Parental Involvement in the COVID Era: An Examination of Motivators and Barriers in Three Rural Elementary Schools

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Abstract

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Parental Involvement in the COVID Era: An Examination of Motivators and Barriers in Three Rural Elementary Schools

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Grounded in the Hoover-Dempsey and Sandler Model of the parent involvement process, this study was an examination of how parental self-efficacy, parental role construction activity beliefs, and parental perceptions of general invitations from the school were related to home-based parental involvement in school activities during a long-term educational disruption (COVID-19 pandemic). Also examined was whether home-based parental involvement in school activities differed based upon various family background characteristics, including annual household income, parental employment schedules, family structure, and parent educational background. Analyses of survey responses from 86 parents of K–5 students enrolled in three predominantly White rural public-school districts in Southern Illinois showed that parental self-efficacy and parental role construction levels were positive and correlated with perceived levels of home-based parental involvement. No statistically significant differences emerged in home-based parental involvement levels and among income, family structure, and educational background groups. Thematic coding of open-ended responses regarding the impact of parental employment schedules on parental involvement indicated significant challenges and barriers to parental involvement for single parents and essential worker parents during the pandemic. The discussion of this study's results is in terms of previous research on parental involvement and school policy and practice.

Dedication

This dissertation is dedicated to my son, Lane, and to my late father, HAS Sutton.

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I would like to acknowledge and offer my most sincere thanks to my committee chair, Dr. Bonnie Beach. Her guidance and mentorship carried me through the peaks and valleys of my research and writing processes. I would also like to thank my committee members, Drs. Kelly Sparks and Paul Theobald, for your wonderful advice, thought-provoking conversations, and gracious encouragement.

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Finally, and most importantly, thank you to my Creator. Through Him all things are possible.

Chapter 1: Problem of Practice

In the United States, more than nine million children—19% of all enrolled students—attend rural schools (Showalther et al., 2019). Like their urban counterparts, many rural families tend to have low parental involvement due to socioeconomic and cultural factors (Green et al., 2007; Hill & Taylor, 2004; Hoover-Dempsey & Sandler, 1995, 1997; Hoover-Dempsey, et al., 2005; Walker et al., 2005). In the rural setting, socioeconomic life-context variables could amplify cooccurring challenges and even lessen parental involvement (Hill & Taylor, 2004). The co-occurring challenges include geographic isolation (Snyder & McLaughlin, 2004); inflexible and rigorous work schedules (Brock & Edmunds, 2010; Finn, 1998; Weiss et al., 2003; Yoder & Lopez, 2013); a lack of access to quality mental and physical health resources (Centers for Disease Control and Prevention [CDC], 2017; Henley et al., 2017; Meit et al., 2014); an increased prevalence of single-parent households (Brody et al., 1999; Epstein, 1990; Kohl et al., 2000; Lareau, 1987; Zill, 1997); and systemic, low levels of educational achievement (Mokrova et al., 2017). COVID-19 onset, mitigation guidelines, and mandates have further contributed to the everyday barriers to parental involvement in rural districts.

The COVID-19 pandemic, which began in early 2020, caused drastic changes in the engagement of rural schools and families. Widespread broadband internet connectivity issues resulted in a hasty and arduous transition from traditional classroom-based instruction to remote learning for most rural schools and students. Some students had little to no school-based instructional stability for weeks due to a lack of school- and home-based infrastructure and processes needed to quickly transition to the virtual space for teacher-led student instruction. The pandemic initially caused a reversal of roles for parents and teachers, as parents found themselves thrust into the primary educator role. The role reversal caused substantial strain for families, especially those performing “essential” functions in the workforce during the pandemic. During this phenomenon, many rural parents had to reevaluate their

roles in their children's education and examine the abilities and resources (e.g., time and energy) they needed to act effectively in these new roles while navigating a barrage of other social, economic, workplace, and health care challenges caused by the COVID-19 pandemic. In many cases, students went without formal education altogether during the pandemic's early phases.

As the nation focused on "flattening the curve" and schools focused on providing instructional continuity for their students in the virtual space, parental involvement—like so many other aspects of education—was set aside. School reopening plans required extensive alterations to nearly every aspect of the rural educational landscape to address the spread of the virus, such as socially distanced classroom configurations, campus and bus mask mandates, the prohibition of visitors at schools, intermittent student and staff quarantines for illness and coronavirus exposure, and the implementation of remote learning days. Although many rural schools reopened their doors to students and personnel in Fall 2020, the extensive restrictions and guidelines for safe operations severely limited the engagement between families and schools. Intermittent periods of remote instruction continued throughout the 2020–2021 academic year.

Problem Statement

Decades of educational research have suggested that increased parental involvement results in positive academic, socioemotional, and behavioral outcomes for all students (Jeynes, 2003, 2005a, 2007, 2012, 2017; McNeal, 2014; Shen et al., 2014; Shumow & Miller, 2001). Therefore, districts and schools must encourage and cultivate effective parental involvement practices even during times of long-term instructional disruptions. Recent research has suggested that parents play a greater role in students' learning outcomes than the school and community (Ma et al., 2016). Furthermore, there are multiple ways for schools to positively influence parental involvement (Epstein, 2007, 2019a; Epstein et al., 2011;

Henderson et al., 2007; McNeal, 2014; Simon, 2019), even amid disruptions to the traditional school model such as those caused by the pandemic.

Researchers and educational leaders should use the data emerging from the pandemic to inform the design and implementation of strategies for encouraging and supporting parental involvement during long-term educational disruptions. Specifically, these plans must include strategies for supporting and developing positive parental role construction activity beliefs and self-efficacy so parents can help their children succeed in school. Furthermore, school leaders should also identify strategies for maintaining an overtly welcoming environment that reflects the importance and usefulness of all parents' involvement in student learning and development at school and in the home (Epstein, 2019b; Sheldon, 2019; Walker et al., 2005). Beginning this process in rural school districts requires examining the relationships between perceived parental involvement in home-based activities and the three school-influenced parental motivators for involvement: parental role construction activity beliefs, parental self-efficacy, and parental perceptions of general invitations from the school. Additionally, a need exists to examine and understand the parental motivators in the rural setting during a long-term educational disruption (i.e., the COVID-19 pandemic).

Parental involvement traditionally occurs in two spaces: at school and at home. Covid-led restrictions for school-based parental involvement began in March 2020 and continued throughout the 2020–2021 academic year. Because parents who wanted to become or remain involved could no longer participate at school, home-based activities were their only means to engage in their children's education. Beginning in Fall 2020, families also experienced alterations to the traditional academic calendar as school districts built in remote learning days and weeks to proactively combat the dangers of potential influenza and COVID-19 community spread in cold weather. Most rural school districts extended the winter break or bookended it with weeks of remote instruction. Without qualified

childcare during the school day and sufficient broadband connectivity to support remote learning, many rural families felt heightened frustration similar to the early phases of the pandemic when schools closed and education halted altogether.

During the 2020–2021 academic year, rural parents frequently reflected on and revised their roles, responsibilities, and abilities to make positive and effective contributions to their children's education. At the same time, rural schools and staff have struggled to create welcoming and collaborative school environments and maintain bidirectional communication with parents about vital school and student-related information when parents cannot be physically present at school. Each parental involvement factor contributes to increased engagement and, therefore, more positive student outcomes. Undoubtedly, the varying role construction activity beliefs and parental self-efficacy, coupled with rural schools' challenges at to foster meaningful parental engagement during the pandemic, will have lasting impacts on overall student success.

Purpose Statement

The purpose of this study was to examine the relationship between parental self-efficacy, parental role construction activity beliefs, and parental perceptions of general invitations and home-based parental involvement with school activities in three rural elementary schools during a long-term educational disruption (the COVID-19 pandemic). Furthermore, this study was a means of examining whether home-based parental involvement in school activities differs based on various family background characteristics. The mixed methods approach was appropriate to address four research questions. Data collection was from survey research using Walker et al.'s (2005) scales to measure the school-influenced motivators of parental involvement and perceptions of parental involvement in home-based school activities. The study included one qualitative question to address the influence of parental employment schedules on perceived parental involvement in home-based school activities during the

COVID-19 pandemic. The research questions focused on the parents of children attending three rural elementary school districts during the first full academic year (2020–2021) after the onset of the COVID-19 pandemic.

Research Questions

1) What is the relationship between parental self-efficacy and home-based parental involvement in school activities?
2) What is the relationship between parental role construction activity beliefs and home-based parental involvement in school activities?
3) What is the relationship between parental perceptions of general invitations for involvement from the school and home-based parental involvement in school activities?
4) How does home-based parental involvement in school activities differ based upon family characteristics?
    a. How does parental involvement in home-based school activities differ based upon annual household income?
    b. How do parental employment schedules influence parental involvement in home-based school activities?
    c. How does parental involvement in home-based school activities differ based upon family structure?
    d. How does parental involvement in home-based school activities differ based upon parent educational background?

Definition of Terms

General invitations for involvement from the school: Genuine messaging from the school that enables parents to feel welcomed and that they play a vital role in their children's success (Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2005).

Parental involvement in home-based activities: Parental or family member interaction, supervision, and engagement with a child's school activities at home (Walker et al., 2005).

Parental self-efficacy: Parents' belief in their ability to positively influence their children's education (Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2005).

Parental role construction: Motivator of parental involvement indicated by parents' beliefs about how they should get involved in their children's education, as well as parents' valence toward school based on their own childhood experiences with school (Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2005).

Parental role construction activity beliefs: Dimension of parental role construction consisting of parents' beliefs regarding their responsibilities to become actively involved in their children's education (Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2005).

Assumptions

Rural school district superintendents remain dedicated to the success of their schools even during long-term educational disruptions. Therefore, superintendents could use the results of this study to inform policymaking decisions. An assumption of the study was that superintendents in the targeted school districts cooperated with the dissemination of the survey to the families in the targeted schools.

The participating parents in this study received assurance that their survey responses would remain confidential. An assumption of the study was that the parents truthfully reported their

backgrounds and perceptions on the survey. The authors of the survey used in this study validated and found it reliable. Therefore, an assumption was that the survey was not a biased or prejudiced tool.

Limitations

This study provided several suggestions for policymakers and educational leaders on fostering the school-influenced motivators of parental involvement during long-term disruptions. However, this study does have limitations, one being the potential for survey bias. The survey focused on parental involvement; therefore, those who chose to complete the survey might have already had greater parental involvement than those who did not respond. Second, parental perceptions consisted of the parents' self-reported beliefs of their participation in home-based parental involvement activities. This study's data did not reflect actual tabulated amounts of participation or involvement in activities; therefore, the study was not a means of measuring involvement. Third, the study focused on the construct of parental involvement during a long-term educational disruption (the COVID-19 pandemic). Thus, the conclusions and implications might not be generalizable to the traditional (nondisrupted) educational setting. Finally, the parents living within the geographic footprint of the targeted area experience life challenges unique to their specific rural setting. Each of the targeted districts also had unique approaches to addressing the effects of the pandemic on student learning. Therefore, this study did not produce findings generalizable to other rural (and nonrural) school districts or other grade levels.

Delimitations

The goal of this study was to inform the design and implementation of strategies for encouraging and supporting rural parental involvement, particularly during long-term educational disruptions. The survey instrument used did not include all the motivators of parental involvement of the Hoover-Dempsey and Sandler (1995, 1997; Walker et al., 2005) model of the parental involvement process. The survey used in this study included only the social constructs schools can influence (i.e., role

construction activity beliefs, parental self-efficacy, and perceptions of general invitations for involvement from the school). In consideration of the respondents' time, the survey included only the sociodemographic indicators that related to the study's research questions or provided the data necessary for descriptive reporting.

The survey dissemination for this study occurred over a short time (3 weeks). Additionally, parental involvement is a dynamic construct, especially during the midst of educational disruption. Therefore, the data collected were a snapshot in time and not static indicators of long-standing parental perceptions.

Chapter 2: A Review of Relevant Literature

History of Parental Involvement

U.S. industrialization and the expansion of public education occurred in tandem (Carl, 2009; Hiatt-Michael, 1994; Williams, 2009). Until this time, children attended community schools and parents controlled all aspects of their education on a local level (Bailyn, 1962; Cremin, 1972). The onset of the First Industrial Revolution in the late 18th century transformed the core mission and principles of education in the United States. The transformation indicated that a functioning democratic society required citizens equipped with basic skills, such as reading and writing (Adams, 1875; Founders Online, n.d.; Theobald, 2009). The creation of "common schools" overseen by local school boards occurred, and family engagement with schools disintegrated due to the bureaucratization of U.S. education (Cremin, 1972; Rice, 1893). As a result, parental involvement in education drastically declined until the turn of the 20th century, when researchers began investigating the field in earnest.

Positive movement for parents seeking larger roles in their children's educations due to the establishment of research-based study centers focused on child development, the expansion of parent-teacher organizations, and the creation of parent education programs (Bridgman, 1930; Burgard, 1948; Gordon & Browne, 2008; Hoke, 1968). Although the focus shifted toward the importance of parental involvement in education, sociopolitical factors affected the time and energy parents could invest in their children's education. Fathers left to fight in wars, women entered the workforce in record numbers, and divorce rates increased (Burgess, 1942; Day, 1964; Goldstein, 1999; Taft, 1943; Waller, 1943). The changing structure of the U.S. family led to national conversations about the government's role in education.

Legal Mandates

The response to the perceived plunge in parental guidance and its resulting generation of "undisciplined" children occurred in the 1980s, when U.S. government officials set a course for greater institutional control by preparing all students to become effective workers in a global economy (Hunt & Staton, 1996; National Commission on Excellence in Education, 1983). Furthermore, lawmakers enacted federal policies during the civil rights movements of the 1960s and 1970s to reintroduce parents into their children's education (Education for All Handicapped Children Act, 1975; Lieberman, 1966; Office of Federal, State, and Special Projects, 1971). On the national stage, scholars and policymakers closely examined U.S. education, and the topic remained at the political forefront in the latter half of the 20th century. The intense government focus on education, coupled with the public's emphatic call for equal rights for all, produced a new era of educational research. Parents' role in education was a research domain that received increased attention due to a critical report by the National Commission on Excellence in Education in 1983.

Commissioned by President Ronald Reagan, the landmark—and highly controversial—report entitled *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983) showed the inferiority of U.S. schools compared to other advanced nations and resulted in an age of intense government scrutiny of U.S. education (Bell, 1993; Hunt & Staton, 1996; Kamenetz, 2018). The extremely critical report presented a warning of "a rising tide of mediocrity" in public education. According to the report, "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war" (National Commission on Excellence in Education, 1983, p. 1). Therefore, the report led to a national outcry for the rehabilitation of the U.S. educational model (Bell, 1993; Mehta, 2015). Although experts have debunked the findings of the 40-year-old report (Guthrie & Springer, 2004), many modern

American educational reform actions date back to *A Nation at Risk* (National Commission on Excellence in Education, 1983).

The U.S. Constitution does not include language regarding public education; however, the federal government controls many aspects of public education via spending clauses and policy and practice mandates. Beginning with the Elementary and Secondary Education Act (ESEA) in 1965, the federal government implemented a federal policy regarding education and sought to ensure equal opportunities for all students via funding allocations to schools. Lawmakers have since updated and reauthorized the act several times, each with more specific language regarding guidelines and practices for parental and family engagement.

The ESEA reauthorization, The No Child Left Behind Act of 2001 (NCLB), resulted in sweeping changes to schools' engagement with parents. NCLB mirrored the recommendations of *A Nation at Risk* by indicating the need to strengthen teacher preparation programs, bolster academic programs, implement sophisticated school management procedures, and focus on standardized tests (Jones, 2009). Regarding parental involvement, the NCLB required the appointment of state agencies for holding school districts accountable to recruit teachers highly qualified and capable of effectively communicating with parents (USCA § 1114(b)(1)(c); USCA § 1115(c)(1)(e)). Furthermore, schools had to develop and communicate parental involvement policies so parents could understand state academic standards and train parents on how to help their children meet academic expectations (20 USCA § 6318). Schools that did not follow the accountability requirements did not receive Title I federal funding. Some researchers have indicated that, in their efforts to reform education, the leaders of vested entities concentrated too much on school-related variables and too little on developing and integrating equitable policies for reinforcing parental involvement in education among families of nondominant educational, linguistic, cultural, and ethnical backgrounds (Epstein, 2005; Mannan & Blackwell, 1992).

Therefore, independent and government-led research began to focus on the external factors impacting academic achievement, such as the relationship between families and schools. Subsequent policies reflected this shift.

Presently, the central law for U.S. public schools is the Every Student Succeeds Act of 2015 (ESSA), which is also a reauthorization of ESEA. ESSA reflects the nation's renewed commitment to the academic preparation of all students, particularly those from historically underserved populations. NCLB and ESSA are identical acts with the exception of changes that provide states with the autonomy to select academic and nonacademic accountability indicators and school performance goals. Like NCLB, ESSA requires that schools receiving Title I funds create and adhere to district-wide family engagement policies. Furthermore, schools must dedicate at least 1% of allocated Title I funds to implement strategies for strengthening family-school relationships, such as family engagement-centered professional development, home-based programs, information dissemination, and community collaboration (Henderson, 2016). Interestingly, however, ESSA does not include the term "parental involvement" but "parent and family engagement," which reflects the government's official shift in the school-parent relationship paradigm. According to the ESSA, parental roles in education are meaningful and crucial components of overall student success. Therefore, the ESSA includes mandates for schools and staff to nurture strong, consistent parental involvement through partnership models.

The Imperative for Research in Parent Involvement in Schools

Since the publication of A *Nation at Risk* (National Commission on Excellence in Education, 1983), countless researchers have spent their careers searching for mechanisms to improve and evaluate academic performance with empirical evidence, producing a diverse and vast body of literature. One persistent theme of the extant literature is that students achieve greater academic success when their parents get involved in their learning and engage with their schools (Fehrmann et al.,

1987; Sénéchal & Young, 2008; Stevenson & Baker, 1987; Useem, 1992). Before educational researchers could scientifically establish causal relationships, they sought to find valid and reliable ways to study the direct, positive correlation between parental involvement and academic success. Much of this scientific research was the result of the NCLB (2001) and other federal legislation for directing federal dollars toward research-based programs and practices for increasing academic achievement.

At the time of the NCLB, scholars believed parental involvement to be a key driver for student success. Moreover, NCLB focused on parental involvement, as it required continuous engagement between families and schools via bidirectional communication regarding academic progress and other school issues. Fan and Chen (2001) sought empirical evidence of the positive relationship between parental involvement and student academic achievement by performing a quantitative synthesis of the literature. The researchers focused on experimental studies on the bivariate relationship between parental involvement and student academic achievement. Fan and Chen found only 25 studies that met their inclusion criteria and contained sufficient information for calculating Pearson correlation coefficients between parental involvement and academic achievement outcome variables. In their literature review, Fan and Chen found broad inconsistencies in how their predecessors had defined parental involvement. As a result, the authors formulated several dimensions for the categorical assignment of the parental involvement typology: parent-child communication, home supervision, parental educational aspirations/expectations for the child, and parental school contact and participation.

Fan and Chen (2001) found a strong positive relationship between parental aspirations/ expectations and academic achievement. Although weaker than the relationship between parental aspirations/expectations and student academic achievement, parental supervision of children at home through homework completion and a good home-learning environment strongly correlated with student

achievement. The empirical study of the meta-analysis enabled those in the educational research community to begin to grasp the legitimate correlation between parental involvement and academic achievement. Additionally, the increasing parental involvement research continued to indicate the need for rigorous research standards.

Mattingly et al. (2002) discovered flaws in the design, methodology, and analysis of parental involvement programs in an evaluation of 41 K–12 parental involvement programs. Despite the popular opinion in the educational community of the direct and strong connection between parental involvement and student success, Mattingly et al. found no conclusive empirical support to substantiate these claims. Instead, the authors implored future researchers to ensure validity, use control groups, and remove indicator subjectivity before affirming the final causal relationships between parental involvement and academic success. Instead of concluding that no cause-effect relationship existed between the two factors, Mattingly et al. called for more rigorous research standards. Additional meta-analytic research has also indicated the lack of rigor in the field of parental involvement.

In a study on the connection between student achievement and parental involvement, Fishel and Ramirez (2005) critically evaluated the research design, methodological quality, and effectiveness of school-initiated programs for improving student achievement and behavior. The authors reviewed 24 intervention programs for parental involvement, most of which were parent-implemented, home-based tutoring interventions for elementary-aged academic deficiencies. Like Mattingly et al. (2002), Fishel and Ramirez found an inconclusive correlation between broadly defined parental involvement and student success. Fishel and Ramirez discovered serious weaknesses in the research designs, execution, analyses, and reporting of the studies they reviewed. Despite these findings, several methodologically sound studies showed promising evidence that more narrowly defined forms of parental engagement are means of improving student academic performance.

