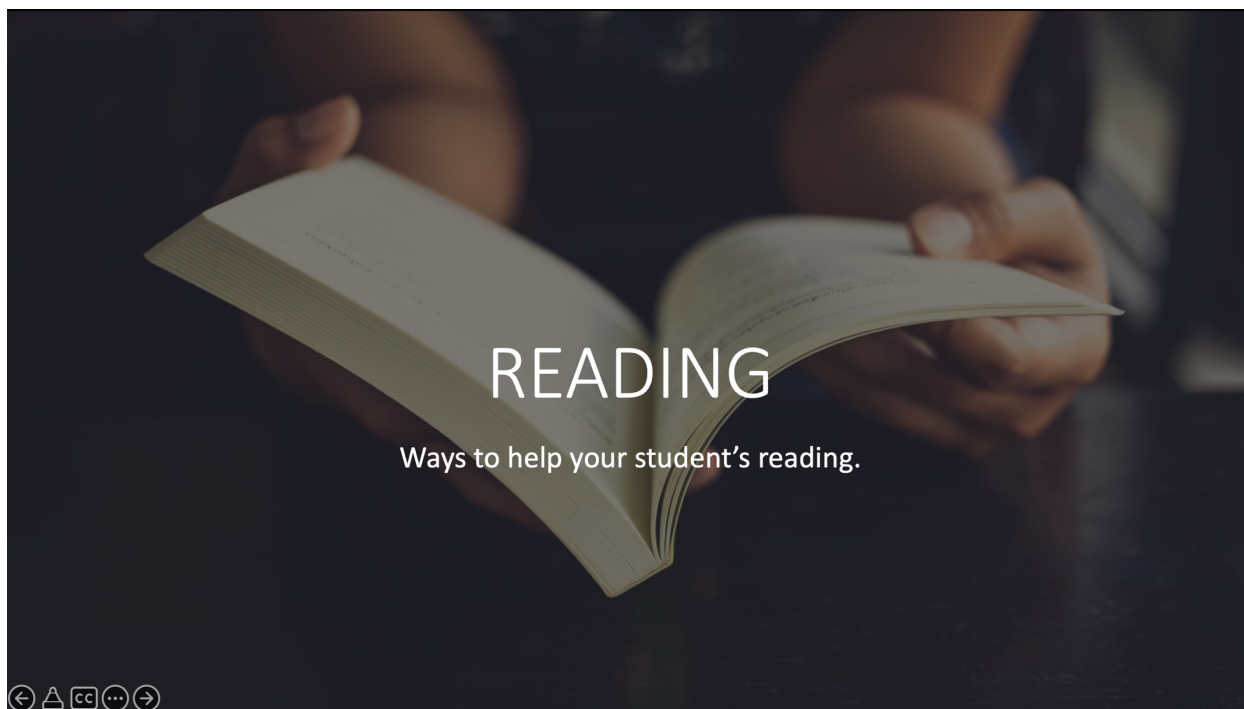
Parent-teacher communication (knowing or talking with teachers and being contacted by teachers, urging parents to attend school activities like assemblies, performances, and sports events)	Barger et al. (2019); Benner et al. (2016); Camacho-Thompson et al. (2016); Hill & Tyson (2009); Jabar (2020); Keith & Lichtman (1994); Marschall & Shah (2020); Powell et al. (2010)
Parent-teacher conference participation	Barger et al. (2019); Benner et al. (2016); Camacho-Thompson et al. (2016); Foley et al. (2015); Hill & Taylor (2004); Hill & Tyson (2009); Jabar (2020); Keith & Lichtman (1994); Marschall & Shah (2020); Powell et al. (2010)
Parent workshop attendance (e.g., enhancing parenting skills for education, curriculum, and learning areas - Family Math).	Jabar (2020); Powell et al. (2010)
School functions or school-sponsored/school-wide activities or social events assistance or attendance	Benner et al. (2016); Hill & Taylor (2004), Powell et al. (2010)
School or building-level advisory, governance councils, committee planning groups membership	Hill & Taylor (2004); Powell et al. (2010)

School programs attendance (e.g., school plays, bake sales, sporting events, music, drama, science fairs)	Barger et al. (2019); Marschall & Shah (2020)
Volunteering in the Classroom	Barger et al. (2019); Benner et al. (2016); Camacho-Thompson et al. (2016); Hill & Taylor (2004); Powell et al. (2010); Hill & Tyson (2009); Keith & Lichtman (1994); Marschall & Shah (2020)



APPENDIX B: PARENT INVOLVEMENT VIDEOS

(Screenshots of opening scene of both parent involvement videos.)



APPENDIX C: PARENT INVOLVEMENT SURVEY

Welcome to the [REDACTED] Math Parent Involvement Survey and Video

Your responses are completely confidential.

(Same survey used for the Reading Event)

* Indicates required question

1. Email *

2. TYPE PARENT/GUARDIAN'S FULL NAME (Last, First) *

3. HOW MANY OF YOUR STUDENTS ATTEND THE [REDACTED] *

4. PROVIDE ALL STUDENT(S) FIRST NAMES ONLY

5. WHAT GRADE LEVELS DO YOUR CHILDREN ATTEND AT THE [REDACTED]? (Select all that apply) *

Check all that apply.

- KINDERGARTEN
- 1ST GRADE
- 2ND GRADE
- 3RD GRADE
- 4TH GRADE
- 5TH GRADE
- 6TH GRADE
- 7TH GRADE
- 8TH GRADE
- 9TH GRADE
- 10TH GRADE
- 11TH GRADE
- 12TH GRADE

6. [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]

7. Select the appropriate grade category for ONE of your children. (You can complete one survey for all children.) *

Mark only one oval.

- KINDERGARTEN - FIRST GRADE (K-1) *Skip to question 8*
- SECOND - FIFTH GRADE (2-5) *Skip to question 50*

Math Parent Involvement Survey and Video (K-1)

Once the 42-question Family Involvement Questionnaire (Fantuzzo, 1997) is submitted, access for the Math Parent Involvement Video link will be given.

How frequently do you do the following? Please fill in the circle. (1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Always)

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AFTER SUBMISSION

Confirmation message[Edit](#)

Thank you for your participation. The Math Parent Involvement Video can be accessed at the following link:

[https://drive.google.com/file/d/\[REDACTED\]usp=sharing](https://drive.google.com/file/d/[REDACTED]usp=sharing)

AFTER SUBMISSION

Confirmation message[Edit](#)

Thank you for your participation. The Reading Parent Involvement Video can be accessed at the following link:

[https://drive.google.com/file/d/\[REDACTED\]usp=share_link](https://drive.google.com/file/d/[REDACTED]usp=share_link)

APPENDIX D: PARENT INVOLVEMENT VIDEO SCRIPTS

READING EVENT - APPROVED VIDEO SCRIPT Supporting Your Child's Literacy Development at Home

We are often asked by parents if there is anything they could (or should) be doing in the home environment to better support their child's reading ability, comprehension, and language skills. The trigger for this question may be a disappointing school report, the start of a new school year, or simply a belief that their child could be doing better than they are currently doing.

The answer is a resounding "Yes, you can help." And the good news is that it needn't be difficult or time-consuming to have an impact if you put a few of these tips into practice.

Actively engage in reading experiences with your children at home. Becoming involved with your child and their reading can develop your child's reading ability, comprehension, and language skills. It could also improve your child's interest in reading, attitude towards reading, and focus.

Engage in activities at home such as joint reading, drawing, singing, storytelling, reciting, game playing, and rhyming. This is important for your child's early literacy development. When joint reading, you and your child take turns reading parts of a book. When reading, ask your child to connect to the story. Have them tell you more about what they are thinking. You can use their personal interests to choose books. As they read, give positive feedback and ask open-ended questions during joint reading to boost her interest and critical thinking skills.

For young children

Nursery rhymes are especially helpful for language and early literacy development. Play audiobooks or read aloud at home to increase the amount of language your child hears. Hang different kinds of print around your house. Label objects in your home. This can show the importance of language, reading, and writing. Help your child build background knowledge on a topic. Talk about everyday experiences, show your child pictures, and tell them stories. If you

Speak a different language at home, speak and read to your child in that language. This can help grow your child's vocabulary and make connections at school. It can also increase their curiosity and readiness to learn at school. Learning opportunities in a home language will help literacy learning in English.