As scholars began conducting more rigorous research on parental involvement in the first decade of the 21st century, they found more convincing evidence of the causal relationship between parental involvement and academic achievement. Wilder (2014) conducted a qualitative synthesis of meta-analyses of the impact of parental involvement on academic achievement. The purpose of the meta-synthesis was to aggregate the results of the existing meta-analyses and identify generalizations of the relationship between the two constructs. Wilder sought to determine if different operational definitions of parental involvement contributed to the inconsistencies of the previous meta-analyses. In a review of peer-reviewed meta-analyses published between 2001 and 2012, Wilder confirmed that regardless of its definition, parental involvement has a significant role in positive outcomes and student achievement. Wilder found the effect generalizable across all grades and ethnicities.

The increasing literature on the effects of parental involvement on student achievement and social growth has also shown the effects of the construct on various groups. Parental involvement has benefits for students, schools, and communities. Numerous researchers have since applied the extant literature to school reform strategies, federal and state policies, and community-building initiatives.

Benefits for Students

The relationship between parental involvement and student academic success has been a topic of many educational studies throughout modern history (Catsambis, 2001; Clark, 1983; Dornbusch & Ritter, 1988; Hoover-Dempsey, Ice, & Whitaker, 2009). At all grade levels, children whose parents get involved at school and encourage learning within the home have better educational outcomes (Becker & Epstein, 1982; Dauber & Epstein, 1989; Frijters et al., 2000), higher overall grade point averages (Gutman & Midgley, 2000), and greater achievement in reading, writing, and mathematics (Izzo et al., 1999; Sénéchal & LeFevre, 2002). Moreover, since the passage of NCLB (2001) and the subsequent growing interest in the construct of parental involvement, several meta-analyses of empirical studies

have shown that parental involvement, in varying forms, has a meaningful effect on academic achievement and test scores (Fan & Chen, 2001; Fan & Williams, 2010; Hill & Tyson, 2009; Jeynes, 2003, 2007, 2012). For example, in a meta-analysis of 28 studies on the relationships between parental involvement and student success and discipline, Jeynes (2017) found that academic success was an outcome significantly linked to parental involvement and to student behavior outcomes among Latino students. Twenty-first century research has shown a strong correlation between parental involvement and student academic achievement. However, some researchers have asserted that the benefits of parental involvement also have an indirect effect on student achievement.

Parental involvement has a positive impact on student academic achievement; however, involvement also provides students with social and behavioral benefits, such as better discipline, increased enrollment in advanced-level courses, improved social skills, academic self-esteem, improved attendance, and higher graduation rates (Domina, 2005; Epstein, 1995; Henderson & Mapp, 2002; Mac Iver et al., 2015; McLeod & Kaiser, 2016; Topor et al., 2010; Xu et al., 2010). Parental involvement has generalizable benefits regardless of ethnicity, race, grade, socioeconomic status, and special education designation (Altschul, 2011; Catsambis, 1998; Domina, 2005; Pena, 2000; Sanders & Epstein, 2000; Scribner et al., 1999; Zhang et al., 2011). Bryan and Henry (2008) found that disciplinary referrals decreased and student attendance improved among all students of color when the school leaders of a Title I elementary school partnered with families to design and implement family-centered programming that linked families with community resources (Bryan & Henry, 2008).

Parental involvement produces positive student social and behavioral outcomes, including student attendance at schools with high truancy rates. Several studies have focused on the parental characteristics and behaviors that correlate with increased student attendance (Astone & McLanahan, 1991; Duckworth & DeJung, 1989; Murray et al., 2020). Certain parental characteristics tend to correlate

with nontruant students, including parental oversight, parent-teacher organization involvement, and at-home discussions about school activities. The evidence of the positive correlation between parental involvement and increased student achievement has resulted in sweeping and successful school-wide family engagement initiatives for improving attendance rates.

Some school-driven practices for improving attendance are more effective than others. Two-way communication between the school and home about attendance policies and issues, parent educational programming, and strong after-school programs have the most impact on student truancy (Helm & Burket, 1989; Sheldon & Epstein, 2004; Sheldon & Jung, 2015). Each strategy is a means of strengthening the relationship between home and school. Sheldon (2007) measured the effects of a program for improving student attendance. The author analyzed the effectiveness of Ohio elementary schools whose families received school-wide partnership intervention programming. Sheldon found statistically significant gains (0.5%) in attendance rates over 1 year. In contrast, the schools that did not have intervention programming showed slight declines in student attendance. Therefore, Sheldon suggested that parental involvement was the driving force behind the substantial gains in student attendance. Truancy correlates with delinquency and risky behaviors in adolescence; therefore, efforts to improve student attendance via parental involvement strategies could be a way to address the problem (Hallfors et al., 2002; Wang et al., 2005).

Although research has indicated the benefits of intentional parental involvement strategies at schools, not all forms of parental involvement are predictors of student success (Domina, 2005; Fan & Chen, 2001; Izzo et al., 1999). Fan and Chen (2001) found that parental ambitions for a child's educational attainment overshadowed all other forms of parental involvement as a predictor of middle school growth and achievement, even when controlling for socioeconomic status among the sample. Fan and Chen also identified negative correlations between some forms of parental involvement and

student achievement (e.g., increased frequency of parent contact with the school), whereas other common forms of parental involvement were inconsistent predictors of student success (e.g., volunteering at the child's school). In another study, Domina (2005) found that after controlling for family background and previous academic achievement, some forms of at-home and on-site parental involvement had no effect on student achievement.

Benefits for Schools

Well-designed and well-implemented parental involvement programs in schools tend to benefit student achievement through several indirect channels, such as parenting education, consistent and purposeful communication with families, family volunteering at school and community events, encouragement of family involvement in learning at home, inclusive decision-making, and community collaboration (Epstein, 1995, 2019b). Parental perceptions about the quality of the school their children attend are based on the schools' parental involvement practices (Dauber & Epstein, 1993; Epstein, 1985, 1986). Dauber and Epstein (1993) analyzed survey data from 2,317 parents with children in urban schools to examine parents' attitudes and practices of involvement at their children's school. This study found that parental attitudes about the climate of their children's school correlated more with the school's focus on parental involvement than the type and intensity of the actual parental engagement. Therefore, actively working to engage parents, regardless of whether the parents choose to engage, produces a more positive school environment and better student achievement.

Parental engagement in the educational process has many short- and long-term benefits tied to student achievement (Epstein & Sheldon, 2016; McNeal, 2014; Sheldon, 2003, 2007). Building bridges between the home and family allows schools to lay the groundwork for the collective impact needed to move schools forward in their mission to provide an excellent education to all children (Jordan et al., 2000; Meidel & Reynold, 1999; Scribner et al., 1999). Furthermore, collaborative parental involvement

initiatives are effective in increasing educational equity for students from disadvantaged backgrounds. For example, in a post hoc, quasiexperimental study, Alameda-Lawson (2014) examined the collective parental engagement approach used to increase the social capital of low-income and minority parents by empowering them to form social networks with their counterparts. The author found that the children of parents who underwent school-sponsored collective parental engagement training experienced gains in mathematics and language. In contrast, children whose parents did not participate in the program saw no marked increases over the 3-year study. Therefore, strong networks of personal relationships impact student learning and can lay the foundation for building strong communities.

Benefits for Communities

The economic and social impacts of successful schools are linked to the vitality of the school's neighborhood (Henderson et al., 2007; Smalley & Reyes-Blanes, 2001; Spoth et al., 2004). The transformation of educational and community ecosystems can occur when families, teachers, businesses, and organizations intersect to contribute to student success and provide guidance (Boykin, 2000; Hiatt, 2001; Wang et al., 2005). For example, in 2006, the revitalization of George Washington Community High School in Downtown Indianapolis, Indiana, occurred through a collective educational effort with a local university and economic development organizations, neighborhood organizations, and parents. The careful, extensive collaboration plan resulted in the highest graduation rate of all Indianapolis public high schools within years of the initiative's start. Additionally, 100% of the school's graduates gained admittance to postsecondary institutions for 3 consecutive years, beginning in 2009. Minority students were the highest-achieving subset of students, and juvenile crime in the neighborhood decreased by 50% within the first 5 years (Officer et al., 2013). Thus, the connections between home and school are necessary for transformative family-school-community engagement.

Benefits for Parents

Understanding the benefits of parental involvement requires focusing on the motivational factors that enable highly engaged parents to maintain their involvement in their children's education. Other considerations include social capital gains experienced by families as they form networks with other members of the school community. Hoover-Dempsey and Sandler (1995, 1997) suggested that parents become involved in their children's education based on two factors or belief systems: parental role construction for involvement and parental self-efficacy.

Parental role construction affects whether parents choose to actively engage with their children's education. Hoover-Dempsey and Sandler (1995, 1997) defined parental role construction as parents' personal belief systems regarding their role in their children's educational attainment and the personal behaviors they exhibit in support of the educational process. Parents shape their self-defined role via external influences, such as social expectations. Parents who take ownership of their important role in education can positively alter their children's educational experiences and outcomes. Parents actively involved in their children's education communicate more with their children about school activities and performance, assist in learning exercises at home, have a more persistent presence at school, and exude more positive attitudes about the importance of educational attainment, all of which are successful strategies for increasing academic success (Epstein, 2019b). By relying on their historical contexts and outside societal expectations, parents construct their roles regarding the levels and ways in which they become involved in their children's education. However, self-efficacy is also important in their decision-making.

Self-efficacy is the core belief that one can act in ways that produce the desired outcomes in life (Bandura, 1986, 1989). Hoover-Dempsey and Sandler (1995, 1997) based some of their parental involvement theory on the parental motivators for involvement in Bandura's work on self-efficacy.

Parents who positively engage in school perceive they can accommodate the demands for their time and energy and have the knowledge and skills to effectively engage with their children in schoolwork. However, parental involvement tends to decrease as children progress through middle and high school and take on increasingly difficult subject matter, in part due to diminishing parental self-efficacy (Adams & Christenson, 1998; Chen & Stevenson, 1989; Drummond & Stipek, 2004). In a study on parental perceptions of homework among a group of fourth- to eighth-grade students with disabilities, Kay and colleagues (1994) found that students' parents felt increasingly apprehensive about assisting with homework as their children progressed into more difficult academic content.

Supportive school culture and purposeful communication with parents on the importance of their involvement and how they can help students meet their learning goals at home, regardless of their knowledge and skill base, are strategies for ameliorating some of the effects of low parental self-efficacy. Such strategies produce a cascade effect of gradually and passively increasing parents' perceptions of their ability to make a difference in their children's education. Ramirez (2004) found that parents at an urban middle school who participated in a series of parenting classes at the school gained more confidence in approaching the school and teachers with questions about their children's academic and social learning. Thus, parental attendance at school-sponsored parenting classes directly correlated with parental self-efficacy as the involved parents passively gained confidence in their abilities to lead their children's education from home. This process, in turn, resulted in increased family social capital, which is another benefit of increased parental involvement.

Parents who engage more frequently and confidently with members of the educational community increase their social capital. Coleman (1988) introduced the concept of social capital from studying the interplay of three social structure conditions on high school dropout rates: understanding obligations and expectations, recognizing information channels, and accepting social norms. Each social

structure condition of social capital had a considerable impact on the high school graduation rate of the subjects studied.

When parents get involved, they become more confident in their role in their children's education. Increased parental confidence and persistent engagement enable parents to understand their obligations and expectations related to their children's schooling. Such parents then become more fluent in making connections and communicating with their children's schools, and they internalize social norms relevant to the educational setting. Overall, involved parents reinforce or entirely redefine their social capital and intrinsic human value.

However, Lareau (1987) found that families with little or no social capital faced unseen challenges. Parents socioeconomically disadvantaged cannot extensively socialize with other parents or their children's schools and therefore cannot enjoy the benefits of cultural capital, which is a form of social capital. According to Lareau, these families typically do not have access to the regular, informal communication channels enjoyed by more financially secure families, which ultimately perpetuates unequal power differentials among nondominant and dominant groups. Although an unintentional phenomenon, schools must invest in community-based parental involvement initiatives to increase the social and cultural capital of all parents, especially those from characteristically at-risk segments of the population.

Some schools have transformed into full-service community schools to build better school-home connections. Along with increased student achievement, the families at such schools tend to have better access to coordinated health and social services, decreased levels of family stress, and increased engagement with their children's education (Adams, 2019; Sanders, 2001; Zetlin et al., 2001), outcomes relevant to schools and communities during the COVID-19 era. Schools with a preexisting family-school-

community partnership model could be better able more quickly address some of the burdens and hardships faced by families during the COVID-19 pandemic.

Parental Motivators for Involvement: The Hoover-Dempsey and Sandler Model

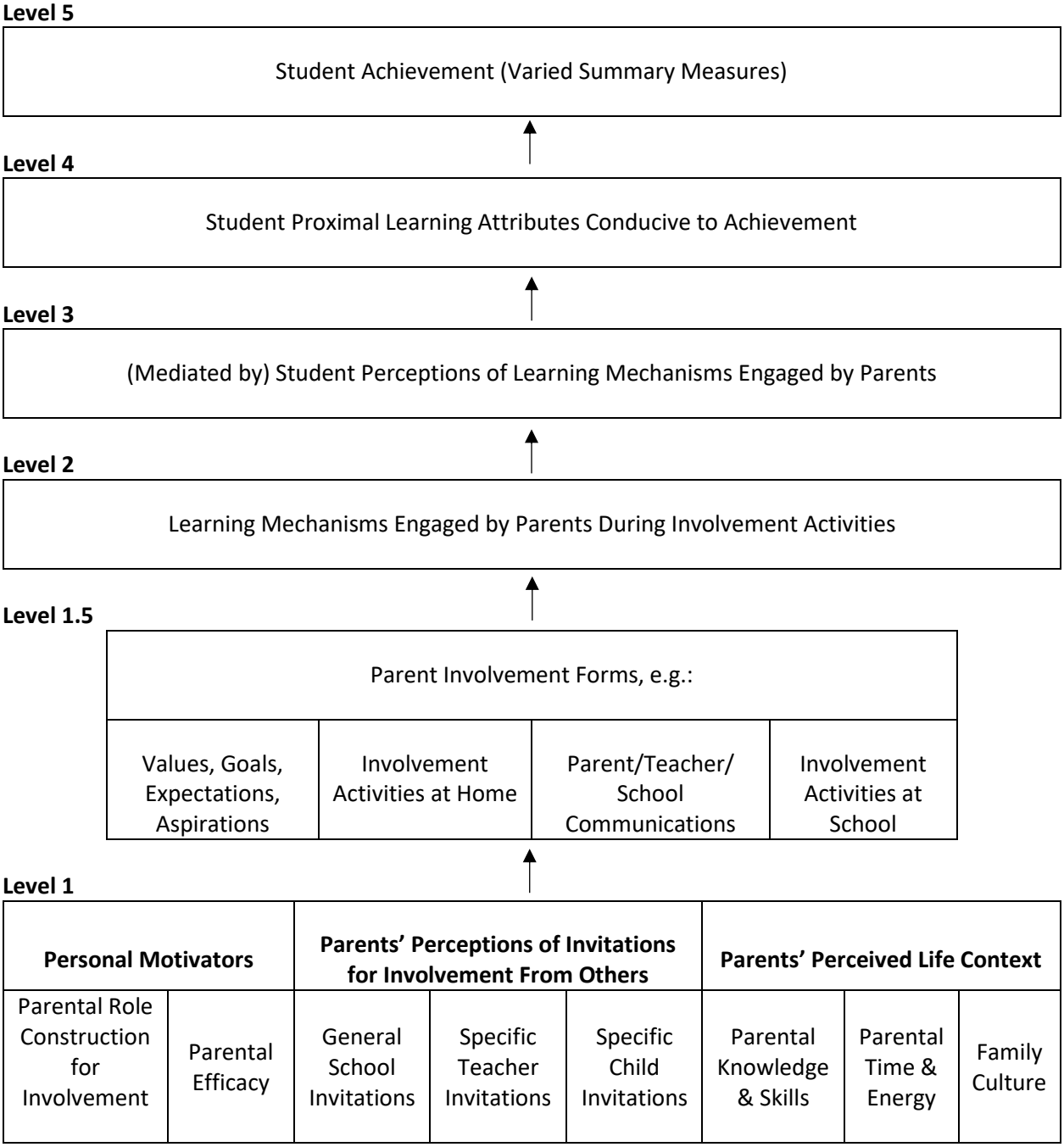
Many factors contribute to parents' decisions to become involved with their children's education. The Hoover-Dempsey and Sandler model (1995, 1997), which has undergone slight modifications since its origin, focuses on parental involvement from parents' perspectives (Walker et al., 2005; see Figure 1). Level 1 of the model shows the reasons parents choose to engage in their children's education (personal motivators, parental perceptions of contextual invitations to involvement, and life-context variables). Level 1.5 presents the ways in which parents may choose to engage. Level 2 shows the learning mechanisms parents may employ during involvement activities. The top three tiers (Levels 3–5) of the model show the influence on student outcomes of how parents initially become involved (Hoover-Dempsey et al., 2007; Hoover-Dempsey, Walker, et al., 2005; Hoover-Dempsey, Whitaker, & Ice, 2010; Walker et al., 2005). The Hoover-Dempsey and Sandler model (1995, 1997; Walker et al., 2005) enables school and district leaders to formulate well-designed plans for improving at-home and off-site parental involvement and enhancing student learning and development in a traditional, nonpandemic school setting. Scholars have not yet used the model to examine the construct of parental involvement during the pandemic.

The goal of this study was to inform future policymaking decisions on improving parental involvement during long-term educational disruptions. Therefore, the study focused on the school-influenced motivators of parental involvement, including two personal motivators (parental self-efficacy and parental role construction activity beliefs) and one contextual motivator (general invitations for involvement from the school). The Hoover-Dempsey and Sandler model (1995, 1997; Walker et al., 2005) includes additional life-context factors that could be powerful influencers of parental

involvement. School leaders and staff cannot completely eradicate the challenges to parental involvement rooted in life-context factors. However, understanding the relationships between life-context factors and levels of at-home parental involvement is an integral step in developing policies and strategies for mitigating their effects on parental involvement. The life context factors in this study were income level, education level, employment schedule, and family structure (Level 1), with involvement in activities at home (Level 1.5) examined in relation to the Level 1 variables.

Figure 1

Hoover-Dempsey and Sandler's Theoretical Model of the Parental Involvement Process



Note. Adapted from "Motivation and Commitment to Family-School Partnerships," by K. V. Hoover-Dempsey, M. C. Whitaker, and C. L. Ice, 2020. In *Handbook of School-Family Partnerships*, edited by S. L. Christenson and A. L. Reschly, p. 38. Routledge.

Parental Self-Efficacy

According to the Hoover-Dempsey and Sandler (1995, 1997; Walker et al., 2005) model, parental self-efficacy is a personal (psychological) motivator for parental involvement. Parental self-efficacy is parents' belief that they can be positive contributors to their children's education. Parents choose to engage in their children's educational processes based on their appraisal of their capability to meet their children's learning goals (Bandura et al., 1996). Strong self-efficacy results in positive decision-making to be active players in their children's education and the persistence necessary for successful outcomes. However, parents with weak self-efficacy experience the opposite effects (Hoover-Dempsey, Bassler, & Brissie, 1992; Hoover-Dempsey et al., 2005). Parents with weak self-efficacy tend to become deficit-focused, avoidant, and unmotivated in challenging situations (Bandura, 1989; Grusec, 1994; Hoover-Dempsey & Sandler, 1997).

Like role construction, self-efficacy is a social construct heavily influenced by the parents' experiences and persuasion (Bandura et al., 1996). Schools, social circles, and other important entities have a significant impact on parental self-efficacy. Therefore, schools should focus on increasing parental involvement through parental self-efficacy. Parental self-efficacy has been the subject of many studies over the years.

Modern scholars began investigating the relationships between parental involvement and parental efficacy in the latter part of the 20th century (Bandura et al., 1996; Eccles & Harold, 1996; Grolnick et al., 1997; Weiss et al., 2003). Parental self-efficacy correlates with increased parental involvement across many sociodemographic subgroups (Eccles & Harold, 1996; Hoover-Dempsey, Bassler, & Brissie, 1992; Sheldon, 2002; Shumow & Lomax, 2002). For example, Seefeldt et al. (1998) found that the self-efficacy of low-income parents of children in a Head Start program directly correlated with their parental involvement. In other words, parents' belief that they had the ability to

positively contribute to their children's education was a predictor of their high level of involvement, regardless of their low-income status. Along with parental self-efficacy, parents' beliefs about their responsibilities toward their children's education are also a key component of their decisions to act.

Parental Role Construction for Involvement

Parental role construction includes parents' sense of personal responsibility for their children's academic outcomes and their beliefs about the extent to which they should engage in their children's education (Hoover-Dempsey & Sandler, 1995, 1997). By participating in activities associated with high levels of parental role construction, parents show their children an investment in their academic progress and link education to their future. Parents engage with their children in different ways based on a wide spectrum of variables; however, even the most nuanced parental behaviors, such as asking the child about the school day and attending any school event, can have a positive effect on overall academic achievement.

Role construction is a concept rooted in sociological and psychological theory suggesting that individuals must understand their roles within a group for the group to function properly (Biddle, 1986; Hoover-Dempsey & Sandler, 1997). Role construction is a social construct; therefore, it undergoes continual and inherent reshaping due to life experiences with school-related social groups and other individuals. Accordingly, external, intentional efforts can have an effect on parents' beliefs about the part they play in their children's education (Chrispeels & Rivero, 2001; Chrispeels & González, 2004; Grolnick et al., 1997; Hoover-Dempsey & Sandler, 1997; Williams & Williams, 2021). Drummond and Stipek (2004) compared parental perceptions of the importance of helping with children's homework to whether the teacher had suggested that parents help with their children's homework. The authors found high parental ratings for the importance of involvement when teachers suggested that parents

assist their children with reading. The teacher influenced the parents to take a more engaged approach to their children's education and thus changed their pattern of involvement.

Like parental self-efficacy, role construction is a powerful motivator transcendent of cultural, ethnic, and socioeconomic bounds (Brody et al., 1999; Chrispeels & Rivero, 2001; Drummond & Stipek, 2004; Lavenda, 2011; Park & Holloway, 2018). Parenting is a phenomenon shaped by a multitude of backgrounds, values, stereotypes, and social contexts that presents differently across all classes, cultures, and ethnicities. Therefore, the depth and breadth of the roles parents choose to play also vary widely .

Minority students from socioeconomically disadvantaged populations tend to score lower on student progress assessments (National Center for Educational Statistics, n.d.-a.) and struggle to navigate the public school system (Altschul, 2011; Inger, 1992). Therefore, school staff and leaders have the responsibility to develop a diverse body of parental leadership within schools and implement systemic and effective intervention programs to elevate the voices of all parents (Hoover-Dempsey, Walker, et al., 2005). By doing so, school leaders and staff directly and indirectly cue other parents from nondominant populations to revise their beliefs about their role in their children's education (Auerbach, 2009; Chrispeels & González, 2004; Jasis & Ordoñez-Jasis, 2012; Shah, 2009; Scribner et al., 1999). Role construction and parent self-efficacy are strong factors in parents' decision to get involved in their children's education. However, feeling welcomed by the school community through active and passive invitations is also an important motivator, particularly for parents with weak self-efficacy or passive ideations of their own role construction.

General Invitations for Involvement From the School

Grounded in the socially constructed nature of role construction and parental self-efficacy, invitations, requests, and support from important others in the educational system are integral

components of parental involvement decision-making (Hoover-Dempsey & Sandler, 1995, 1997; Hoover-Dempsey, Walker, et al., 2005; Whitaker & Hoover-Dempsey, 2013; Walker et al., 2005). Parents who do not believe they are valuable contributors to their children's education might find such invitations especially potent influencers for involvement (Park & Holloway, 2013; Sheldon, 2003). Positive perceptions of the invitations received from important others in the school may be the most influential factor of parental involvement in some populations (Abel, 2012; Fishman & Nickerson, 2015; Reynolds et al., 2015). Each type of invitation, which has varying levels of authority and importance in the educational context, can have an influence on parents' perceptions of their roles in their children's education. Three interconnected social groups of students, teachers, and the school in general can provide the invitations. General invitations from the school are a measure of school climate or the perceived efforts to make parents feel valued and appreciated; therefore, they can be a powerful influence on parental involvement (Whitaker & Hoover-Dempsey, 2013) and result in academic gains in the elementary setting (Galindo & Sheldon, 2012). The variables measured to gauge school climate include feeling welcomed at the school, perceived interest and cooperation from teachers, timely and consistent communication regarding the child's progress and issues, and reverence for the parent's availability when scheduling parent activities (Walker et al., 2005).

Parent's Perceived Life Context Variables

A variety of life context variables that exist outside of the parameters of direct school influence also have an effect on families' decisions about educational engagement. At the onset of each instance of involvement, parents must weigh the communicated need for involvement against their personal beliefs and abilities and their available resources, such as knowledge, skills, time, and energy (Green et al., 2007; Hoover-Dempsey & Sandler, 1995, 1997; Hoover-Dempsey & Sandler et al., 2005). During nonpandemic times, some rural parents have shown uncertainty about how to participate in their

children's learning (Robinson, 2017; Robinson & Volpe, 2015). Parents with significant drains on any of their available resources are less likely to become involved in their children's education. Undoubtedly, the pandemic had many adverse effects on this relationship.

Perceived Knowledge and Skills

The Hoover-Dempsey and Sandler (1995, 1997) model suggests that parents often hesitate to take on parental involvement activities outside of the bounds of their knowledge and skillsets. For example, Hoover-Dempsey et al. (1995) found that parents who felt more adept with mathematics than other academic subjects were more inclined to assist with mathematics homework than homework for other subject matter. Similarly, parents with careers requiring frequent public speaking felt more comfortable agreeing to give presentations about their occupations to a class of students. Therefore, the perceived knowledge and skills of parents are factors closely tied to the construct of parental self-efficacy.

A decline in parental involvement with homework tends to occur as students progress to more difficult subject matter in school (Adams & Christenson, 1998; Chen & Stevenson, 1989; Drummond & Stipek, 2004). However, parents' perceived lack of knowledge and skills is not the only documented reason for this trend. For example, parents also begin to acknowledge their children's need for increased autonomy as they mature (Kay et al., 1994; Simon, 2004). Additionally, structural changes to the school setting and function could result in parents receiving fewer invitations for involvement as students progress through the educational system (Eccles et al., 1996; Izzo et al., 1999). Parents' perceptions of their knowledge and skills are just one of the life contexts by which parents judge their mental and physical abilities to contribute to their children's education.

Perceived Time and Energy

Alongside their perceived knowledge and skills, parents also make decisions about involvement based on their perceptions of the time and energy they can invest in engaging with the school (Hoover-Dempsey & Sandler, 1995, 1997, 2005; Lareau, 2003; Walker et al., 2005; Green et al., 2007). Inflexible or rigorous work schedules can present severe limitations to the academic help parents can offer their children (Brock & Edmunds, 2010; Finn, 1998; Weiss et al., 2003; Yoder & Lopez, 2013), particularly in low-income and single-parent households. For example, Heymann and Earle (2000) found the working conditions of 1,878 substantially employed (at least 20 hours per week) working mothers with at least one child received scores in the bottom quartile of the reading portions of the Peabody Individual Achievement Test. Of the mothers sampled, 37% of low-income mothers and 21% of nonimpoverished mothers did not have paid leave. Furthermore, before the pandemic, 63% of low-income families reported a lack of flexibility in their work schedules. Low-income families with children with low mathematics achievement who exhibited behavior problems also reported a lack of work schedule flexibility.

Many families of students in low-income, at-risk populations have indicated a desire to get more involved with their children's education; however, inflexible work schedules and child care constraints, compounded by the omnipresent struggle to balance the stressors of modern-day family dynamics, have presented increasingly complex difficulties to family engagement (Finders & Lewis, 1994; Hoover-Dempsey, Walker, et al., 2005; Norton & Nufeld, 2002). Undoubtedly, the COVID-19 pandemic had a compounding effect on many of the prepandemic challenges to parental involvement. However, the pandemic presented new challenges and opportunities for families as well.

Socioeconomic Status Considerations

Hoover-Dempsey, Walker, et al. (2005) extended the construct of parental involvement to include the socioeconomic family factors that have historically contributed to disparate parental involvement between affluent and low-income families (Auerbach, 2007; Hill & Taylor, 2004; Ingram et al., 2007; Ji & Doblinsky, 2009; Lareau, 1987.) Hoover-Dempsey, Walker, et al. posited that examining the lack of resources during poverty could enable researchers to understand the relationship between parental involvement and socioeconomic status. Some of the symptoms of poverty that affect parents' decisions to get involved with their children's education include less flexible and rigorous work schedules (Brock & Edmunds, 2010; Garcia Coll et al., 2002; Griffith, 1998; Hoover-Dempsey, Bassler, & Brissie, 1987; Weiss et al., 2003); physical and mental health issues (Hoover-Dempsey, Walker, et al., 2005); single-parent households (Eccles & Harold, 1996; Epstein, 1990; Lareau, 1987; Zill, 1997); a lack of transportation and childcare (Hill & Taylor, 2004); and a lack of the knowledge necessary to effectively assist children caused by the lower education levels of parents of low socioeconomic status (Finn, 1998; Horvat et al., 2003; Moll et al., 1992; Pena, 2000). Most researchers agree that high-income parents tend to be more active in traditional forms of parental involvement than their low-income counterparts; however, some have suggested that low-income parents have just as much involvement but in different ways.

Much of the controversy in the literature has stemmed from the narrow definition of parental involvement used by many researchers. Freeman (2010) found that families of low-socioeconomic status typically engaged with schools in informal ways not always captured and recognized when measuring parental involvement using traditional indicators. Freeman further cautioned that school leaders and staff risk disenfranchising at-risk families when they narrowly define parental involvement and do not include the more informal ways in which these families engage.

Historically, families of low-socioeconomic status have unique perceptions of their roles in their children's education, suffer from a greater subset of barriers to engagement, and exhibit low engagement in traditional involvement activities when compared to high-socioeconomic groups. Barriers (i.e., life-context variables) associated with poverty inherently indicate and present further complications to parental self-efficacy, parental involvement, and, in turn, overall parental involvement (Hoover-Dempsey, Walker, et al., 2005).

Research on the engagement patterns of low-income families has shown the promising outcomes of using relationship-building strategies and structured parental advocacy initiatives to positively influence parental role construction and self-efficacy (Bower & Griffin, 2011). Such strategies could be means of ameliorating some of the disadvantages caused by class-driven barriers. However, in many cases, other life-context variables also negatively contribute to parents' decisions regarding involvement.

Family Cultural Considerations

Socioeconomic life-context variables often exist within another context with an influence on how overall family dynamics relate to education: family culture (Hoover-Dempsey, Walker, et al., 2005). Individuals from ethnic and racial minorities have culturally rooted differences in how they engage in their children's education (Chen & Stevenson, 1989; Delgado-Gaitan, 2004; Garcia Coll et al., 2002). Scholars focused on Latino populations have indicated the struggles experienced by minorities in the United States, citing the misalignment of student expectations between home and school due to culturally engrained parental perceptions of their role in education, language barriers, and a lack of social capital necessary to be effectual change-makers within the school (Chrispeels & Rivero, 2001; Garcia Coll et al., 2002; Chrispeels & González, 2004; Pena, 2000; Reynolds et al., 2015). Additionally, families of nonmajority races and ethnicities in the United States not only suffer from culturally rooted

barriers to parental involvement but also experience the common barriers associated with low-socioeconomic status (Garcia Coll et al., 2002; Hill & Taylor, 2004; Hoover-Dempsey, Bassler, & Brissie, 1987; Griffith, 1998; Hoover-Dempsey, Walker, et al., 2005; Moll et al., 1992).

Therefore, scholars in the educational community have begun to further explore strategies for educating teachers about the influence of family culture on parental involvement and how to communicate with minority families effectively and routinely and create a trusting, respectful school climate to support the involvement of all parents (Epstein et al., 2019; Henderson et al., 2007; Hoover-Dempsey, Walker, et al., 2005; Hoover-Dempsey, Whitaker, & Ice, 2010; Mapp, 2003). Currently the most widely used framework for family-school-community engagement, the *overlapping spheres of influence model* (Epstein, 2019a, 2019b) includes strategies for mitigating the socioeconomic and cultural challenges parents face when deciding if and how to get involved in their children's education.

The Rural Setting

For most people, the term "rural" tends to include images of pastures with roaming farm animals, sleepy and small main street towns, and dirt roads. The definition of rural in the Merriam-Webster Dictionary (n.d.) also indicates a sense of pastoral quaintness: "of or relating to the country, country people or life, or agriculture." From a research perspective, scholars conducting rural-specific research have featured the contexts that exist only in the rural setting. However, of the existing definitions of "rural," none universally indicate, in totality, the unique context of the overall construct (Coburn et al., 2007; Coladarci, 2007; Howley et al., 2005). In a review of the literature on rural coding schemes, Howley et al. (2005) found that scholars typically utilized three major categories when defining spatial constructs for research purposes: (a) county-level systems; (b) subcounty systems; and (c) educational jurisdiction systems. Each category presents limitations and challenges. For example, county-level coding systems are means of grouping rural subjects into a metropolitan setting based on

the existence of one densely populated city within the boundary of the county. Subcounty systems consist of using tracts for geographical units to mitigate some of the issues of the county-level coding system; however, these systems can become unstable over time. Educational jurisdiction coding systems entail using geocoding information for more granular examinations of data at the school level; however, these systems could mask important cultural and linguistic characteristics of the sample population (Coady, 2019). Therefore, scholars must operationally define the rural construct to fit the context of their research to avert potential overgeneralizations due to population sample inconsistencies (Hawley et al., 2017).

Scholars in the rural education research community have widely used the educational jurisdiction coding systems proposed by the National Center for Educational Statistics (NCES; Berry, 2012; Demi et al., 2010; Tekniepe, 2015). In 2006, the NCES, in collaboration with the United States Census Bureau, presented an urban-centric local classification system for differentiating schools and districts in cities, suburbs, towns, and rural areas and extending the definitions of the four broad categories into subcategories (locales; see Table 1). Locales are components based on population density and proximity from an urbanized area. According to the urban-centric local classification system, rural is a “census-defined rural territory” (NCES, n.d.-b.) with the subcategories of fringe, distant, and remote. A predominant advantage of the urban-centric locale classification system is that, because of geocoding, it is a means of efficiently differentiating schools and school districts marginally outside of an urbanized area from those more geographically removed from urbanization (Hawley et al., 2017).

Table 1

Current Urban-Centric Local Code Names and Definitions

Locale Code	Definition
City, Large	Territory inside an urbanized area and inside a principal city with population of 250,000 or more
City, Midsize	Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000.
City, Small	Territory inside an urbanized area and inside a principal city with population less than 100,000.
Suburb, Large	Territory outside a principal city and inside an urbanized area with population of 250,000 or more.
Suburb, Midsize	Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.
Suburb, Small	Territory outside a principal city and inside an urbanized area with population less than 100,000.
Town, Fringe	Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area.
Town, Distant	Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.
Town, Remote	Territory inside an urban cluster that is more than 35 miles from an urbanized area.
Rural, Fringe	Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.
Rural, Distant	Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from
Rural, Remote	Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.

Note. From “Rural Education in America,” by National Center for Education Statistics (https://nces.ed.gov/surveys/ruraled/definitions.asp).

COVID-19 Impact on Education

The COVID-19 pandemic created a historic upheaval of education in the United States due to state-implemented emergency shutdowns of nearly all school buildings in late March 2020 (*Education Week*, 2020). At the end of the 2019–2020 academic year, school districts rushed to build frameworks to ensure students' educational continuity through distance learning for the remainder of the school year (Reimers & Schleicher, 2020). The instructional methodology varied substantially depending on the circumstances of each school system. Some schools transitioned to virtual instruction through patchworks of existing online learning platforms, some resorted to the distribution of take-home packets of schoolwork to replace face-to-face instruction, and others halted instruction altogether for the remainder of the school year.

Although there was no pharmaceutical intervention expected until late 2020 or early 2021, U.S. schools reopened in Fall 2020 due to growing sentiment that the importance of a fully functioning school consists of more than the learning time it provides (CDC, 2020). In other words, school is a component integral to not only the academic advancement of children but also the health and well-being of children and their families. Local school districts received some flexibility in the planning process for safely reopening schools based on local community transmission data and the ability to implement mitigation strategies (i.e., masking, physical distancing, handwashing and respiratory etiquette, facility sanitation, contact tracing, and isolation/quarantine) at each school (CDC, 2020). Although many school buildings remained closed during Fall 2020 and provided only remote instruction, many reopened schools provided in-person learning. School districts with open schools activated remote learning based on county metrics built into their reopening plans, and school closures only occurred when the county had COVID-19 community transmission metrics deemed unacceptable by state and county health departments. Students periodically and often repeatedly experienced

quarantine as schools worked to slow the spread of the virus among students and staff; however, the quarantines resulted in further interruption of school activities. The culmination of persistent, rapid changes to the structure of the learning environment affected students—especially disadvantaged students—in a multitude of ways that researchers have yet to quantify (Reimers & Schleicher, 2020).

Rural Life-Context Considerations for Parental Involvement During Long-Term Educational Disruptions

Young people began migrating from rural to urban areas during the last part of the 20th century, largely in response to the economic damage caused by the dissolution of small family farms, the outsourcing of U.S. manufacturing jobs, the collapse of the mining industry, and the lack of local educational and career opportunities in sparsely populated regions (Johnson & Winkler, 2015; McGranahan, 1994; Mokrova et al., 2017). The families who chose to stay in rural areas comprised a smaller population and generally had low educational attainment and diminished opportunities for high-paying jobs, both of which can cause a generational cycle of poverty. Low educational attainment leads to low-paying, inflexible jobs, which cause financial stress and personal time constraints at home and force struggling rural parents to disengage from their children's education; parental disengagement, in turn, results in overall negative student outcomes. Furthermore, like low-paying jobs and low educational attainment, single parenthood also directly correlates with poverty (Manning, 2015; McLanahan, 2009) and causes both obvious and nuanced challenges to parental involvement, reducing the likelihood of effective and consistent parental involvement at home and at school.

Poverty, single parenthood, and low educational attainment have been intertwined constructs and predictors of parental involvement for decades (Eccles & Harold, 1996; Epstein, 1990; Lareau, 1987; Zill, 1997). However, research on parental involvement began more than 4 decades ago, and scholars have not had the opportunity to examine these constructs during a long-term educational disruption. The COVID-19 pandemic has presented the research community with this opportunity.

Poverty

Although rural children are more likely than urban children to live in two-income households (O'Hare et al., 2009; Snyder & McLaughlin, 2004), families from rural areas are more susceptible to persistent, deeply rooted poverty, defined as meeting government-defined measures of poverty over three decades (McGranahan, 2015; Schaefer et al., 2016). The existing hardships faced by rural families increased in severity when, at the peak of the first wave of COVID-19 in March and April 2020, the national unemployment rate for nonmetro areas peaked at nearly 14%, a rate near that of the Great Depression of the 1930s (USDA, 2021a). Many employment disruptions resulted from nationwide shelter-in-place orders and severe government restrictions on nonessential activity. Local economies came to a standstill, and people lost their jobs. Many families, especially those earning low incomes, faced significant financial stressors until they gained access to federal COVID-19 relief aid. In other words, the COVID-19 pandemic contributed to already high systemic poverty rates in rural spaces.

Newly unemployed and underemployed rural families grappled simultaneously with preexisting and emerging COVID-19-related challenges, such as a lack of child care; the widespread threat of serious illness in rural areas due to health care access and high costs; poor or unaffordable internet connectivity for remote learning; and extreme social isolation. Together, these factors could have had a significant effect on the levels and types of engagement that parents could show in regard to their children's education. Little hope exists of completely eradicating the COVID-19 virus; therefore, a need exists to examine parental involvement during long-term educational disruptions through the lens of poverty to craft effective school policies and strategies for creating and maintaining effective family engagement. Otherwise, rural children could have even fewer chances of escaping poverty and achieving upward economic mobility (Lichter & Johnson, 2007). Like poverty, family structure could also pose barriers to the time, energy, and resources that parents can devote to their children's growth and development.

Family Structure

Family structure is a sociodemographic variable for the number of adult caregivers living with a child and is often a primary source of familial stress. In the United States, over 30% of children live in single-parent homes (U.S. Census Bureau, 2020) and therefore endure poverty and its co-occurring stressors more than children living in two-parent homes (Manning, 2015; McLanahan, 2009). In the beginning stages of the COVID-19 pandemic, single parents were more likely to suffer greater economic impacts of a paralyzed economy than their married counterparts. The nationwide Economic Impact Payments program (Internal Revenue Service, n.d.) diminished but did not eliminate individuals' financial stressors. Research has provided clear insight into the positive effects of parental involvement on student academic success; however, little literature has shown the effects of parental involvement on students of differing family structures (Cavanagh & Fomby, 2012; Fan & Chen, 2001; Jeynes, 2010; Martin, 2012; Thomson & McLanahan, 2012).

The limited evidence suggests that, like poverty, family structure can have a tremendous impact on how parents engage in their children's education and the time, energy, and resources that parents can devote to their children's growth and development (Brody et al., 1999; Epstein, 1990; Kohl et al., 2000; Lareau, 1987; Zill, 1997). Furthermore, employment trends in rural areas show that single parents, especially single mothers, have become less reliant on government welfare programs and chosen to enter the workforce. Therefore, working single parents could have even less perceived time and energy available to devote to involvement practices (Lichter & Jenson, 2001), which can have indirect consequences on academic success. Single and often low-income parents often want to engage with their children's schooling effectively; however, to do so, they must overcome other logistical challenges. Additionally, single, working, low-income parents in the rural setting must also overcome challenges

specific to their areas, such as access to reliable transportation and quality child care and financial stress (Bracy, 2001; Hill & Taylor, 2004).