For older children

Take time to play word games, talk about word meanings, and point out interesting or new words when reading together. When reading books aloud, ask questions before, during, and after reading. This can help your child focus attention on the ideas in the story. Before reading, look at the book cover and talk about what might happen in the story. During reading, ask what questions he has about the story. After reading, talk about what happened. Ask your child to sum it up and relate the story to what he already knows or has experienced.

For adolescents

Engage in meaningful conversations, offer a literacy-rich environment full of books, and be a strong model for reading. Talk about school, magazines, or current events. Ask them what they are reading and discuss the books. Have a lot of age-appropriate and grade-level reading material around your home. Model good literacy behavior for your children by reading regularly yourself.

Actively engage in reading experiences with your children at home. Involve yourself with your child to develop your child's reading ability, comprehension, and language skills. Remember, "Yes, you can help your child get better at reading at home." The good news is that it needn't be difficult or too time-consuming to have an impact.

ADAPTED FROM:

<https://improvingliteracy.org/brief/supporting-your-childs-literacy-development-home>

MATH EVENT - APPROVED VIDEO SCRIPT
Help Your Child With Math - a 3 Step Plan for Parents

We are often asked by parents if there is anything they could (or should) be doing in the home environment to better support their child's math learning. The trigger for this question may be a disappointing school report, the start of a new school year, or simply a belief that their child could be doing better than they are currently doing.

The answer is a resounding "Yes, you can help." And the good news is that it needn't be difficult or time-consuming to have an impact if you put a few of these tips into practice.

Math ability is **not** set in stone and parents **can** help in very practical ways. Here are the three tips to get you started: Be Aware, Practice, Develop a Healthy Mindset.

Step 1 Be Aware

Learning math is like building a pyramid. Math skills children learn early on such as counting, addition, subtraction etc are the foundation building blocks that make up the base. If one math skill doesn't quite sink in, it makes the foundations shaky and new skills become harder to learn.

This shaky foundation is what causes children to start to lose confidence and fall behind. So early awareness of a potential problem is key so it can be addressed before confidence is damaged.

However, it can be tricky to really know how your child is doing in math - *even after you've seen your child's school report card!*

Here are a few tips to help build an accurate picture of your child's math abilities.

- **Speak to your child regularly** - *What are you doing in math this week? Can you show me your Math for this week? What are some math vocabulary words you learned? How did you do on that homework/weekly test?*
- **Look at his/her schoolwork** - Check your child's digital platform, such as Google Classroom or Canvas. Ask your child to show you their notes, journal, or notebook as well.
- **Check out your child's grade-level Texas math standards** - Familiarize yourself with the skills your child will be working on in school (found in the email link you received for this video)
- **Speak to your child's teacher** - Your child's teacher will have a good grasp of how your child is doing compared to what is reasonably expected for their age.
 - Attend parent events, like this one. At in-person events, have a few questions in mind to ask the teacher, such as "What can I do to improve her understanding...? Which curriculum areas...?"
 - If you have particular concerns, don't wait until parent events to address. Although teachers are busier than ever, there are very few who wouldn't welcome the efforts of an engaged parent.

Step 2 Practice

Very much like sports or music, math is a skill that needs practice. For the best outcome, the ideal plan includes a mix of different approaches to math practice to develop true math fluency.

And by that I mean:

- **Direct, targeted practice** based on your knowledge of your son or daughter's strengths and weaknesses, and complementing their school work. This is the core of what is required. But, tread a fine balance as too much/too often is likely to burn out even the most enthusiastic learner.

- **Real world math.** Math is all around us - so you can use everyday experiences to reinforce and develop math skills and vocabulary. Measurement, fractions, shapes, time and money all benefit from real world application and often can be naturally harnessed as a way to learn math. You just need to make a habit of it.