Family structure has an effect on both active parental involvement in school-based and home-based activities; however, family structure could also influence how parents promote and support education. In an extensive study of national data, Jeynes (2005b) surmised that single-parent households provide less encouragement and guidance to children regarding academics. Additionally, the study did not align with some commonly held beliefs about the positive effects of various conventional forms of parental involvement. Jeynes posited that family structure is a stronger contributor to high academic achievement than parents checking their children's homework. Similarly, El Nokali et al. (2010) found that after controlling for family structure in one elementary school sample, parental involvement had no statistically significant effect on overall academic development. Durham and Smith (2006) used student-level data from the Early Childhood Longitudinal Study kindergarten cohort and county-level sociodemographic data and found that, in the rural setting, higher incomes and increased parental involvement were not means of rectifying the disadvantages of single-parent family structures. Similarly, Roscigno et al. (2006) identified strong negative correlations between the nontraditional rural family structures and parental involvement in a longitudinal study with three waves of National Education Longitudinal Survey data and Common Core data. Consequentially, single parenthood, regardless of many other sociodemographic factors, including rurality, could inherently cause deficits in parental involvement unsurmountable without the presence of another primary caregiver in the home.

Parent Educational Background

Like their urban counterparts, many rural children face challenges to educational success, although others living outside of the rural space view them as sheltered from urban problems (e.g., family instability, alcohol and drug abuse, and crime). Some have perceived the isolation of the rural

setting as having a mitigating effect on urban problems; however, despite increased social connections associated with small school sizes (Lichter et al., 2003), the proportion of rural citizens over the age of 25 holding bachelor's degrees or higher still lags 14% behind urbanized areas (USDAb, 2021). Low parental educational attainment is a symptom and perpetuator of poverty. Thus, it is not possible to discuss the relationship between parental involvement and parental educational attainment without simultaneously discussing poverty.

Low parental educational attainment and poverty often correlate with diminished parental involvement, infrequent communication with the school, and parents less equipped to offer postsecondary guidance to their children (Baker & Stevenson, 1986; Grolnick & Slowiaczek, 1994). Most of the studies on the complex relationship between poverty, parental involvement, and low student achievement have focused on the urban space. However, Roscigno et al. (2006) compared the educational resource and investment data of rural, suburban, and inner-city education with three cycles of National Education Longitudinal Survey and Common Core data. The authors found that the root cause of the rural-suburban student achievement gap was rural families' lack of the resources needed to promote students' overall success, namely sufficient family income and high parental educational attainment. Interestingly, Roscigno et al. also noted that although rural parents invested and engaged less in their children's educations than their urban and suburban counterparts, their involvement had no direct impact on student success; however, it did correlate with the reduced probability of their students dropping out of high school.

COVID-19 Life-Context Considerations for Parental Involvement in Education

One of the most profound changes in education caused by the pandemic was the reversal of roles for teachers and parents. Many parents gained the primary responsibility for all aspects of their children's schooling for varying and often unpredictable periods due to intermittent school closures and

student or staff quarantines. Teachers, on the other hand, experienced significantly less facetime with their students. Like all parents, regardless of proximity to a city or town, additional COVID-driven life-context variables had a direct impact on the parental involvement required during the pandemic. The most profound of these variables was the impact on parental employment schedules.

Employment Schedules

Historically, parents with inflexible and rigorous work schedules have little time and resources to engage in their children's education effectively and consistently (Brock & Edmunds, 2010; Garcia Coll et al., 2002; Griffith, 1998; Hoover-Dempsey, Bassler, & Brissie, 1987; Weiss et al., 2003). With the onset of the COVID-19 pandemic, many parents in rural areas saw significant shifts in their employment schedules and the mental and physical requirements associated with their jobs. Some parents became underemployed or unemployed during national lockdowns, which created additional financial stressors causing them to divert their focus from their children's schooling. Some parents' employers ordered them to work remotely from home; thus, many working parents had to juggle their professional lives and their children's school activities and virtual learning times from their homes. Parents who were essential and health care workers experienced extraordinary strains on their time, energy, and mental health due to mounting fears of contracting the virus, hospitals were at the brink of overcapacity (Hibel et al., 2021), and the nation was experiencing steeply rising rates of rural COVID-19 deaths (Rural Policy Research Institute, 2020). Therefore, the phenomenon of the COVID-19 pandemic had a significant impact on parents' ability to adapt to the disrupted educational landscape and the new, unfamiliar educational responsibilities they had to take on for their children.

Limitations and Gaps in Knowledge

The construct of parental involvement has been a topic extensively represented in scholarly research. Many studies have focused on the relationship between parental involvement and student

achievement either broadly or bound by sociodemographic factors (Fan & Chen, 2001; Jeynes, 2017; Wilder, 2014). However, the educational literature disproportionately underrepresents the rural setting (Cicchinelli & Beesley, 2017). Of the limited rural-specific educational literature, very few studies have addressed the factors with an influence on parents' decisions to actively participate in their children's education. Although the body of knowledge contains rural representation, it has shown the importance of parental involvement in student development and academic success, indicating that effective parental engagement enables children to achieve more success. Regardless of geography and sociodemographic status, the COVID-19 pandemic presented unique personal and work-related challenges for all parents and contributed to parents' existing challenges as they made decisions regarding their types and levels of involvement. At the time of this publication, no research existed on the parental involvement construct and the pandemic-related influences of parental involvement. School and district leaders could use the research on parental involvement during pandemic times to develop and revise parental involvement improvement strategies for disrupted and nondisrupted instructional models. The gaps in research resulted in this study's research questions. This study focused on the parents of children who attended three rural elementary school districts during the first full academic year (2020–2021) after the onset of the COVID-19 pandemic. The study had the following research questions:

1) What is the relationship between parental self-efficacy and home-based parental involvement in school activities?
2) What is the relationship between parental role construction activity beliefs and home-based parental involvement in school activities?
3) What is the relationship between parental perceptions of general invitations from the school and home-based parental involvement in school activities?

4) How does home-based parental involvement in school activities differ based upon family characteristics (i.e., household income, employment schedules, family structure, and parent educational background)?
    a. How does parental involvement in home-based school activities differ based upon annual household income?
    b. How do parental employment schedules influence parental involvement in home-based school activities?
    c. How does parental involvement in home-based school activities differ based upon family structure?
    d. How does parental involvement in home-based school activities differ based upon parent educational background?

This study provided the information needed to close the gap in the extant literature on the complex construct of parental involvement in rural elementary schools. Furthermore, the findings and conclusions provided insight into the influence of parental self-efficacy, role construction activity beliefs, general invitations from the school, and family background characteristics on home-based parental involvement during the instructional instability caused by the COVID-19 pandemic. The superintendents of the school districts under study received the results of this research and could use the findings to develop ongoing family engagement strategies for improving parental involvement and overall student success.

Chapter 3: Methodology

Researchers in the field of education have dedicated substantial time and energy to investigating the effects of parental involvement on student academic achievement across all grade levels, demographics, and socioeconomic statuses (Fan & Chen, 2001; Jeynes, 2012, 2017; Núñez et al., 2015; Reynolds et al., 2015). However, limited research has focused on the factors that influence parental involvement in children's education, with even fewer studies on the parental involvement construct of families living in underresourced rural spaces (Semke & Sheridan, 2012). Like no other event in history, the COVID-19 pandemic and its inexorable, socially disruptive consequences required parents to become intimately and holistically involved in their children's education. Undoubtedly, the mere existence of the COVID-19 pandemic and its ensuing disruptions to the traditional school day were the primary influencing factors for increased parental involvement. However, the other factors found through decades of educational research could have also had an effect on the extent to which parents responded to this need. The purpose of this study was to examine the relationship between parental self-efficacy, parental role construction activity beliefs, and parental perceptions of general invitations and home-based parental involvement with school activities in three rural elementary schools during a long-term educational disruption (the COVID-19 pandemic). The results of this study could contribute to the design and implementation of strategies for encouraging and supporting parental involvement, particularly during long-term educational disruptions.

This study had four research questions investigated through a mixed methods survey approach. The survey consisted of the scales by Walker et al. (2005) of the known school-influencing motivators of parental involvement: parental self-efficacy, parental role construction role activity beliefs, and general invitations for involvement from the school. The survey also included scales for measuring the parents' perceptions of their parental involvement in home-based school activities. Additionally, there was one

qualitative subquestion on the influence of parental employment schedules on the participants' perceived parental involvement in home-based school activities during the long-term educational disruption of the COVID-19 pandemic. The research questions focused on parents of elementary-aged children who attended one of three county-wide school districts during the first full academic year (2020–2021) of the COVID-19 pandemic.

Research Questions

1) What is the relationship between parental self-efficacy and home-based parental involvement in school activities?
2) What is the relationship between parental role construction activity beliefs and home-based parental involvement in school activities?
3) What is the relationship between parental perceptions of general invitations for involvement from the school and home-based parental involvement in school activities?
4) How does home-based parental involvement in school activities differ based upon family characteristics?
    a. How does parental involvement in home-based school activities differ based upon annual household income?
    b. How do parental employment schedules influence parental involvement in home-based school activities?
    c. How does parental involvement in home-based school activities differ based upon family structure?
    d. How does parental involvement in home-based school activities differ based upon parent educational background?

The study's conclusions could be a tool for school decision-making processes. Educational leaders could use the results to create and implement evidence-based policies for encouraging and supporting parental involvement in home-based activities during future educational disruptions. This research had the following operational definitions of the research question variables.

General invitations for involvement from the school: Genuine messaging conveyed by the school that enables parents to feel welcomed and that they play a vital role in their children's success (Hoover-Dempsey & Sandler, 1995, 1997, 2005; Walker et al., 2005).

Parental involvement in home-based activities: Parental or family member interaction, supervision, and engagement with school activities at home (Walker et al., 2005).

Parental self-efficacy: Parents' beliefs in their ability to positively influence their children's education (Hoover-Dempsey & Sandler, 1995, 1997, 2005; Walker et al., 2005).

Parental role construction activity beliefs: A dimension of parental role construction that consists of parents' beliefs regarding their responsibilities to get actively involved in their children's education (Hoover-Dempsey & Sandler, 1995, 1997, 2005; Walker et al., 2005).

Participants and Sampling

The participants of this survey research study were the parents of elementary-aged children (Grades K–5) who attended one of three county-wide consolidated rural school districts in Southern Illinois: Hawk River School District, Belle Smith School District, and Shawnee Hills School District (pseudonyms). The criteria of the Urban Centric Locale Codes (NCES, 2006) were the means used to determine each district's rurality. In each district, one large school complex provides services for Grades PK–12. The large school complex contains the three levels of elementary, middle, and high school. According to the Illinois Department of Education (2019), the three consolidated districts' PK–12 student enrollment was 1,725, and the K–5 enrollment was 719. The students had similar characteristics in three

of the district elementary schools (see Table 2). The school report cards showed that all three districts consisted of predominantly White students and learners from low-income homes and almost no English language learners (Illinois Department of Education, 2019).

Table 2

Elementary Enrollment and Student Characteristics by School

School	% Low Income	% English Learners	% Non-White	K-5 Enrollment
Hawk River	59	1	3	301
Belle Smith	61	0	11	223
Shawnee Hills	62	0	5	195

Parental involvement is an integral component of overall student success; however, involvement decreases markedly when children transition from the primary grades to the middle school setting (Elias et al., 2007; Seidman et al., 2003). Ensuring consistent measurements of the construct under study (parental involvement in home-based activities) consisted of administering the survey only to the parents of children in the elementary grades (K–5). Furthermore, the parents with multiple children completed the survey only once for only one of their children at the elementary level. Census sampling commenced to recruit the participants, as all the parents of children enrolled in Grades K–5 at the three identified elementary schools received invitations to complete the survey from their respective school superintendents.

Design

This nonexperimental, mixed methods study consisted of analyzing the data collected via a survey. After the analysis, there was an exploration of the relationships between the influencing factors and perceptions of home-based parental involvement during the pandemic. The participating districts could use the conclusions of this study to craft policies and programs to support effective parental involvement during future long-term educational disruptions. The online nature of the survey research provided advantages during the 2020–2021 academic year because the participants had become accustomed to the electronic delivery of school-related communications. However, the COVID-19 mitigation strategies did not enable visitors to enter the school buildings and thus presented challenges to the distribution of paper surveys to parents during regularly scheduled parent attendance events. Furthermore, the distribution of the survey with an online format enabled the participation of parents with children engaging in long- or short-term remote learning formats. The schools also received paper copies at the district's request for distribution to the parents who wanted to complete the survey but lacked reliable internet access.

According to Bickman and Rog (2009), survey research studies are susceptible to many threats, such as nonsampling bias and cognitive bias. In this study, nonsampling bias could have been a systemic threat to the generalizability of the results if some parents had been unable to access or complete the survey due to internet connectivity issues or chose not to reach out to the district for a hard copy. Furthermore, nonresponse could have resulted in further nonsampling bias if the potential respondents had opted out of their role as voluntary participants. Such bias can occur if a potential respondent does not see the value of the research study or perceives the survey items as intrusive. Cognitive bias might have also affected the validity of the results if the parents provide responses not reflective of their actual perceptions of the constructs but reflective of desired social norms (Tracey, 2016). The effects of

socially desirable responses have not yet undergone examination in situations absent of external motivators (i.e., an anonymous voluntary survey); therefore, this type of bias might or might not have been present in this study.

Despite efforts to condense and simplify the survey experience for the respondents, measurement errors could have resulted from the instrument's structure and format. Notably, the survey had a long length and contained many Likert-style prompts, some requiring multiple cognitive steps, which could have caused cognitive fatigue for the respondents (Bickman & Rog, 2009). The survey in this study was an instrument created and deemed reliable before the pandemic. There were no survey alterations for this study; therefore, the participants might not have found some of the items relevant due to the marked variability in their educational experiences, capabilities, and expectations as they navigated unique personal and professional challenges midpandemic. This phenomenon could have contributed to generalized cognitive fatigue, which might have affected the validity of the study's results.

Survey Instrument

This study consisted of collecting parental perceptions of (a) role construction role activity beliefs, (b) parental self-efficacy to help children succeed in school, (c) general invitations for involvement from school, and (d) involvement in home-based school activities. The study received the survey author's written permission (see Appendix A) and IRB approval (see Appendix B). The Walker et al. (2005) scales allowed for measuring the motivators for parental involvement among the targeted population with superintendent consent (see Appendices C, D, and E). Walker et al. developed and refined the scales via a 3-year grant program at The Family-School Partnership Lab at Vanderbilt University.

The survey included the entirety of each scale and subscales without alteration. The scales were the Parental Role Construction for Involvement in the Child's Education Role Activity Beliefs (RAB), Parental Self-Efficacy for Helping the Child Succeed in School (PSE), Parents' Perceptions of General Invitations for Involvement from the School (GIIS), and Parents' Involvement in Home-Based Activities (HBPI). The study included one open-ended question to answer the research question about the impact of work schedules on parental involvement in home-based school-related activities during the COVID-19 pandemic. Additionally, the survey included the addition of demographic indicators for descriptive purposes (see Appendix F). The following sections present the scales by Walker et al. (2005).

Parental Self-Efficacy for Helping the Child Succeed in School

Parental self-efficacy is a social construct with an influence on parental involvement. Several life constructs affect whether parents feel confident in their abilities to positively impact their children's education and become engaged. Walker et al.'s (2005) Parental Self-Efficacy for Helping the Child Succeed in School is a seven-indicator tool for understanding parents' beliefs in their ability to understand and influence their actions via school strategies and actions. In responding to this scale, the respondents identified the extent they agreed or disagreed with statements regarding their confidence with helping their children learn during the 2020–2021 academic year. The survey items contained Likert-based responses: 1 = *disagree very strongly*, 2 = *disagree*, 3 = *disagree just a little*, 4 = *agree a little*, 5 = *agree*, and 6 = *agree very strongly*. Walker et al. reported acceptable reliability ($\alpha = .78$) in a pilot test of this subscale.

Parental Role Construction for Involvement in the Child's Education Role Activity Beliefs Subscale

Parental role construction is a social construct that influences parents' decisions to become involved in their children's education based on their past experiences with schooling and current experiences with their children. Two subscales were the components used to measure these two

components of the overall role construction domain and were uncorrelated (*r* = .08; Walker et al., 2005). This study focused on the factors the school can influence; however, schools cannot have control over parents' past educational experiences. Therefore, this study included only the Role Activity Beliefs subscale.

The first subscale of this tool, Role Activity Beliefs, is a measure of the parents' active or passive perceptions of their involvement with their children's education. The 10 indicators of this subscale required the respondents to identify the extent they agreed or disagreed with the statements regarding their perceived education-related responsibilities. The subscale items contained Likert-based responses: 1 = *disagree very strongly*, 2 = *disagree*, 3 = *disagree just a little*, 4 = *agree a little*, 5 = *agree*, and 6 = *agree very strongly*. Walker et al. (2005) reported the acceptable reliability of the subscale (α = .80).

One of the indicators on this scale (volunteer at school) appeared irrelevant in the COVID-19 educational landscape, as parents could no longer volunteer at school due to efforts to curb the spread of the virus. However, the goal of the research was to capture the parents' perceptions of the construct to inform future research and conversations on the impact of the pandemic on education. Therefore, the study included the indicator.

Parents' Perceptions of General Invitations for Involvement From the School

How parents perceive general invitations from the school indicate whether they become involved. Walker et al. (2005) adapted an existing school climate survey to create the Parents' Perceptions of General Invitations for Involvement from the School scale. In this scale, the respondents identified the extent they agreed or disagreed with six statements regarding teacher interest and cooperation, school environment, school scheduling practices, and school communication during the 2020–2021 academic year. The scale contained Likert-based responses: 1 = *disagree very strongly*, 2 =

disagree, 3 = *disagree just a little*, 4 = *agree a little*, 5 = *agree*, and 6 = *agree very strongly*. Walker et al. reported the acceptable reliability of the subscale ($\alpha = .88$) in a pilot test.

Parents' Involvement in Home-Based Activities

Walker et al. (2005) devised a five-item subscale for the frequency of parental involvement in home-based school activities with their children. For the home-based subscale, the respondents identified the number of times during the 2020–2021 academic year that they engaged with their children through conversations about the school day, supervision of homework, assistance with studying for tests, reading, and skills practice. The response format for this subscale was 1 = *never*, 2 = *1 or 2 times per week*, 3 = *4 or 5 times per week*, 4 = *once a week*, 5 = *a few times a week*, and 6 = *daily*. Walker et al. reported an acceptable reliability ($\alpha = .85$) in a pilot test of this subscale.

Open-Ended Question

The end of the survey presented the question, "Explain how your work schedule during the COVID-19 pandemic has impacted your involvement in your child's home-based school activities." The goal of the question was to elucidate themes regarding parents' challenges in maintaining work-life balance in the first academic year after the pandemic's onset.

Demographic and Background Indicators

The survey included family background questions directly related to the study's research questions. The participants indicated marital status (single; married/domestic partnership); educational background (some high school, no diploma; high school graduate, diploma, or equivalent; some college credit, including trade, technical, and vocational training; college graduate; advanced college degree), and average annual household income ($0–30,000; $30,001–60,000; $60,0001 and up). The survey also included the addition of four descriptive indicators: relationship to the child (mother/stepmother; father/stepfather; grandparent; other [text box]); gender (male; female; non-binary/third gender);

race/ethnicity (White; Hispanic or Latino; Black or African American; American Indian or Alaska Native; Asian or Hawaiian/Pacific Islander; two or more races [text box]; other [text box]); and the number of days the child participated in remote instruction during the 2020–2021 academic year (less than 10 days; 11–20 days; 21–30 days; more than 30 days). An analysis commenced of the relationships between the family background variables and parental involvement in home-based school activities to find how parental involvement in home-based school activities differed based on family background characteristics during the COVID-19 pandemic.

Verification Indicators

Because survey dissemination occurred electronically, any person with access to the survey link was a potential respondent. The beginning of the survey contained logic indicators for determining whether the potential respondent was a member of the intended research population to avoid ineligible parties recording their responses. The first verification indicator required each respondent to select the child's school district: Belle Smith, Hawk River, Shawnee Hills, or none of these. The second verification indicator required the respondent to indicate the child's grade level: kindergarten, first grade, second grade, third grade, fourth grade, fifth grade, or none of these. The respondents who answered *none of these* to either of the verification indicators were ineligible to participate and were automatically routed out of the survey before they saw the research-based indicators. To mitigate the effects of response duplication on survey data, the survey's instructions included explicit directions for only one parent from each household to complete only one survey. Respondents with more than one qualifying child in the household received instruction to complete the survey by using only one child to report their perceptions.

Data-Collection Methods

The creation and management of the online survey instrument occurred via the university-owned and secured Qualtrics (2020) platform. Superintendents from the targeted school districts (Hawk River, Belle Smith, and Shawnee Hills) received telephone calls and emails requesting assistance with the survey distribution. The superintendents sought to reach as many parents as possible by disseminating the parent recruitment letter (see Appendix G) with the online survey's link via internal email distribution lists, school and district websites, school and classroom newsletters, and social media platforms, including Twitter, Facebook, and Instagram. The superintendents also requested paper copies of the survey, but none of the respondents requested a hard copy. Survey dissemination to the parents of K–5 children in the identified districts occurred over 3 weeks, beginning on April 19, 2021, when the cooperating school superintendents disseminated the survey. After 10 days, on April 29, 2021, the superintendents sent the potential respondents a follow-up email and posted a reminder to their social media accounts to ask the parents to complete the survey. The response period ended and the survey closed on May 10, 2021. SPSS Version 24 was the software used to import the survey data from Qualtrics.

Analysis and Interpretation

IBM SPSS Statistics for Windows, Version 24.0 (2016) was the software used to analyze the collected data. The analysis consisted of compiling and reporting the descriptive statistics for all family background characteristics and scale scores. Also, thematic coding and analysis of the research questions, with the exception of Research Question 4b, occurred with nonparametric statistical tests.

Research Question 1

What is the relationship between parental self-efficacy and home-based parental involvement in school activities?

Research Question 1 had a correlational nature and no independent variables. The two scale score variables (PSE scale scores and HBPI scale scores) underwent analysis to assess their statistical relationship. Confirming the validity of the scale as applied to this study's sample population consisted of calculating, reporting, and comparing Cronbach's alpha for both scales to previous research-based uses (Walker et al., 2005). In this case, the Cronbach's alpha for the PSE scale did not align with validity standards, which resulted in the deletion of four scale indicators. Also, the data set did not align with all the assumptions necessary for parametric analysis with the Pearson's correlation coefficient (Pearson's *r*) statistical test; therefore, the analysis occurred with the nonparametric Spearman's correlation analysis. The following step consisted of calculating and reporting the means and standard deviations for the PSE and HBPI scale scores. The purpose of the analysis was to examine the existence and strengths of statistically significant relationships between the sample's PSE scale scores and HBPI scale scores and elucidate the PSE scale scores and HBPI item-level indicators. The next step consisted of reporting the correlation coefficients and effect size interpretations.

The calculation and evaluation of the correlation coefficients between the overall PSE scale scores and item-level HBPI item-level scale indicators occurred to identify the existence and strength of statistically significant relationships between the item-level PSE indicators and item-level HPBI indicators. The analysis consisted of organizing and reporting the interitem correlation coefficients, as well as the means and standard deviations for each PSE indicator and HBPI indicator. An examination of the correlations showed whether the parents with heightened parental self-efficacy reported more frequent involvement in specific home-based learning activities during the instructional disruption of the COVID-19 pandemic. The null hypothesis for this statistical analysis was that no relationship existed between any two of the correlated variables (scale- or item-level).

Research Question 2

What is the relationship between parental role construction activity beliefs and home-based parental involvement in school activities?

Research Question 2 had one correlational and no independent variables. The two scale score variables (RAB scale scores and HBPI scale scores) underwent analysis to assess their statistical relationship. Confirming the validity of the scale as applied to this study's sample population consisted of calculating, reporting, and comparing the Cronbach's alpha for both scales to previous research-based uses (Walker et al., 2005). The data set did not align with all the assumptions necessary for parametric analysis with the Pearson's *r* statistical test; therefore, the analysis occurred with the nonparametric Spearman's correlation analysis. The analysis consisted of calculating and reporting the means and standard deviations for the RAB and HBPI scale scores to examine the existence and strength of a statistically significant relationship between the sample's RAB and HBPI scale scores.

The calculation and evaluation of the correlation coefficients between item-level RAB scale indicators and item-level HBPI scale indicators occurred to identify the existence and strength of statistically significant relationships between item-level RAB indicators and item-level HPBI indicators. The analysis consisted of organizing and reporting the interitem correlation coefficients, as well as the means and standard deviations for each RAB indicator and HBPI indicator. The examination of the correlation between the two scales' variables showed whether the parents with positive perceptions of role activity beliefs reported more frequent involvement in specific home-based learning activities during the instructional disruption of the COVID-19 pandemic. The null hypothesis for this statistical analysis was that no relationship existed between any two of the correlated variables (scale- or item-level).

Research Question 3

What is the relationship between parental perceptions of general invitations from the school and home-based parental involvement in school activities?

Research Question 3 had a correlational nature and no independent variables. The two scale score variables (GIIS scale scores and HBPI scale scores) underwent analysis to assess their statistical relationship. Confirming the validity of the scale as applied to this study's sample population consisted of calculating, reporting, and comparing Cronbach's alpha for both scales to previous research-based uses (Walker et al., 2005). The data set did not align with all the assumptions necessary for parametric analysis with the Pearson's *r* statistical test; therefore, the analysis occurred with the nonparametric Spearman's correlation analysis. The calculation and reporting of the means and standard deviations for the GIIS and HBPI scale scores occurred. The analysis was the means of examining the existence and strength of a statistically significant relationship between the sample's GIIS scale scores and HBPI scale scores.

Calculating and evaluating the correlation coefficients between item-level GIIS scale indicators and item-level HBPI scale indicators occurred to identify the existence and strength of statistically significant relationships between item-level GIIS indicators and item-level HPBI indicators. The interitem correlation coefficients, as well as the means and standard deviations for each GIIS indicator and HBPI indicator, were organized and reported. Examination of the correlation between the two scales' variables showed whether the parents with positive perceptions of general invitations for involvement from the school reported more frequent involvement in specific home-based learning activities during the instructional disruption of the COVID-19 pandemic. The null hypothesis for this statistical analysis was that no relationship existed between any two of the correlated variables (scale- or item-level).

Research Question 4 Overview

How does home-based parental involvement in home-based school activities differ based up family characteristics?

The purpose of Research Question 4 was to examine the background factors that could have influenced home-based parental involvement levels during the COVID-19 pandemic: household income, family structure, parent employment schedules, and parental education level. Therefore, Research Question 4 was a means of discerning the existence of statistically significant differences in home-based parental involvement levels based on household income, family structure, and parental education level. An open-ended question and the subsequent thematic coding of responses occurred to evaluate and thematically describe the influences of various types of employment schedules on home-based parental involvement. The HBPI scale data allowed for measuring the sample's overall perceived parental involvement level and the levels associated with specific types of home-based parental involvement (item-level responses). The responses to the survey's descriptive indicators were the family background variables used for each research question.

The Kruskal-Wallis H test analysis was appropriate due to the presence of more than two groups of an independent variable (Research Questions 4a and 4b). The Mann-Whitney U test occurred to examine the statistically significant differences in HBPI scores among dichotomous groups (Research Question 4c). The significance level for the Kruskal-Wallis H and Mann-Whitney U tests was $p < .05$. Descriptive statistics were the means used to calculate each group's median HBPI scale score and mean rank, as well as the measures of central tendency for each item-level indicator.

Subquestion 4a

Research Question 4a: How does parental involvement in home-based school activities differ based upon annual household income?

The nonparametric Kruskal-Wallis H test occurred to examine the statistically significant differences in median HBPI scores among the three groups of participants with differing income levels: $0–30,000; $30,00–60,000; and $60,001 and up. An analysis of the item-level data also occurred with the Kruskal-Wallis H test to examine the statistically significant differences in specific home-based parental involvement activities (item-level data) among the income groups. For this analysis, income was the independent variable, and HBPI scale responses were the dependent variable. The significance level for the Kruskal-Wallis H test was $p < .05$. Descriptive statistics were appropriate to calculate each income group's median HBPI scale score, HBPI scale score, mean rank, and frequency. Calculation also occurred of the measures of central tendency for each item-level HBPI indicator.

Subquestion 4b

Research Question 4b: How do parental employment schedules influence parental involvement in home-based school activities?

The survey included one open-ended question to explore the impact of the participants' employment schedule on their perceived levels of home-based involvement in their children's school activities. The question was, "Explain how your work schedule during the COVID-19 pandemic has impacted your involvement in your child's home-based school activities." Analysis and coding of the responses occurred to elucidate the emergent themes (see Appendix H).

Subquestion 4c

Research Question 4c: How does parental involvement in home-based school activities differ based upon family structure?

The nonparametric Mann-Whitney U test occurred to examine statistically significant differences in median HBPI scores between the two independent groups of participants with differing family structures: married or domestic partnership and single. Closer inspection of the HBPI item-level data

through the Mann-Whitney U analysis occurred to identify statistically significant differences in specific home-based parental involvement activities (item-level data) between the family structure groups. For this analysis, family structure was the independent variable, and HBPI scale responses were the dependent variable. The significance level for the Mann-Whitney U test was $p < .05$. The calculation of the effect sizes occurred for this test of significance. Descriptive statistics enabled the calculation of each family structure group's median HBPI scale score, HBPI scale score mean rank, and frequency. The calculation of the measures of central tendency for each item-level HBPI indicator also occurred.

Subquestion 4d

Research Question 4d: How does parental involvement in home-based school activities differ based upon parent educational background?

The nonparametric Kruskal-Wallis H test was a means to explore the statistically significant differences in the median HBPI scores among the three groups of participants with differing education levels: some high school, no diploma; high school graduate, diploma or the equivalent; some college credit, including trade, technical, and vocational training; college graduate; and advanced college degree. Closer inspection of HBPI item-level data also occurred with the Kruskal-Wallis H test to examine the statistically significant differences in specific home-based parental involvement activities (item-level data) between any two education level groups. For this analysis, education level was the independent variable, and HBPI scale responses were the dependent variable. The significance level for the Kruskal-Wallis H test was $p < .05$. Descriptive statistics enabled the calculation of each education level group's median HBPI scale score, HBPI scale score mean rank, and frequency. The calculation of measures of central tendency for each item-level HBPI indicator also occurred for each group.

Chapter 4: Findings

Introduction

The purpose of this study was to examine the relationship between parental self-efficacy, parental role construction activity beliefs, and parental perceptions of general invitations and home-based parental involvement with school activities in three rural elementary schools during a long-term educational disruption (the COVID-19 pandemic). The study produced insights into the constructs and factors that had an influence on the parents' home-based involvement during the COVID-19 pandemic. This chapter presents the data analysis and findings to address the research questions. The participants were the parents of children who attended one of three rural elementary school districts during the first full academic year (2020–2021) after the onset of the COVID-19 pandemic.

Research Questions

1) What is the relationship between parental self-efficacy and home-based parental involvement in school activities?
2) What is the relationship between parental role construction activity beliefs and home-based parental involvement in school activities?
3) What is the relationship between parental perceptions of general invitations for involvement from the school and home-based parental involvement in school activities?
4) How does home-based parental involvement in school activities differ based upon family characteristics?
    a. How does parental involvement in home-based school activities differ based upon annual household income?
    b. How do parental employment schedules influence parental involvement in home-based school activities?

c. How does parental involvement in home-based school activities differ based upon family structure?

d. How does parental involvement in home-based school activities differ based upon parent educational background?

Statistical Testing Hypotheses

Based on the research questions, the study consisted of creating and testing the following statistical hypotheses:

$H1_0$: There is no significant relationship between parental self-efficacy and home-based parental involvement ($p < 0.05$).

$H1_a$: There is a significant relationship between parental self-efficacy and home-based parental involvement ($p < 0.05$).

$H2_0$: There is no significant relationship between parental role construction activity beliefs and home-based parental involvement ($p < 0.05$).

$H2_a$: There is a significant relationship between parental role construction activity beliefs and home-based parental involvement ($p < 0.05$).

$H3_0$: There is no significant relationship between parental perceptions of general invitations for involvement from the school and home-based parental involvement ($p < 0.05$).

$H3_a$: There is a significant relationship between parental perceptions of general invitations for involvement from the school and home-based parental involvement ($p < 0.05$).

$H4a_0$: The distributions of home-based parental involvement scores for the three income groups (i.e., $0 – 30,000; $30,001 – $60,000; and $60,000 and more) are equal ($p < 0.05$).

$H4a_a$: The medians of home-based parental involvement scores for the three income groups (i.e., $0–30,000; $30,001–$60,000; and $60,000 and more) are not equal ($p < 0.05$).

H4b: No hypothesis was formed because the researcher used qualitative thematic coding to analyze the data.

$H4c_0$: The distribution of home-based parental involvement scores for the two family structure groups (i.e., single and married/domestic partnership) are equal ($p < 0.05$).

$H4c_a$: The median of home-based parental involvement scores for the two family structure groups (i.e., single and married/domestic partnership) are not equal ($p < 0.05$).

$H4d_0$: The distribution of home-based parental involvement scores for the five education level groups (i.e., high school, no diploma; high school graduate, diploma, or the equivalent; some college credit, including trade, technical and vocational training; college degree; and advanced college degree) are equal ($p < 0.05$).

$H4d_a$: The medians of home-based parental involvement scores for the five education level groups (i.e., high school, no diploma; high school graduate, diploma, or the equivalent; some college credit, including trade, technical and vocational training; college degree; and advanced college degree) are equal ($p < 0.05$).

Descriptive Data

This study entailed collecting survey data from the parents of elementary students enrolled in three small, rural consolidated school districts in Southern Illinois. The median household income in Southern Illinois is approximately $45,000 (U.S. Census Bureau, 2019a). Combined, the school districts provided services to 719 K–5 students (Illinois Department of Education, 2019). In 2019, the average American family had 1.93 children living in the household (U.S. Census Bureau, 2019b). For the targeted population, approximately 373 families met the criteria necessary to participate in the study (719 students/1.93 children per family). Census sampling indicated the eligibility of all families with K–5

children enrolled in the identified school districts. Eighty-six parents completed the survey instrument for a response rate of 23%.

Ideally, the sample would have been equally representative of all three school districts; however, this was not the case. Of the respondents (*N* = 86), nearly 71% originated from the Hawk River School District; Belle Smith School District and Shawnee Hills School District had significantly lower participation rates of 10.5% and 18.6%, respectively. As expected, given the demographics of the area, the sample consisted primarily of Whites (95.35%). Parents self-identifying as mothers or stepmothers submitted nearly 75% of the responses. The grade levels of the children had an even distribution and showed diverse response rates for grade levels ranging from 16.28% to 19.78%. However, Grade 2 remained underrepresented (9.30%). Remote learning was still a reality for families during the first full academic year after the lifting of the COVID-19 lockdowns. Over 40% of the participants reported their children participated in 30 or more days of remote learning during the 2020–2021 academic year. Only 19.78% reported that their children experienced minimal remote learning of fewer than 10 days (see Table 3).

Table 3

Sociodemographic Characteristics of Research Study Participants by District

		Hawk River		Belle Smith		Shawnee Hills		Total	
		n	%	*n*	%	*n*	%	*n*	%
Ethnicity	White	58	70.73	8	9.76	16	19.51	82	95.35
	Black/African American	0	0	1	100	0	0	1	1.16
	Two or more races	1	100	0	0	0	0	1	1.16
	No response	2	100	0	0	0	0	2	2.33
Relationship to Child	Mother/stepmother	45	70.31	8	12.50	11	17.19	64	74.42
	Father/stepfather	10	76.92	0	0	3	23.08	13	15.12
	Grandparent	6	66.67	1	11.11	2	22.22	9	10.47
Grade Level of Child	Kindergarten	10	58.82	2	11.76	5	29.41	17	19.78
	Grade 1	13	81.25	2	12.50	1	6.25	16	18.60
	Grade 2	7	87.50	0	0	1	12.50	8	9.30
	Grade 3	9	64.29	2	14.29	3	21.43	14	16.28
	Grade 4	11	78.86	1	7.14	2	14.29	14	16.28
	Grade 5	11	64.71	2	11.76	4	23.53	17	19.77
Days in Remote Learning	Less than 10 days	12	70.59	0	0	5	29.41	17	19.78
	11–20 days	19	100	0	0	0	0	19	22.09
	21–30 days	7	58.33	1	8.33	4	33.33	12	13.95
	More than 30 days	23	60.53	8	21.05	7	18.42	38	44.19

Note. $N = 86$

Research Question 1 Results: Spearman Correlation Analysis

What is the relationship between parental self-efficacy and home-based parental involvement in school activities?

Answering Research Question 1 consisted of administering the PSE scale and HBPI subscale by Walker et al. (2005). The use of the scales together was the means used to examine the correlation between the two constructs.

Scale Reliability Analysis for PSE Scale

The PSE scale (Walker et al., 2005) is a tool for developing an understanding of parents' confidence in their ability to positively impact their children's education (parental self-efficacy). The PSE consists of seven items on a 6-point Likert scale. Of the seven items developed by Walker et al. (2005), four had negative wording and measurement. Therefore, a response of 1 indicated *agree very strongly*, and a response of 6 indicated *disagree very strongly*. For the other three questions, a response of 1 indicated *disagree very strongly*, and a response of 6 indicated *agree very strongly*. Before the analysis, the calculation of the Cronbach's alpha of the scale's responses commenced to confirm the reliability of the PSE scale. Cronbach's alpha is a measure of reliability that indicates if the scale is an accurate measure of the intended construct; in this case, parental self-efficacy. Past uses of this scale have shown acceptable reliability (Walker et al., 2005); however, for this application of the PSE, the scale showed unacceptable reliability ($\alpha = -.047$).

The poor internal consistency of the PSE scale could have occurred due to the format of the corresponding Likert-style response options, which may have resulted in cognitive bias for the sample population. Four of the indicators contained negative wording, requiring the reversal of the coding for the response choices before analysis. For these questions, the choices ranged from 1 = *strongly agree* to 6 = *strongly disagree*, whereas every other Likert-style choice sequence on the survey ranged from *6 =*

agree very strongly to *1 = disagree very strongly*. Consultation with Joan Walker, Ph.D., one of the chief developers of the PSE scale, resulted in the elimination of the items with poor internal consistency because, at face value, the resulting scale presented a valid measure of the parental self-efficacy construct. In other words, experts in the field would consider the three items of the scale with good internal consistency (i.e., *I know how to help my child do well in school, I feel successful about my efforts to help my child learn,* and *I make a significant difference in my child's school performance)* to be indicators of the construct of self-efficacy. The eliminated indicators were:

- I don't know if I'm getting through to my child.
- I don't know how to help my child make good grades in school.
- Other children have more influence on my child's grades than I do.
- I don't know how to help my child learn.

After eliminating the reversed items, the PSE scale showed acceptable reliability (α = .676). Therefore, this study included only the responses from the three-item PSE scale.

Scale Reliability Analysis for HBPI Subscale

The HBPI subscale is a tool by Walker et al. (2005) used to capture the frequency of parental involvement in home-based school activities. The respondents identified the number of times during the 2020–2021 academic year they engaged with their children through conversations about the school day, supervision of homework, assistance with studying for tests, reading, and skills practice. The HBPI subscale consists of five items on a 6-point Likert scale: 1 = *never*, 2 = *1 or 2 times per week*, 3 = *4 or 5 times per week*, 4 = *once a week*, 5 = *a few times a week*, and 6 = *daily*. The calculation of Cronbach's alpha also occurred for the HBPI subscale to assess its reliability, or internal consistency. Although not as high as the value found by Walker et al. (α = .85), the Cronbach's alpha in this study was an acceptable value for the application of the HBPI subscale (α = .790).

Introduction to Parental-Self Efficacy Scale and Descriptives

The three-item parental self-efficacy scale scores ranged from 3 to 18. Higher scores indicate higher confidence in the ability to positively impact the child's education (self-efficacy). The calculated mean scale score ranged from 1 to 6; therefore, a scale score of 3.5 would have indicated neutral parental self-efficacy in helping the child succeed in school. Mean scale scores below 2.5 were indicators of negative parental self-efficacy, while a score above 4.5 were indicators of positive parental self-efficacy. For this study (*N* = 86), the mean scale score for the three-item PSE was 4.86, *SD* = .816. This result showed that the sample had parental self-efficacy. Analysis of the mean score for each indicator also showed the participants' overall perceptions of their confidence in (a) their ability to help their children do well in school, (b) their ability to achieve success in their efforts to help their children learn, and (c) the significance of their contributions in making a difference in their children's performance at school (see Table 4).