Here are just a few ideas:

- **Shopping** - involve younger children in counting out items, talk about one more, one less, bigger, smaller etc. Older children can practice money management, and comparing discounts are a great opportunity for some quite complex mental math.
- **Cooking** - always a mathematician's favorite! Perfect for understanding and practicing numbers, measuring, size, shape and time. Fractions can also be introduced by measuring ingredients in a recipe or as easy as sharing out portions.
- **Gardening** - most kids love to help out in the garden so it makes a fun and memorable learning opportunity. Counting, measuring, reading temperature, and sorting are all easy mathematical activities for younger children. Older children may enjoy planning a gardening project - introducing scale, evenly spacing out seeds, checking temperatures and measuring plants as they grow.
- **Games and puzzles** - I'm particularly keen on the value of math puzzles when it involves the whole family and younger members can be involved in working through and finding creative solutions.

Step 3 Develop A Healthy Mindset

A healthy mindset towards learning math includes self-belief, confidence and the resilience to keep learning even when it gets tough.

- **Start with yourself and your partner** - are you setting a good example? Throw out remarks like, "I'm no good at math," "I hated math in high school" etc. These phrases are easily picked up by children, influencing their attitude toward math. *Instead, show enthusiasm towards math - even if you need to fake it!*
- **Build confidence** - if your child is struggling and has lost some confidence, go back a few steps to the skills that they feel comfortable doing and build from there.
- **Praise for effort, not performance** - your child's continued effort is important. Making mistakes isn't bad, it's a necessary part of the journey for every learner. Change, "I can't do it," to "**I can't do it yet.**"
- **Keep your child motivated** - This is a key role (and challenge) for parents. Think more carrot, less stick. And consider getting other family members involved in the all-important encouragement.

Remember, "Yes, you can help your child get better at math at home." The good news is that it needn't be difficult or too time-consuming to have an impact.

ADAPTED FROM:

<https://komodomath.com/us/blog/3-steps-to-help-your-child-with-math>

APPENDIX E: FAMILY INVOLVEMENT QUESTIONNAIRE (FIQ)

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Younger Elementary FIQ (Kindergarten-First Grades)

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Older Elementary FIQ (Second-Fifth Grades)

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APPENDIX F: FAMILY INVOLVEMENT QUESTIONNAIRE RELIABILITY TABLE

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APPENDIX G: PERMISSION TO USE THE FIQ

Amanda Hart
Liberty University

June 14, 2022

Dear Amanda,

Thank you for your interest in the Family Involvement Questionnaire (FIQ), Elementary. I have received your signed contract and payment. As agreed, I have enclosed a copy of the FIQ Elementary scale and published manuscript which I am sending to you on behalf of Dr. John Fantuzzo.

Should you have any further questions, please feel free to contact me by email.

Sincerely,

Ellie DeWitt



Amanda Hart
Liberty University

June 14, 2022

Dear Amanda,

Thank you for your interest in the Family Involvement Questionnaire (FIQ), Early Childhood. I have received your signed contract and payment. As agreed, I have enclosed a copy of the FIQ manual which I am sending to you on behalf of Dr. John Fantuzzo.

Should you have any further questions, please feel free to contact me by email.

Sincerely,

Ellie DeWitt



APPENDIX H: SUPERINTENDENT'S PERMISSION

November 17, 2020

Mrs. [REDACTED] Superintendent

RE: Permission to Conduct Research Study

Dear Mrs. [REDACTED]:

I am writing to request permission to conduct a research study at your institution. I am currently enrolled in the Curriculum & Instruction Doctoral Program through the Education Department at Liberty University Online, and I am in the process of writing my doctoral dissertation. My study is entitled "SCHOOL-PARENT-STUDENT COMMUNICATION: CAN ADDING STUDENTS TO COMMUNICATION IMPROVE PARENTAL ATTENDANCE AT SCHOOL EVENTS."

I hope that the school administration will allow me to recruit Kindergarten through 12th grade students from the school to participate in my quantitative study that uses a non-randomized causal-comparative research method. Due to the nature of the study, I hope to recruit the parents of the students to complete a questionnaire at the conclusion of the study to support the data and to be included in Chapter 5 to help the researcher understand the role that students play in encouraging parents to attend school events. Students will be given a consent form to be signed by their parent or guardian and returned to the primary researcher at the beginning of the survey process. Parents will also be given consent forms to be signed and returned to the primary researcher for the survey portion of the study.