Table 4

Self-Efficacy for Helping the Child Succeed in School (PSE): Indicator and Overall Scale Scores

Indicator	*M*	*SD*	Min.	Max
I know how to help my child do well in school.	4.97	.999	2	6
I feel successful about my efforts to help my child learn	4.84	1.072	1	6
I make a significant difference in my child's school performance.	4.78	1.067	1	6
PSE Scale Overall	4.86	.816	1	6

Scale scores from the HBPI portion of the survey instrument ranged from 5 to 30. Higher scores indicate higher frequencies of parental involvement in home-based school activities. The calculated mean scale score for each participant ranged from 1 = *never* to 6 = *daily*. A scale score of 3.5 showed a midlevel frequency of parental involvement in home-based activities, scores below 2.5 were indicators of low home-based parental involvement (less than *4–5 times this year*), and scores above 4.5 were indicators of high parental involvement (more than *4–5 times this year*). In this study (*N* = 86), the mean scale score for home-based parental involvement in school activities was 5.46, *SD* = .661, indicating very high overall home-based parental involvement in school activities during the pandemic among the sample population. Analysis of the individual indicators for the HBPI scale also showed high frequencies of specific traditional forms of parental involvement (see Table 5).

Table 5

Parents' Involvement in Home-Based School Activities (HBPI): Indicator and Overall Scale Scores

Indicator	*M*	*SD*	Min.	Max.
Someone in this family talks with this child about the school day.	5.93	0.299	4	6
Someone in this family supervises this child's homework.	5.67	0.727	1	6
Someone in this family helps this child study for tests.	5.19	1.090	1	6
Someone in this family practices spelling, math, or other skills with this child.	5.40	0.876	1	6
Someone in this family reads with this child.	5.10	1.208	1	6
HBPI Scale Overall	5.46	0.661	2	6

Analysis Overview

The study did not contain continuous independent and dependent variables. Pearson correlations require continuous variables; therefore, Spearman's rank-order correlations occurred to assess the relationship between PSE scale scores and HBPI scale scores in the three participating rural elementary school districts during the first full academic year after the onset of the COVID-19 pandemic. PSE scale scores and individual item-level indicator responses on the HBPI scale correlated with one another to find relationships between parental self-efficacy and specific types of parental involvement activities. The data underwent further analysis for the relationships between the two scales' item-level indicators. The evaluation of the strengths of the relationships occurred with Cohen's standard. Coefficients between .10 and .29 indicate small effect size, coefficients between .30 and .49 moderate effect size, and coefficients above .50 indicate large effect size (Cohen, 1988). The significance level for Spearman's rank-order correlations was $p < .05$.

Results

The analysis found a statistically significant correlation between PSE scale scores and HBPI scale scores in the sample during the first full academic year after the onset of the COVID-19 pandemic (R_s = .422, $p < .001$). A correlation coefficient of .422 indicated a moderate effect size. The analysis also showed statistically significant positive correlations between PSE scale scores and each item-level indicator of the HBPI scale (see Table 6). The parents reporting higher levels of self-efficacy also tended to more actively engage in the five types of involvement activities included on the HBPI scale. Therefore, for Research Question 1, the null hypothesis was rejected, and the alternative hypothesis was accepted. A significant relationship existed between parental self-efficacy and home-based parental involvement ($p < 0.05$).

Table 6

Correlation Coefficients for PSE Scale Scores and HBPI Indicators

HBPI Indicator	R_s	Effect Size
Talks with child	.231*	Small
Supervises homework	.417**	Moderate
Helps study for tests	.406**	Moderate
Practices skills	.330**	Moderate
Reads with child	.302**	Moderate

**$p < 0.01$ (two-tailed); *$p < 0.05$ (two-tailed); $N = 86$

Closer inspection of the item-level data showed significant positive correlations between the parental self-efficacy indicators and participation in most of the specific home-based school activities on the HBPI scale (see Table 7). The most prominent relationships emerged with parental confidence in knowing how to help children to do well in school. The analysis showed that the parents who thought they knew how to help their children succeed reported increased levels of conversing with their children ($R_s = .340$, $p < .001$); supervising their homework ($R_s = .682$, $p < .001$); helping to study for tests ($R_s = .838$, $p < .001$); practicing skills ($R_s = .812$, $p < .001$); and reading to their children ($R_s = .849$, $p < .001$). *Talks with the child about the school day* was the only HBPI indicator that showed no statistically significant relationships when correlated with all PSE indicators (*I feel successful about my efforts to help my child learn* [$R_s = .152$, $p > .05$] and *I make a significant difference in my child's school performance* [$R_s = .171$, $p > .05$]). Therefore, talking with the children about the school day frequently occurred, regardless of whether the parents considered their efforts helpful or impactful.

Table 7

Correlation Coefficients for PSE and HBPI Indicators

Variable	1	2	3	4	5	6	7	8
PSE Indicators								
1. Knows how to help	.313**							
2. Feels successful	.430**	.655**						
3. Significant difference	.352**	.540**	.425**					
HBPI Indicators								
Someone in this family…								
4. Talks with child	.340**	.152	.171	.277**				
5. Supervises homework	.682**	.354**	.282**	.373**	.434**			
6. Helps study for tests	.838**	.290**	.407**	.356**	.242*	.591**		
7. Practices skills	.812**	.236*	.360**	.299**	.219*	.585**	.744**	
8. Reads with child	.849**	.250*	.318**	.225*	.286**	.514**	.499**	.612**

**$p < 0.01$ (two-tailed); *$p < 0.05$ (two-tailed); $N = 86$

Research Question 2 Results: Spearman Correlation Analysis

What is the relationship between parental role construction activity beliefs and home-based parental involvement in school activities?

Answering Research Question 2 consisted of administering the RAB subscale and the HBPI subscale by Walker et al. (2005). The RAB and HBPI together were the means used to examine the correlation between the two constructs.

Scale Reliability Analysis for RAB Subscale

The RAB subscale (Walker et al., 2005) is a tool used to understand parental role construction activity beliefs via active or passive perceptions of parental involvement with their children's education. The RAB is part of a larger scale with two subscales: the RAB and the Role Construction–Past Experiences (RCPE) subscale. The study did not include the RCPE subscale, which focuses on the influence of parents' past educational experiences in the parental role construction construct. The RAB and RCPE subscales are uncorrelated (r = .08), so scholars can use them independently (Walker et al., 2005). The RAB consists of 10 items on a 6-point Likert scale, from 1 = *disagree very strongly* to 6 = *agree very strongly*. Before analysis, determining the reliability of the RAB occurred by calculating the Cronbach's alpha of the responses. Cronbach's alpha is a measure of reliability that indicates if the subscale is a true measure of the intended construct—in this case, parental role construction role activity beliefs. Although not as high as the value found by Walker et al. (2005; α = .80), the Cronbach's alpha for this study was an acceptable value for the study's application of the RAB (α = .788).

Scale Reliability Analysis for HBPI Subscale

The HBPI is a tool by Walker et al. (2005) for capturing the frequency of parental involvement in home-based school activities. The respondents identified the number of times during the 2020–2021 academic year that they engaged with their children through conversations about the school day, supervision of homework, assistance with studying for tests, reading, and skills practice. The HBPI consists of five items on a 6-point Likert scale: 1 = *never*, 2 = *1 or 2 times per week*, 3 = *4 or 5 times per week*, 4 = *once a week*, 5 = *a few times a week*, and 6 = *daily*. The calculation of Cronbach's alpha occurred for the HBPI to assess its reliability, or internal consistency. Although not as high as the value found by Walker et al. (2005; α = .85), the Cronbach's alpha in this study was an acceptable value for the study's application of the HBPI (α = .790).

Introduction to Role Construction Role Activity Beliefs Scale and Descriptives

The role activity beliefs scale scores ranged from 10 to 60, with higher scores indicating increased parental perceptions of responsibility for their children's education (parental role construction). The calculated mean scale score ranged from 1 to 6; therefore, a mean scale score of 3.5 indicates a neutral sense of responsibility in the academic success of the child, a mean scale score below 2.5 was an indicator of negative parental role construction, and a score greater than 4.5 was an indicator of positive parental role construction. For this study (N = 86), the mean scale score for parental role construction activity beliefs was 4.98, SD = .579, indicating positive perceptions of parental role construction among the study's sample. Analysis of the mean score for each of the scale's indicators also showed the participants' perceptions of their responsibilities in their children's education (see Table 8).

Table 8

Role Activity Beliefs (RAB): Indicator and Overall Scale Scores

Indicator	*M*	*SD*	Min.	Max
I believe it is my responsibility to…				
volunteer at the school.	4.02	1.265	1	6
communicate with my child's teacher regularly.	5.4	0.819	2	6
help my child with homework	5.67	0.585	3	6
make sure the school has what it needs.	4.36	1.328	1	6
support decisions made by the teacher.	5.01	0.874	2	6
stay on top of things at school.	5.33	0.659	3	6
explain tough assignments to my child.	5.19	1.232	1	6
talk with other parents from my child's school.	4.31	1.215	2	6
make the school better.	4.84	1.016	2	6
talk with my child about the school day.	5.72	0.451	5	6
RAB Scale Overall	4.98	0.579	3.5	6

Home-based parental involvement scale scores ranged from 7 to 42, with higher scores indicating higher frequencies of parental involvement in home-based school activities. The calculated mean scale score ranged from 1 to 6. A scale score of 3.5 indicates a mid-level frequency of parental involvement between *4–5 times this year* and *once a week*. Scores below 2.5 were indicators of low home-based parental involvement (less than *4–5 times this year*), whereas scores greater than 4.5 were indicators of high levels of parental involvement (more than *4–5 times this year*). For this study (*N* = 86),

the mean scale score for home-based parental involvement in school activities was 5.46, *SD* = .661, indicating very high overall home-based parental involvement activities during the first full academic year post-pandemic among the sample population. An analysis of the individual indicators for the HBPI scale also showed high frequencies of specific traditional forms of parental involvement (see Table 9). The results showed that during the 2020–2021 academic year, the parents believed it was their responsibility to communicate regularly with their children's teachers, help with homework, support teacher decisions, stay on top of things at school, explain tough assignments, improve the school, and talk with their children about school.

Table 9

Parents' Involvement in Home-Based School Activities (HBPI): Indicator and Overall Scale Scores

Indicator	*M*	*SD*	Min.	Max.
Someone in this family talks with this child about the school day.	5.93	0.299	4	6
Someone in this family supervised this child's homework.	5.67	0.727	1	6
Someone in this family helps this child study for tests.	5.19	1.090	1	6
Someone in this family practices spelling, math, or other skills with this child.	5.40	0.876	1	6
Someone in this family reads with this child.	5.10	1.208	1	6
HBPI Scale Overall	5.46	0.661	2	6

Analysis Overview

The study did not have continuous independent and dependent variables. Pearson correlations require continuous variables; therefore, Spearman's rank-order correlations were appropriate to assess the relationship between RAB and HBPI scores at the three identified rural elementary schools during the first full academic year after the onset of the COVID-19 pandemic. The relationships between the RAB scores and the individual item-level indicator responses for the HBPI underwent examination for the correlations between role construction activity beliefs and specific types of home-based parental involvement. Granular inspection of the data occurred to identify relationships between the two scales' item-level indicators. The evaluation of the strengths of the relationships commenced with Cohen's standard. Coefficients between .10 and .29 indicate a small effect size, coefficients between .30 and .49 indicate moderate effect size, and coefficients above .50 indicate large effect size (Cohen, 1988). The significance level for Spearman's rank-order correlations was $p < .05$.

Results

A statistically significant positive correlation existed between mean RAB scores and HBPI scores in the sample during the first full academic year after the onset of the COVID-19 pandemic ($R_s = .285$, $p = .008$). A correlation coefficient of .285 showed a small effect size. The analysis also found statistically significant positive correlations between RAB scores and each item-level indicator of the HBPI, except *talks with the child about the school day* (see Table 10). The correlation indicates that as overall parental role construction increases, parental involvement in home-based school activities tends to increase as well. For Research Question 2, the null hypothesis was rejected, and the alternative hypothesis was accepted. A significant relationship existed between parental role construction and home-based parental involvement ($p < 0.05$).

Table 10

Correlation Coefficients for RAB Scale Scores and HBPI Indicators

HBPI Indicator	R_s	Effect Size
Talks with child	.042	--
Supervises homework	.264*	Small
Helps study for tests	.257*	Small
Practices skills	.236*	Small
Reads with child	.231*	Small

**p < 0.01 (two-tailed); *p < 0.05 (two-tailed); N = 86

Two indicators of the RAB were the drivers of the statistically significant relationship between RAB and HBPI levels: *stay on top of things* and *explain tough assignments* (see Table 11). The parents' belief that it was their responsibility to stay on top of things at school had statistically significant correlations with talking with the child about school (R_s = .216, p < .05); supervising homework (R_s = .242, p < .05); helping to study for tests (R_s = .357, p < .001); practicing skills (R_s = .224, p < .05); and reading to their children (R_s = .247, p < .05). The parents' belief that it was their responsibility to explain tough assignments to their child also had statistically significant correlations with supervising homework (R_s = .263, p < .05); helping to study for tests (R_s = .253, p < .05); practicing skills (R_s = .231, p < .05); and reading to their children (R_s = .275, p < .05). A few RAB indicators (volunteer at the school, communicate with the teacher, and talk with the child about the school day) also had statistically significant, positive relationships with reported homework supervision levels, R_s = .238, .221, and .234, respectively. The parents' belief that it is their responsibility to meet the school's needs correlated slightly with increased levels of parent-assisted practicing of spelling, math, or other skills at home (R_s = .244, p < .05).

Table 11

Correlation Coefficients for RAB and HBPI Indicators

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
RAB Indicators														
I believe it is my responsibility to…														
1. Volunteer at the school														
2. Communicate with teacher	.281**													
3. Help with homework	0.162	.338**												
4. Schools needs are met	.473**	0.203	.228*											
5. Support decisions	.315**	0.168	.311**	.319**										
6. Stay on top of things	.286**	.322**	.443**	.328**	.305**									
7. Explain assignments	.271*	.260*	.621**	.374**	.323**	.578**								
8. Talk with parents	.371**	0.208	.271*	.537**	.258*	.455**	.366**							
9. Make school better	.378**	.254*	.293**	.575**	.324**	.360**	.358**	.445**						
10. Talks with child	0.093	.521**	.571**	0.111	0.148	.325**	.421**	0.126	0.189					

Table 11 continued

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
HBPI Indicators														
Someone in this family…														
11. Talks w/ child about school	0.01	0.08 6	0.08 4	- 0.017	- 0.124	.216*	0.10 2	0.08 7	- 0.091	0.17 4				
12. Supervises homework	.238 *	.221 *	0.20 2	0.069	0.024	.242*	.263 *	0.16 7	0.114	.234 *	.434* *			
13. Helps study for tests	0.16 2	0.11 3	0.17 2	0.204	0.031	.357* *	.253 *	0.17 1	0.153	0.18 9	.242*	.591* *		
14. Practices skills	0.16 6	0.13 1	0.08 3	.244*	0.007	.224*	.231 *	0.17 2	0.11	0.09 6	.219*	.585* *	.744* *	
15. Reads with child	0.12 8	0.20 4	0.16	0.153	0.023	.247*	.275 *	0.19 3	0.136		.286* *	.514* *	.499* *	.612* *

**$p < 0.01$ (two-tailed); *$p < 0.05$ (two-tailed); $N = 86$

Research Question 3 Results: Spearman Correlation Analysis

What is the relationship between parental perceptions of general invitations from the school and home-based parental involvement in school activities?

Answering Research Question 3 consisted of administering the GIIS scale and the HBPI subscale by Walker et al. (2005). The GIIS and the HBPI together were the means used to examine the correlation between the two constructs.

Scale Reliability Analysis for GIIS Scale

The GIIS scale (Walker et al., 2005) was the survey instrument used to understand parent satisfaction with the school during the 2020–2021 academic year. The GIIS scale consists of six items on teacher interest and cooperation, school environment, school scheduling practices, and school communication and has Likert-based responses. A response of 1 indicates *disagree very strongly*, and a response of 6 indicates *agree very strongly*. Before analysis, the calculation of the reliability of the GIIS scale occurred by calculating the Cronbach's alpha of the scale's responses. Cronbach's alpha is a measure of reliability that shows if the scale is a true measure of the intended construct—in this case, parental perceptions of general invitations for involvement from the school. For this study's application of the GIISS scale, the scale showed excellent reliability ($\alpha = .889$), similar to the reliability found by Walker et al. (2005; $\alpha = .88$).

Scale Reliability Analysis for HBPI Subscale

The HBPI subscale is a tool by Walker et al. (2005) used to capture the frequency of parental involvement in home-based school activities. The respondents identified the number of times during the 2020–2021 academic year they engaged with their children through conversations about the school day, supervision of homework, assistance with studying for tests, reading, and skills practice. The HBPI subscale consists of five items on a 6-point Likert scale: 1 = *never*, 2 = *1 or 2 times per week*, 3 = *4 or 5*

times per week, 4 = *once a week*, 5 = *a few times a week*, and 6 = *daily*. The calculation of Cronbach's alpha occurred for the HBPI subscale to assess its reliability, or internal consistency. Although not as high as the value found by Walker et al. (2005; α = .85), the Cronbach alpha in this study was a value acceptable for the study's application of the HBPI subscale (α = .790).

Introduction to General Invitations for Involvement From the Schools Scale and Descriptives

The GIIS scale scores ranged from 6 to 36, with higher scores indicating more positive parental perceptions of the efforts at the school to involve, communicate, and cooperate with parents during the long-term educational disruption caused by the pandemic (general invitations for involvement). The calculated mean scale score ranged from 1 to 6. Therefore, a scale score of 3.5 indicates an overall neutral perception of the efforts at the school to involve, communicate, and cooperate with parents, a mean scale score below 2.5 was an indicator of negative parental perceptions of general invitations for involvement from the school, and a score above 4.5 was an indicator of overall positive parental perceptions. For this study (*N* = 86), the mean scale score for parental perceptions of general invitations for involvement from the school was 4.70, *SD* = .430. Therefore, the participants had positive parental perceptions of general invitations for involvement from the school. Analysis of the mean score for each indicator also showed the sample's overall perceptions of the efforts at the school to involve, communicate, and cooperate with parents during the first full academic year after the onset of the COVID-19 pandemic (see Table 12).

Table 12

General Invitations for Involvement from the School (GIIS): Indicator and Overall Scale Scores

Indicator	*M*	*SD*	Min.	Max
Teachers at this school are interested and cooperative when they discuss my child.	5.09	0.916	2	6
I feel welcome at this school.	4.88	1.25	1	6
Parent activities are scheduled at this school so that I can attend.	4.06	1.434	1	6
This school lets me know about meetings and special school events.	4.63	1.247	1	6
This school's staff contacts me promptly about any problems involving my child.	4.76	1.328	1	6
The teachers at this school keep me informed about my child's progress in school.	4.79	1.266	1	6
GIIS Scale Overall	4.70	1.002	1.5	6

Home-based parental involvement scale scores ranged from 6 to 36, with higher scores indicating higher frequencies of parental involvement in home-based school activities. The calculated mean scale score ranged from 1 to 6. A scale score of 3.5 indicates a midlevel frequency of parental involvement between *4–5 times this year* and *once a week*, scores below 2.5 were indicators of low home-based parental involvement (less than *4–5 times this year*), and scores above 4.5 were indicators of high levels of parental involvement (more than *4–5 times this year*). For this study (*N* = 86), the mean scale score for home-based parental involvement in school activities was 5.46, *SD* = .661, indicating very high home-based parental involvement in school activities during the pandemic among the sample

population. Analysis of the individual indicators for the HBPI scale also showed high frequencies of specific traditional forms of parental involvement (see Table 13).

Table 13

Parents' Involvement in Home-Based School Activities (HBPI): Indicator and Overall Scale Scores

Indicator	*M*	*SD*	Min.	Max.
Someone in this family talks with this child about the school day.	5.93	0.299	4	6
Someone in this family supervised this child's homework.	5.67	0.727	1	6
Someone in this family helps this child study for tests.	5.19	1.090	1	6
Someone in this family practices spelling, math, or other skills with this child.	5.40	0.876	1	6
Someone in this family reads with this child.	5.10	1.208	1	6
HBPI Scale Overall	5.46	0.661	2	6

Analysis Overview

The study did not have continuous independent and dependent variables. Pearson correlations require continuous variables; therefore, Spearman's rank-order correlation occurred to assess the relationship between GIIS scale scores and HBPI scale scores in the three identified rural elementary schools during the first full postpandemic academic year. Spearman's rank-order correlation was the statistic used to evaluate the strength of the relationship with Cohen's standard. Coefficients between

.10 and .29 indicate a small effect size, coefficients between .30 and .49 indicate moderate effect size, and coefficients above .50 indicate large effect size (Cohen, 1988). The significance level for Spearman's rank-order correlation was $p < .05$.

Results

No statistically significant correlation existed between mean GIIS scale scores and HBPI scale scores for parents with children enrolled in the targeted school districts during the first academic year after the onset of the COVID-19 pandemic ($R_s = .173$, $p = .110$). Furthermore, closer inspection of the data showed no significantly significant correlations between increased perceived participation in specific home-based school activities and the parents' perceptions of each GIIS indicator (see Table 14). Therefore, for Research Question 3, the null hypothesis was not rejected, and the alternative hypothesis was not accepted. No significant relationship existed between parental perceptions of general invitations for involvement from the school and home-based parental involvement ($p < 0.05$).

Table 14

Correlation Coefficients for GIIS and HBPI Indicators

Variable	1	2	3	4	5	6	7	8	9	10
GIIS Indicators										
1. Teachers interested/cooperative										
2. Feel welcome	.606**									
3. Schedule	.365**	.588**								
4. Meetings/special events	.480**	.662**	.662**							
5. Contacts about problems	.657**	.715**	.493**	.654**						
6. Keep parent informed	.743**	.537**	.401**	.664**	.785**					
HBPI Indicators										
Someone in this family…										
7. Talks with child	-0.016	0.024	-0.039	-0.116	0.063	0.074				
8. Supervises homework	0.125	0.026	0.033	0.062	0.109	0.192	.434**			
9. Helps study for tests	0.199	0.053	0.096	0.048	0.055	0.208	.242*	.591**		
10. Practices skills	0.116	0.052	0.185	0.117	0.054	0.108	.219*	.585**	.744**	
11. Reads with child	0.12	0.113	0.112	0.08	0.113	0.141	.286**	.514**	.499**	.612**

**$p < 0.01$ (two-tailed); *$p < 0.05$ (two-tailed); $N = 86$

Research Question 4 Overview

How does home-based parental involvement in school activities differ based upon family characteristics?

This study focused on the statistically significant differences in home-based parental involvement during the long-term educational disruption of the COVID-19 pandemic based on family characteristics. The HBPI was the subscale utilized to measure perceived parental involvement in home-based school activities with children for each subquestion, except Research Question 4b. Thematic coding occurred to analyze Research Question 4b. Kruskal-Wallis H test analysis occurred to explore the impact of family characteristics and demographics with more than two groups of an independent variable. The Mann-Whitney U test occurred to explore differences in HBPI scores among dichotomous groups. The significance level for each Kruskal-Wallis H test and Mann-Whitney U test was $p < .05$. Descriptive statistics were the means used to calculate the median HBPI score and mean rank.

Scale Reliability Analysis for HBPI Subscale

The HBPI subscale is a tool by Walker et al. (2005) to capture the frequency of parental involvement in home-based school activities. The respondents identified the number of times during the 2020–2021 academic year they engaged with their child through conversations about the school day, supervision of homework, assistance with studying for tests, reading, and skills practice. The HBPI subscale consists of five items with a 6-point Likert scale: 1 = *never*, 2 = *1 or 2 times per week*, 3 = *4 or 5 times per week*, 4 = *once a week*, 5 = *a few times a week*, and 6 = *daily*. The calculation of Cronbach's alpha occurred for the HBPI subscale to assess its reliability, or internal consistency. Although not as high as the value by Walker et al. ($\alpha = .85$), the Cronbach alpha in this study was an acceptable value for the application of the HBPI subscale ($\alpha = .790$).

Research Question 4a: Kruskal-Wallis H Test

How does parental involvement in home-based school activities differ based upon annual household income?

Introduction

The Kruskal-Wallis H test is a nonparametric alternative to one-way ANOVA. The purpose of the Kruskal-Wallis H test is to identify statistically significant differences between groups of an independent variable on an ordinal or continuous dependent variable when the assumptions of the one-way ANOVA are not met (Laerd Statistics, 2015a). This study had an ordinal independent variable; therefore, the one-way ANOVA was not appropriate. For the sample (N = 86), an analysis of HBPI scores showed a mean score of 5.446 (SD = .661). This finding indicates that the parents reported engaging in home-based involvement in school activities a few times per week on average. The sample had a disproportionate representation of parents with household income levels of more than $60,000 (62.8%). Parents with household incomes of $30,001 to $60,000 comprised 25.6% of the sample, and only 11.6% reported household incomes of less than $30,000 (see Table 18). The Kruskal-Wallis H test occurred to determine if there were statistically significant differences in the overall HBPI scale scores between different household income groups. Closer inspection of item-level data also underwent analysis with the Kruskal-Wallis H test to find statistically significant differences in specific home-based parental involvement activities among income groups. The significance level for the Kruskal-Wallis H test was $p < .05$.

Results

A Kruskal-Wallis H test occurred to explore the statistically significant differences in median HBPI scores between three groups of participants with different income levels: $0–30,000; $30,001–60,000; and $60,001 and up. The median HBPI scores showed no trend from $0–30,000($Mdn$ = 5.80) to $30,001–

60,000 (*Mdn* = 5.68) and to $60,001 and up(*Mdn* = 5.70). Therefore, the data showed no statistically significantly different HBPI scores between income groups, $\chi^2(2) = .656$, $p = .720$ ($E_2R = 0.01$). The analysis showed a mean rank HBPI score of 48.80 for the $0–30,000 income group, 44.32 for the $30,001–60,000 income group, and 42.19 for the $60,001 and up income group (see Table 15).

Table 15

Descriptive Statistics for HBPI Scale Scores per Income Group

Income group	*n*	%	*Mdn*	*M* Rank
$0–30,000	10	11.6	5.80	48.80
$30,001–60,000	22	25.6	5.68	44.32
$60,001 and up	54	62.8	5.70	42.19

Note. N = 86, *Mdn* HBPI score = 5.68

In the sample population, the HBPI scores did not significantly differ between any income groups, although the parents in the lowest income group ($0–30,000) showed slightly higher median HBPI scale scores than those in the middle ($30,001–60,000) and high ($60,000 and up) income groups. Overall, the participants, regardless of income, exhibited very high levels of home-based parental activity. A closer examination of the item-level data showed that the same finding emerged for each parental involvement indicator on the HBPI (see Table 16). Thus, no statistically significant differences existed among the participants' reported participation in specific home-based parental involvement indicators. The results did not require post hoc analysis. Therefore, the null hypothesis was not rejected, and the alternative hypothesis was not accepted. The three income groups ($0–30,000; $30,001–

$60,000; and $60,000 and more) had equal ($p < 0.05$) distribution of home-based parental involvement scores.

Table 16

Kruskal-Wallis Analysis of HBPI Indicators Across Income Groups

HBPI Indicator	*M*	*SD*	χ^2	*p*	E_2R
Talks with child	5.90	.30	1.088	.580	0.01
Supervises homework	5.70	.73	4.512	.125	0.05
Helps study for tests	5.20	1.09	1.341	.512	0.02
Practices skills	5.40	.88	.198	.906	0.00
Reads with child	5.10	1.21	.214	.899	0.01

*$p < 0.05$ (two-tailed); $N = 86$

Research Question 4b Results: Qualitative Thematic Coding Analysis

How do parental employment schedules influence parental involvement in home-based school activities?

Introduction

The Hawk River, Belle Smith, and Shawnee Hills school districts implemented coronavirus mitigation strategies in March 2020 to protect the health and wellness of students and staff. For the 2020–2021 academic year, Hawk River School District made no changes to the academic calendar due to the COVID-19 pandemic; instead, they monitored student illness and mandated quarantine protocols to trigger remote learning on a case-by-case basis. The students and staff at Belle Smith School District began the school year in person and on time; however, the districts built in 2 weeks of remote learning

(November 30–December 11, 2020) before an extended Christmas break (December 12, 2020–January 4, 2021) in response to an anticipated increase in student and staff illness due to COVID-19 and influenza. Shawnee Hills School District took another approach to managing the challenges of COVID-19 by designating each Friday as a remote learning day, which provided teachers with the time needed to focus on instructional planning for sudden influxes of remote student learners. Furthermore, students of all three districts could opt-in to engage in full-time virtual learning based on the needs of their families at the beginning of each semester. For many families, the unfamiliar educational landscape occurred alongside significant pandemic-related employment changes.

The survey included one open-ended question to address the impact of the parents' employment schedules on their perceived home-based involvement in their children's school activities. The question was, "Explain how your work schedule during the COVID-19 pandemic has impacted your involvement in your child's home-based school activities." Of the survey respondents (*N* = 86), 55 (64%) responded to the open-ended question. Analysis and coding of the responses occurred to produce themes (see Appendix H). The emergent themes found in the analysis were work/life balance hardships, disparities based on family structure, essential worker hardships, and internet/technology issues.

Theme 1: Work/Life Balance Hardship

For many of the respondents, the onset of the COVID-19 pandemic and the intermittent transitions between remote and in-person learning presented challenges to their ability to balance employment and family responsibilities. The challenges mentioned in the survey showed that some (*n* = 18) parent schedules or work arrangements presented no significant impediments to parental involvement. However, other participants (*n* = 30) described their schedules as more strenuous and taxing during the pandemic, leaving them limited time and resources to assist in at-home school activities. One female respondent whose child participated in remote instruction for more than 30 days

described the extent and impact of the burden placed on her family due to her and her husband's inability to get involved in their child's home-based education during the pandemic because of their professional schedules:

> My husband and I are gone over 12 hours a day for work, and my child fell behind because there wasn't an adult there to supervise. She had her high-school-aged sister there making sure she logged in to do the work, but she had her own assignments to complete.

In contrast, a few of the parents had voluntarily or involuntarily lost or experienced diminished employment because of the pandemic. In turn, these parents had more time to devote to home-based school activities with their children. For example, one male respondent who reported that his child participated in 21 to 30 days of remote instruction during the 2020–2021 academic year said,

> COVID has caused me to be laid off from work; hence, my children get more parental supervision in activities, as well as more hands-on assistance in schoolwork as compared to pre-COVID days. More family time has been a little brighter despite COVID being a rather unpleasant event.

Theme 2: Family Structure

Family structure emerged as another theme with an effect on the time and ways in which the working parents could engage with their children's learning at home during the pandemic. Married couples managed remote learning by scheduling around each parent's work obligations or relying on extended family members for occasional assistance. Single parents appeared to have fewer scheduling options than married parents. Some of the single parents mentioned the need for additional support from people outside of their children's immediate family. To illustrate the differences, the following are the responses of a married female nurse and a single female nurse.

When asked to explain the impact of her work schedule during the COVID-19 pandemic on her involvement in her child's home-based school activities, a married woman whose child participated in more than 30 days of remote learning stated,

> I am a Registered Nurse and work nights; my husband is a Registered Nurse who works days. Therefore, on the days I work, he helps the children with homework, and they complete it in the evening. On the days I help the children with homework, we complete it in the day.

Conversely, a single mother whose child participated in only 11–20 days of remote learning during the 2020–2021 academic year had a much different experience than her married counterpart. She described support from her parents as critical to her child's participation in remote learning, saying, "I am a nurse. Being at home was never an option. If it wasn't for living with my parents and my father being retired, I would have had to pay someone to keep my children and help teach them."

A frustrated single father whose children participated in 30 or more days of remote learning underscored the adverse impact of his job schedule and his inability to adequately engage in remote learning activities on his children:

> I work anywhere from 10–12 hours a day with an hour drive one way. My oldest child is failing because I couldn't keep up with three kids. My children's mother tried as well, but we just ain't [sic] that smart on computers. This school kept switching up on software and ways to turn the homework in. It was a nightmare. By the time we figured it out, it was too late for my oldest. COVID-19 has been a nightmare.

Theme 3: Essential Worker Hardships

The burden of remote learning due to the pandemic was a particular challenge for parents who were essential workers, such as nurses and health care professionals. The participants who worked in these professions experienced tremendous increases in occupational expectations and workplace

stressors during the pandemic. An analysis of responses showed that the parents who were essential workers had little time and energy left at the end of their shifts to focus on their children's education. The parents who identified as essential workers or health care professionals described the nature of their jobs and long hours as extremely detrimental to the time they could spend getting involved in their children's school activities at home.

One female respondent whose child participated in remote instruction for more than 30 days shared the extent of the burden placed on her family during the pandemic due to her and her husband's essential worker status. She wrote, "My husband and I both were essential workers and worked throughout the pandemic. Finding childcare was difficult, and finding childcare that could assist with remote learning was virtually possible." This participant prioritized finding child care so both parents could continue to work. Remote learning provided additional challenges to essential worker parents during the pandemic.

Theme 4: Internet/Technology Issues

The lack of reliable internet connectivity in the geographical region was a significant challenge during the COVID-19 pandemic, as many of the families of remote-learning students struggled to retrieve assignments online and attend virtual instructional sessions. Parents, especially those who worked long hours during the pandemic, found the extraordinary educational challenges exacerbated by the limitations of their home internet access. For example, one female participant whose child participated in more than 30 days of remote instruction described the relationship between reliable internet access and her child's ability to learn: "I am an essential worker and *cannot* help my children daily with their schoolwork. Also, we are so rural and have very bad internet, making computer schoolwork nearly impossible. My children's learning suffered significantly without in-person instruction."

Other parents also noted the challenges associated with their ability to access and navigate various online learning tools (i.e., Google Classroom, Zoom, and email) and the remote learning schedules. A female participant whose child participated in 21–30 days of remote learning during the 2020–2021 academic year summed up her struggles by saying,

> Working 40+ hours a week and being a single mom did make it very difficult this year to keep up with schoolwork at times this year. It was more difficult due to having to learn how to use Google Classroom on my own and find my son's assignments. It was very difficult when my son would get quarantined, and we needed to figure out the virtual schedule versus the normal in-school schedule. Trying to figure out how to get on the Google Meets with my 10-year-old for the first time at home was a whole different story, and emailing the teachers to figure it out was not very helpful. This school year has definitely been more trying than previous years.

Research Question 4c Research: Mann-Whitney U Test

How does parental involvement in home-based school activities differ based upon family structure?

Introduction

The Mann-Whitney U test is a nonparametric alternative to the independent *t* test used to identify statistically significant differences between two independent dichotomous groups on a continuous or ordinal dependent variable (Laerd Statistics, 2015b). For this study, the Mann-Whitney U test was the means used to determine the statistically significant median difference in HBPI scores (i.e., dependent variable) between the parents who reported *married or domestic partnership* and those reported *single* (i.e., the two groups of the independent variable of family structure). The participants reported their family structure as single or married or in a domestic partnership. Twenty respondents (23.3%) reported *single*, and 66 (76.7%) reported *married or domestic partnershi*p. The HBPI had a mean

score of 5.446 (*SD* = .661), which indicates that the participants (*N* = 86) reported home-based involvement in school activities occurring at least weekly. The significance level for the Mann-Whitney U test was $p < .05$.

Results

A Mann-Whitney U test commenced to determine the statistically significant differences in HBPI scores between the *married or domestic partnership* and *single* participants. The median HBPI scores for the single parent group (5.60) and married or domestic partnership group (5.76) did not have statistically significant differences, U = 616.50, $z = -.456$, $p = .648$, with a mean rank HBPI score of 45.67 for the single group and 42.84 for the married or domestic partnership group (see Table 17). In the sample population, the reported levels of HBPI did not significantly differ between the family structure groups.

Table 17

Descriptive Statistics for HBPI Scale Scores per Family Structure Group

Family Structure Group	*n*	%	*Mdn* HBPI Score	*M* Rank
Single (never married, widowed, divorced, or separated)	20	23.3	5.60	45.67
Married or domestic partnership	66	76.7	5.78	42.84

Note. *N* = 86, *Mdn* HBPI scale score = 5.68

Overall, the participants, regardless of their relationship status, exhibited very high levels of home-based parental involvement. A closer examination of item-level data showed the same finding for each parental involvement indicator on the HBPI scale (see Table 18). No statistically significant

differences existed among the family structure groups in their reported participation in specific home-based parental involvement indicators. The HBPI scale scores and the item-level indicator responses did not significantly differ between the family structure groups. Therefore, the null hypothesis was not rejected, and the alternative hypothesis was not accepted. The home-based parental involvement scores for the family structure groups (i.e., single and married/domestic partnership) had equal distribution ($p < 0.05$).

Table 18

Mann-Whitney U Analysis of HBPI Indicators Across Family Structure Groups

	Mean Rank				
HBPI Indicators	Single	Married or Domestic Partnership	U	*p*	*r*
Talks with child	46.00	42.74	610.00	.207	0.08
Supervises homework	45.80	42.80	614.00	.530	0.07
Helps study for tests	40.95	44.27	711.00	.570	-0.07
Practices skills	41.80	43.37	674.00	.779	-0.04
Reads with child	47.15	42.39	587.00	.419	0.11

*$p < 0.05$ (two-tailed); $N = 86$

Research Question 4d Research: Kruskal-Wallis H Test

How does parental involvement in home-based school activities differ based upon parent educational background?

Introduction

The Kruskal-Wallis H test in a nonparametric alternative to the one-way ANOVA. The Kruskal-Wallis H test is a means of identifying statistically significant differences between groups of an independent variable on an ordinal or continuous dependent variable when one or more of the assumptions of the one-way ANOVA are not met (Laerd Statistics, 2015a). This study had an ordinal independent variable; therefore, the one-way ANOVA could not occur for the study. Many of the participants reported attending some college (37%) or graduating from college with bachelor's or advanced degrees (34%). The HBPI analysis showed a mean score of 5.446 (*SD* = .661), indicating that the parents (*N* = 86) reported home-based involvement in school activities occurring at least weekly. The Kruskal-Wallis H test occurred to determine if statistically significant differences existed in overall HBPI scale scores between different education groups. A closer inspection of item-level data also occurred with the Kruskal-Wallis H test for the statistically significant differences in the specific home-based parental involvement activities among the education groups. The significance level for the Kruskal-Wallis H test was $p < .05$.

Results

A Kruskal-Wallis H test occurred to examine the differences in HBPI scores between five groups of participants with different education levels: *some high school, no diploma*; *high school graduate, diploma, or the equivalent*; *some college credit, including trade, technical, and vocational training*; *college graduate*; and *advanced college degree*. The median HBPI scores showed no trend from *some high school, no diploma* (*Mdn* = 5.70) to *high school graduate, diploma or the equivalent* (*Mdn* = 5.80) to *some college credit, including trade, technical, and vocational training* (*Mdn* = 5.40) to *college graduate* (*Mdn* = 5.80) to *advanced college degree* (*Mdn* = 5.60). In the sample population, no statistically significant differences existed in overall HBPI scale scores between educational level groups, $\chi^2(4) =$

1.438, p = .838 ($E^2R = 0.02$). The mean rank HBPI scale scores for the *some high school; high school graduate, diploma or equivalent; some college credit, including trade/technical/vocational training; college graduate; and advanced college degree* were 52.25, 46.69, 40.08, 45.37, and 45.73, respectively (see Table 19).

Table 19

Descriptive Statistics for HBPI Scale Scores per Education Group

Education Level Group	*n*	*%*	*Mdn* HBPI Score	*M* rank
Some high school, no diploma	2	2.3	5.70	52.25
HS graduate, diploma, or equivalent	13	15.1	5.80	46.69
Some college credit, including trade, technical, and vocational training	37	43	5.40	40.08
College graduate	23	26.7	5.80	45.37
Advanced college degree	11	12.8	5.60	45.73

Note. N = 86*, Mdn* HBPI score = 5.68

Overall, the participants, regardless of education level, exhibited very high levels of overall home-based parental involvement. Closer examination of item-level data showed the same finding for each parental involvement indicator on the HBPI (see Table 20). No statistically significant differences existed among the groups in their reported participation in specific home-based parental involvement indicators. The results did not require post hoc tests. The HBPI scores and the item-level indicator responses did not significantly differ between any educational level groups. Therefore, the null hypothesis was not rejected, and the alternative hypothesis was not accepted.

Table 20

Kruskal-Wallis Analysis of HBPI Indicators Across Education Groups

HBPI Indicator	*M*	*SD*	χ^2	*p*	E^2R
Talks with child	5.90	.30	3.896	.420	0.05
Supervises homework	5.70	.73	2.526	.640	0.03
Helps study for tests	5.20	1.09	.824	.935	0.01
Practices skills	5.40	.88	1.005	.909	0.01
Reads with child	5.10	1.21	1.993	.737	0.02

*$p < 0.05$ (two-tailed); $N = 86$

Chapter 5: Conclusions

The purpose of this study was to investigate four research questions with the mixed methods design. The scales by Walker et al. (2005) were the means to measure the participants' school-influenced motivators of parental involvement and perceptions of parental involvement in home-based school activities. The study included one qualitative subquestion on the influence of parental employment schedules on the participants' perceived parental involvement in home-based school activities during the long-term educational disruption of the COVID-19 pandemic. The research questions focused on the parents of children who attended three rural elementary school districts during the first full academic year (2020–2021) after the onset of the COVID-19 pandemic.