If approval is granted, students would be divided into treatment and control groups by grade level for the study and the researcher will work with the Reading and Math Coordinators to utilize the Spring after school events to collect attendance data. The survey process for parents should take no longer than 10 minutes, and parent participants would complete the survey at home. The results of this study will remain absolutely confidential and anonymous. All data will be deidentified by the PEIMS clerk. No costs will be incurred by either your school/center or the individual participants and there is no incentive for participants.

Your approval to conduct this study will be greatly appreciated. This initial approval does not take the place of the researcher receiving approval from both institutions, Liberty University and [REDACTED]. This initial approval simply allows the researcher to lock in research criteria required for Chapters 1-3.

If you agree, you may simply print and sign this letter of permission on your institution's letterhead acknowledging your consent and permission for me to conduct this survey/study at your institution.

Respectfully,

Amanda S. Hart, M.Ed.

cc: Dr. R. Stiles, Dissertation Chari, LUO

Approved by:

Print your name and title here Signature Date

APPENDIX I: "THE ANONYMOUS TEXAS CHARTER ACADEMY" IRB APPROVAL

Dear Amanda Hart,

The Institutional Review Board (IRB) has reviewed and approved your application entitled "School-parent-student communication: Can adding students to communication improve parental attendance at school events?." Your IRB reference number is 2022-057. Please reference this project number in any future correspondence with the IRB regarding this project. Thank you for your attention to revisions.

Please note that with the passage of the OHRP new rules, minimal risk research no longer has an expiration date. However, if you wish to amend the application at any time during the project please file a Project Update form, which can be found on the .edu/university-offices/research-and-sponsored-programs/human-subjects-in-research-irb). Should an adverse event occur, please file an adverse event report. An adverse event includes, but is not limited to, a complaint, or a change or unexpected event that alters the level of risk for the participants or the researcher. You are also advised that any adverse events must be reported to the IRB committee within 48 hours. At the conclusion of your project, we request that you file a project closure form. All forms can be found on the IRB Web page. If you have reason to contact the IRB concerning your project, please contact me directly.

This email serves as your official approval from the IRB. Should you require an approval letter on letterhead, please let me know.

On behalf of the IRB, I wish you success in your research.

APPENDIX J: LIBERTY UNIVERSITY'S IRB APPROVAL

The screenshot displays the Cayuse Human Ethics web application. At the top left is the logo for Cayuse Human Ethics. The top right shows a notification bell with a red '5' and a user profile for Amanda Hart. Below the header is a navigation menu with 'Dashboard', 'Studies', 'Submissions', and 'Tasks'. The main content area shows the details for IRB-FY22-23-538, titled 'THE EFFECT OF ADDING STUDENTS TO THE SCHOOL-PARENT COMMUNICATION ABOUT ATTENDANCE AT SCHOOL EVENTS'. There are 'PDF' and 'Delete' buttons. A table of metadata is provided below:

Approval Date: 01-26-2023	Expiration Date: N/A	Organization: Graduate Education	Active Submissions: N/A
Admin Check-In Date: N/A	Closed Date: N/A	Current Policy: Post-2018 Rule	Sponsors: N/A

APPENDIX K: DESIGNATION OF READING AND MATH COORDINATORS

Ladies –

Please work with Amanda Hart to create a Reading and Math Parent Event. This is part of her dissertation study for her doctorate. If you have any questions, please let me know.

|

APPENDIX L: READING AND MATH ONLINE ARTICLES

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APPENDIX M: PARENT INVOLVEMENT VIDEO SCRIPT APPROVAL

Reading Video Script

Amanda Hart <hart_a@[redacted].edu>

Mon 2/14/2022 6:10 PM

To: Bd [redacted].edu>

Please sign in with your @ [redacted] account and read though the Reading Video Script: <https://docs.google.com/document/d/1GKswRW0mfz6Q-bww4qGogmifv->

[redacted]

Make any comments or note changes you'd like to see.

Amanda S. Hart, M.Ed.

Re: Reading Video Script

[redacted]

Both math and reading videos are approved! Best of luck on your research.

[redacted], Superintendent

APPENDIX N: APPROVED DIGITAL PARENT INVOLVEMENT FLYER

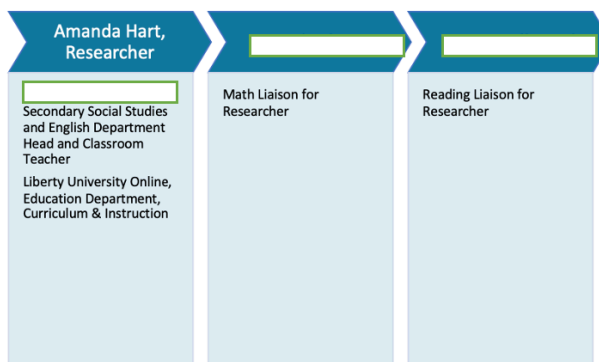
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APPENDIX O: TEACHER WORKSHOP PRESENTATION

SCHOOL-PARENT-STUDENT
COMMUNICATION: CAN
ADDING STUDENTS TO
COMMUNICATION IMPROVE
PARENTAL ATTENDANCE AT
SCHOOL EVENTS?

Amanda S. Hart, M.Ed.
- a doctoral study

Introductions



Roles

- **RESEARCHER** – Design and implement the study
- **READING/MATH COORDINATORS** – Liaison between researcher and teachers
- **SUPERINTENDENT** – Approval of study
- **PRINCIPALS** – Support teachers through research implementation
- **TEACHERS** – Deliver information as requested to students in homeroom (elementary) and 1st period classes (secondary) for five consecutive days

Teacher Tasks

MONDAY – Have Math Digital Announcement uploaded in your LMS and accessible to students for the next five days. Show the Math Digital Announcement on your teacher screen and discuss the Math parent event with students by reading the script. Encourage students to talk to their parents about attending the event.



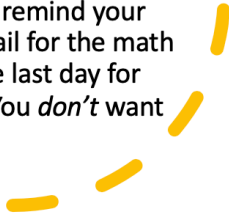
TUESDAY thru THURSDAY - Show the Math Digital Announcement on your teacher screen and discuss the Math parent event with students by reading the script. Encourage students to talk to their parents about attending the event.



FRIDAY - Show the Math Digital Announcement on your teacher screen and discuss the Math parent event with students by reading the script. Encourage students to talk to their parents about attending the event. Emphasize that this is the last day for their parents to access the event, so time is of the essence.

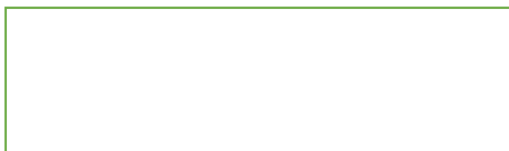


Teacher Script –
Digital
Announcement
displayed on
Board

- **Teacher (Monday through Thursday):** Good morning! This week is an exciting week for your parents because the school is having a special event where they will learn about how to help you with math. Your parents are given access to the information through their email accounts, so make sure you go home and remind your parents that they need to check their email for the math parent event. You *don't* want them to miss out.
 - **Teacher (Friday):** Good morning! Today is the last day for your parents to access a special event where they will learn about how to help you with math. Your parents were given access to the information through their email accounts, so make sure you go home and remind your parents that they need to check their email for the math parent event. Remember that today's the last day for your parents to access the information! You *don't* want them to miss out.
- 

Q & A:

-
- Group discussion
 - If you have questions, please feel free to email the researcher or liaison for more information.



APPENDIX P: PARENT E-MAIL TO PARTICIPATE IN EVENT

Parents –

We are excited to have you and your students join us at the for another year of learning and adventure. Parent involvement is very important to us, and to help you understand how to help and support your student at home with reading and math, please click on the following links, fill out the surveys, and then watch a quick video on your role as a parent of a learner.

- [Reading Survey & Video Link](#)
- [Math Survey & Video Link](#)

We are looking forward to working with you and supporting you through another year of learning.