Parental involvement, in general, correlates with increased student development and success (Catsambis, 2001; Clark, 1983; Dornbusch & Ritter, 1988; Hoover-Dempsey, Ice, & Whitaker, 2009; Jeynes, 2005a, 2005b, 2007). The benefits of parental involvement are apparent across all sociodemographic boundaries, such as ethnicity, race, grade, socioeconomic status, and special education designation (Altschul, 2011; Catsambis, 1998; Fan & Chen, 2001; Jeynes, 2012, 2017; Núñez et al., 2015; Reynolds et al., 2015; Sanders & Epstein, 2000; Scribner et al., 1999). However, little literature has provided insight into the factors with an influence on parents' decisions to become involved in their children's education, and even fewer researchers have focused on the topic in the rural space (Semke & Sheridan, 2012). Furthermore, the implications of the COVID-19 pandemic were, to varying degrees, a formula for a barrage of additional and exacerbated challenges to parental involvement in the rural space. Therefore, a need existed to capture the nuances of the construct of rural parental involvement during the pandemic to inform parental involvement initiatives and improve student success in the future.

The first step in crafting effective parental involvement strategies is understanding the social and life-context factors in rural parents' decisions to get involved in their children's education during the pandemic. Therefore, the goal of this study was to glean information directly from parents to improve student outcomes. Hoover-Dempsey and Sandler (1995, 1997) developed a theoretical model of the parental involvement process. The implication was that school and school district leaders could influence parents to become more involved in their children's education by developing and employing strategies focused on three constructs: parental self-efficacy, parental role construction, and general invitations for involvement from the school (Whitaker, 2019). This study focused on the three constructs, as well as several life-context variables, among parents in the rural setting during the COVID-19 pandemic. This chapter presents the findings, conclusions, and implications of the study, as well as recommendations for future research.

This study included three research questions on the relationships between the three school-influenced parental motivators for involvement (self-efficacy, role construction, and general invitations from the school) and participation in home-based school activities. This study also included one research question on the relationships between the four life-context variables (household income, employment schedules, family structure, and educational attainment) and parental participation in home-based school activities. Following is a discussion of the findings based on the data analysis for the three research questions.

Research Question 1

Research Question 1: What is the relationship between parental self-efficacy and home-based parental involvement in school activities?

After the initial COVID-19 shutdown ended, the districts represented in this study formulated safe reopening plans. In each district, school began on time for the 2020–2021 academic year with strict

COVID-19 mitigation plans, fully remote options for students who could not return to the classroom, and full-time and hybrid options students quarantined or isolated due to contact tracing policies. At the same time, parents addressed a multitude of personal and work-related challenges caused by the pandemic. Nevertheless, the results of this study suggest that the parents managed to maintain positive parental self-efficacy and home-based parental involvement amid the uncertainty and stress. Overall, the participants perceived they knew how to help their children do well in school, felt successful in their efforts to help their children learn, and felt that they made a significant difference in their children's school performance. Strong relationships between parental self-efficacy and home-based parental involvement also emerged from the study.

The results of the study aligned with the theory of self-efficacy (Bandura, 1986, 1989) and the Hoover-Dempsey and Sandler (1995, 1997, 2005) model of parental motivators for involvement. Parents who perceive themselves as capable and successful contributors to their children's education are more likely to engage. In this study, parental self-efficacy and participation in home-based school activities were directly proportional to one another. The parents who considered themselves capable and successful players in their children's education reported higher levels of all types of at-home involvement (e.g., talking with the child, supervising homework, helping to study for tests and practice skills, and reading with the child). In contrast, parents with weaker self-efficacy scores reported less participation in home-based involvement. Interestingly, the data also suggest that although an overwhelming majority of parents reported talking to their children at least a few times a week, only a slight positive relationship existed between the survey item talking with the child and the PSE indicator knows how to help. Therefore, the act of talking with the child about the school day did not correlate to the parents' feelings of success in getting involved or their belief that they made a significant difference through their efforts. Thus, the findings indicate that talking with children about the school day is a

customary act that frequently occurs, regardless of whether parents consider their school-related efforts helpful or impactful.

This study suggests that parental self-efficacy was an important driver of parental involvement during the COVID-19 pandemic. Therefore, the districts in this study could leverage their resources to strengthen parental self-efficacy through strategic planning (Hoover-Dempsey, Whitaker, & Ice, 2010). Districts and schools should boost parents' confidence by offering activities throughout the school year to prepare parents for their children's anticipated academic content. Additionally, districts and schools should recognize and regard parents as valuable partners, train them to effectively communicate with their children about school activities, and offer guidance on how to create and maintain suitable and structured home-learning environments (Epstein, 2019b). Based on Epstein (2019b) and the results of this study, the following are activities useful for the study's districts during times of educational discontinuity: (a) virtual parent office hours to create dialogue about children's specific educational desires/needs, (b) virtual parent sessions to prepare parents for weekly academic content, (c) parent-focused how-to videos for tough assignments, (d) invitations to parents to present virtually as parent content experts, (e) parent support groups for those facing specific hardships, and (f) community-building by recognizing and highlighting parents who have overcome unique obstacles to stay involved in their children's education. Also, schools and districts might need to revise the administration and modality of activities of the traditional setting to strengthen parental self-efficacy based on transmission mitigation strategies and other community-specific challenges. School and district leaders should acknowledge and address all of the above in their districts' ongoing needs assessments.

Research Question 2

What is the relationship between parental role construction activity beliefs and home-based parental involvement in school activities?

COVID-19 was a chaotic time for schools and parents. Before the pandemic, parents could feel confident that, on any given weekday, their children could attend school and receive supervision from qualified teachers who bore the instructional and pedagogical burden of their children's education. However, the pandemic resulted in uncertain and complicated educational pathways for children due to the steady influx of COVID-related challenges (e.g., remote learning, remote work, illness, financial stressors, and employment changes). With each new development, parents had to reevaluate and adjust their beliefs about the roles they played in their children's education.

During these moments of reflection and reevaluation, many parents looked to their children's schools as navigational beacons, asking themselves a myriad of questions: What are my responsibilities? Do I have the time and resources to do all the things required of me now? Are volunteer opportunities still available? Simultaneously, districts and schools focused on the delivery of effective and equitable education to all students after the historic upending of the entire instructional paradigm. Understandably, the promotion of and support for traditional forms of parental involvement were overlooked due to the multitude of challenges the pandemic presented to districts and schools. Moreover, emerging COVID-19 mitigation policies did not enable parents to be present at schools for extended periods during the 2020–2021 academic year. School and district leaders placed existing in-school parental involvement initiatives on indefinite hold. Thus, increased at-home parental involvement during the pandemic was a necessity as well as a requirement for student learning due to statewide executive actions for mandatory and intermittent quarantines, isolations, and school closures throughout the 2020–2021 academic year. The disruption of the pandemic caused many parents to engage in cyclic self-examination of their role in their children's education.

This study found high levels of parental involvement in home-based school activities and very positive personal responsibility for their children's educations (parental role construction role activity

beliefs) among the participants. As was the case with parental self-efficacy in Research Question 1, parental role construction activity beliefs and home-based parental involvement were directly proportional to one another. This finding aligned with the parental motivators represented in the Hoover-Dempsey and Sandler model (1995, 1997) and previous studies on the importance of school strategies for bolstering parental role construction (Anderson & Minke, 2007; Deslandes & Bertrand, 2005; Green et al., 2007, Marinez-Lora & Quintana, 2009; Park & Holloway, 2018). Overall, the results suggest that the participants viewed parental role construction as an important influencer of parental involvement during the pandemic. But how did parents' beliefs that they should get involved translate into real-world practice? Did their sense of responsibility match their actions?

Examination of the correlational coefficients between parental role construction activity beliefs and participation in specific home-based school activities bridged some of the gaps between parental beliefs and perceived parental actions. Two specific beliefs of the parental role construction construct emerged as the main influencers of involvement for the parent sample: stay on top of things and explain assignments. The parents who believed it was their responsibility to remain informed at school also reported higher levels of talking with the child about school, supervising homework, helping their children study for tests, practicing skills, and reading with the child. On the other hand, the parents with less belief in their responsibility to stay on top of things at school did not participate in traditional home-based learning activities as frequently as those who held the opposite belief. The same trend existed for parents who believed it was their responsibility to explain tough assignments to their children, as these parents spent more time participating in all home-based parental involvement activities except talking with their child about school than those who did not believe it was their responsibility.

Nuanced relationships also emerged between RAB indicators and specific types of home-based parental involvement. One of these relationships consisted of reported homework supervision and

parental beliefs regarding the responsibility to maintain communication about school activities with children and teachers. Parents who reported high levels of homework supervision held strong positive beliefs regarding their responsibility to talk with their children about the school day and communicate with their children's teachers. This relationship could have existed because the act of homework assistance inherently requires a dialogue between children and parents. Furthermore, the parents' exposure to and engagement with their children's homework inherently creates higher levels of procedural and content-specific questions, thus resulting in increased communications between parents and teachers. However, in this study, no statistically significant relationship emerged between the parents' belief that it was their responsibility to help with homework and reported levels of homework supervision. In other words, the parents sampled might have risen to the occasion and highly prioritized their children's homework, regardless of whether they believed it was their responsibility to do so.

The study also suggests that the pandemic could have caused parents to make decisions regarding their involvement to maximize the return of the investment of their time and energy. At the time of the survey, parents faced multiple demands on their time and energy from all directions, and most parents felt some degree of pandemic fatigue. The parents in this study may have coped with the stressors of the pandemic by prioritizing their involvement around a triad of activities to support the educational goals for their children. This triad included specific home-based parental involvement activities in which all respondents agreed fell under their direct parental purview: (a) talking with children about the school day, (b) helping children with homework, (c) and staying on top of things at school. Unlike the more neutrally regarded activities (i.e., making sure the school had what it needed, talking with other parents, and volunteering at the school), this triad of activities directly contributed to the completion of homework and school-related tasks.

Like parental self-efficacy, parental role construction is a powerful influence on active parental involvement (Hoover-Dempsey, Whitaker, & Ice, 2010). Taking advantage of the social malleability of parental role construction requires school-based parent involvement initiatives with strategies for supporting the development of positive parental role construction beliefs. Specifically, school improvement plans should address the organized and consistent circulation of information between the school and home so parents do not become overwhelmed with the myriad of tasks associated with staying on top of things. The flow of information should include the grade-level skills necessary for student success, homework policies, tips for discussing schoolwork with children, daily and weekly school calendars, family learning opportunities, and content-specific aid for difficult concepts (Epstein, 2019b). Self-efficacy can increase parents' belief in their responsibility to assist with difficult assignments; therefore, the provision of informal and formal training for complex school-related concepts and processes could be means of simultaneously building both parental self-efficacy and parental role construction. Overall, the results of this study suggest that, like parental self-efficacy, parental role construction was an important influencer of parental involvement during the pandemic.

Research Question 3

What is the relationship between parental perceptions of general invitations for involvement from the school and home-based parental involvement in school activities?

The revised Hoover-Dempsey and Sandler model (Walker et al., 2005) indicates that parents who feel welcomed and integral to their children's success are more likely to become involved. Therefore, parental perceptions of general invitations for involvement are an accepted driver of parental involvement in the traditional school setting. Model development and testing occurred during prepandemic times; thus, there was no expectation that each of the personal and contextual motivators identified in this study would have an influence on parental involvement in the same ways during the

pandemic. The results of this study suggest that although, overall, the participants had positive parent perceptions of GIIS, the onset and effects of the pandemic may have resulted in the diminished influence of invitations from important others. In this study, parental perceptions of GIIS were not an influencing factor of home-based parental involvement, a finding that did not align with the study's theoretical framework and other supportive studies (Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2005). Furthermore, none of the GIIS indicators correlated with any of the HBPI indicators, suggesting that any school district efforts to directly increase at-home parental involvement through school climate strategies did not result in changes in parental involvement during the pandemic. However, the participants did report positive self-efficacy earlier in the study; therefore, some or all of the GIIS factors could have had an indirect but positive impact on parental involvement via parental self-efficacy (Bandura, 1986,1989) and role construction (Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2005).

This finding is an interesting anomaly for the represented districts and schools, as it shows future policymakers where not to focus their limited energy and resources during long-term educational disruptions. Nevertheless, the effectual relationship between GIIS, parental self-efficacy, and parental role construction indicates that all district leaders should implement school climate initiatives to foster welcoming, interesting, cooperative, and engaging environments for parents. However, during educational disruptions, both parents and schools have limited resources (time, energy, and money) and face a multitude of educational challenges, such as teachers juggling in-person and remote curriculum and instruction simultaneously, widespread financial hardships, systemic changes to employment, and mental and physical illness. Therefore, school and district leaders might need to set aside the strategies associated with the direct improvement of GIIS indicators to increase parental involvement until the return to the traditional educational model.

Research Question 4

How does parental involvement in home-based school activities differ based on family characteristics (i.e., household income, employment schedules, family structure, and educational background)?

Undoubtedly, pandemic-era parents experienced significant everyday stressors that impacted their ability to get involved in their children's educations. However, the results of this study suggest the participants prioritized their children's education, regardless of their personal stressors. The Hoover-Dempsey and Sandler model (Hoover-Dempsey & Sandler, 1995, 1997; Walker et al., 2005) indicates that a parent's time, energy, knowledge, and skills can have an impact on parental involvement. However, some studies regarding these constraints as predictors of parental involvement have had mixed results (Anderson & Minke, 2007; Fan & Chen, 2001; Green et al., 2007; Lareau, 1987; Stevenson & Baker, 1987).

An expected outcome of this study was that the economic volatility and extreme systemic stressors caused by the pandemic and factors associated with these constraints (i.e., household income, family structure, employment schedules, and educational background) would have an effect on the participants' perceived home-based parental involvement. However, when examined as factors independent of one another, three of these constraints were not influencers of parental involvement: household income, family structure, and educational attainment. In other words, the participants with low incomes perceived themselves as engaged as their higher-income counterparts, the single parents perceived themselves as engaged as their married counterparts, and parents with lower educational attainment perceived themselves as engaged as their more highly educated counterparts. These results do not align with earlier studies of the sociodemographic factors thought to be contributors to disparities in parental involvement: family structure (Brody et al., 1999; Epstein, 1990; Kohl et al., 2000;

Lareau, 1987; Zill, 1997) and educational attainment (Baker & Stevenson, 1986; Grolnick & Slowiaczek, 1994; Roscigno et al., 2006). Educational attainment and single parenthood are factors often rooted in poverty. Therefore, the federal financial stimulus payments and expanded unemployment benefits could have mitigated some of the stressors to parental involvement.

This study's results suggest that, in some regards, the COVID-19 pandemic could have been a great equalizer for at-home parental involvement. Very few, if any, families were immune to the sweeping changes to education caused by the pandemic. A cursory review of parent responses indicates the parents felt mobilized to take more responsibility in their children's education, and this study's findings suggest they responded. The study found proportional and high levels of perceived parental involvement across income, family structure, and educational background groups. Conversely, and in line with Freeman's (2010) assertion, the pandemic could also have caused parents to change their perceptions of their role in their children's education. In other words, low-income families, who historically have had more relaxed and informal mantras for parental involvement, could have found it necessary to take a more formal and involved approach due to an overwhelming quantity of emergent competing variables.

In alignment with prepandemic studies, this study showed that inflexible and rigorous employment schedules had a tremendous impact on how parents became involved in their children's educations during the pandemic (Brock & Edmunds, 2010; Griffith, 1998; Garcia Coll et al., 2002; Hoover-Dempsey et al., 1987; Weiss et al., 2003). This study found that much of this reported variability in parental involvement based on employment schedules occurred based on family structure, essential worker status, and remote employment status. Nuanced details from the open-ended responses indicate that some of the participants had to work harder and show more diligence to ensure that their children received proper supervision and assistance with school activities at home.

The participants who were essential workers and single parents withstood most of the pandemic's effects on parental involvement. In these cases, the participants lacked time and energy due to the physical and mental loads of their positions. Subsequently, many of the participants had to relinquish their parental involvement duties to extended family members, close family friends, or hired helpers. Many parents also experienced technological and internet issues while learning and navigating online learning platforms, which often resulted in intense frustration for many and complete resignation for some. Thus, essential worker status and single parenthood could have had a direct and adverse effect on some children's academic success. However, other parents had vastly different experiences.

Not all participants reported that the pandemic had negative effects on their ability to get involved with their children's education at home. Parents with stay-at-home roles in the household said the pandemic had little effect on their parental involvement. Interestingly, parental involvement increased within some households due to pandemic-driven layoffs and underemployment, as these parents had more time to dedicate to their children's learning. Although no two participants experienced the same employment conditions during the pandemic, most of the parents found ways to ensure their children had their educational needs met, either personally or by proxy, regardless of their lack of resources. The extreme employment-related variability among families during the pandemic presents school and district leaders with the difficult task of ensuring that all parents, including their proxies, can effectively contribute to their children's educational needs.

The results suggest that the schools represented by this study's population should focus on training programs and robust communication plans. This study showed that parental self-efficacy and parental role construction were critical to parental involvement in home-based school activities. Therefore, a need exists to leverage school and district resources to strengthen parental self-efficacy and parental role construction, not only for parents but for all the important others who stand in and

help parents during taxing times (Hoover-Dempsey, Whitaker, & Ice, 2010). School and district leaders should expand the recommendations for schools and districts in Research Questions 1 and 2 to include all at-home educational proxies. In addition, schools and districts should allow and encourage parents to designate proxies on official school documents and include them in communication channels so these important others have access to all or some information regarding students.

Recommendations for Future Research

The following are recommendations to improve parental involvement for the school districts involved in the study and future research endeavors.

1) This study included parents of elementary-aged children from three rural consolidated school districts in Southern Illinois. A recommendation is to repeat this research in similar districts with long-term educational disruptions in the Midwest and other rural regions in the United States as the pandemic continues. Such research could provide the opportunity for comparative analysis to determine if parental involvement changes occur based on geographic location.
2) This study occurred during the peak of the COVID-19 pandemic, at the peak of illness and mitigation strategies. A recommendation is to repeat this research on the same population yearly as more people, including children, have received COVID-19 vaccinations and as school and district leaders change management strategies. Such research could enable comparative analysis of the significant changes in the locale-specific parental involvement construct over time.
3) This research included the collection and analysis of parental perceptions of involvement. Future researchers could repeat the study and include teacher perceptions of parental involvement. Such a comparative analysis could indicate if significant differences exist between teachers' and parents' perceptions of parental involvement.

4) This research focused on the relationship between the motivators of at-home parental involvement and perceived levels of parental involvement. Future scholars could ask questions about student academic success with a survey instrument or harvest data from the districts with random sampling procedures. Such research could provide the opportunity for correlational analysis between perceived parental involvement and perceived student academic success.
5) This study focused on the research-backed motivators of parental involvement independent from one another. Future scholars could conduct inferential statistical analyses of the current data set to determine if any significant changes in the relationship between parental self-efficacy and parental role construction occur based on the absence or presence of other variables.
6) This research took place with predominantly quantitative methods, with the participants receiving only a small portion of the survey to editorialize their lived experiences during the pandemic. Future researchers could administer the survey and engage in interviews to more vividly capture the otherwise lost or overlooked crucial subtleties of the barriers to parental involvement.

Summary

The purpose of this study was to examine the relationship between parental self-efficacy, parental role construction activity beliefs, and parental perceptions of general invitations and home-based parental involvement with school activities in three rural elementary schools during a long-term educational disruption (the COVID-19 pandemic). The study was a means of examining whether home-based parental involvement in school activities differed based on various family background characteristics. An analysis of survey responses from 86 parents of K–5 students enrolled in three predominantly White rural public school districts in Southern Illinois found high parental self-efficacy.

Additionally, the study indicated high parental role construction levels that correlated positively with perceived levels of home-based parental involvement. The study found no statistically significant differences in home-based parental involvement levels among sociodemographic groups. However, the qualitative analysis of the survey's open-ended question showed that single parents and essential worker parents encountered significant challenges and barriers to parental involvement during the pandemic. The districts within the scope of the study could use this study's results to develop and improve parental involvement initiatives during long-term educational disruptions.

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Appendix A: Author's Consent for Use of Parental Involvement Scales

Grabert, Allison F

From: Walker, Joan T. <jwalker@pace.edu>
Sent: Wednesday, January 27, 2021 8:59 AM
To: Grabert, Allison F
Subject: RE: Parental Involvement Scales - Permission to Use

*** This message was sent from a non-USI address. Please exercise caution when responding, clicking on links or opening attachments. ***

Dear Allison,

Thank you for your interest in our work.

You are very welcome to use the model and our related scales, which can be found on our archived website: http://web.archive.org/web/20130202151528/http:/www.vanderbilt.edu/peabody/family-school/Reports.html

On the site please refer to the Statement of Use document, which explains which papers to cite for the specific scales you used.

Best wishes to you on your research. Please do let me know what you learn. Your topic is of deep personal interest to me.

Joan Walker

Joan Walker, PhD
Interim Associate Provost for Academic Affairs
Pace University
One Pace Plaza
New York, NY 10038
914.773.3803

From: Grabert, Allison F <afgrabert@usi.edu>
Sent: Friday, January 15, 2021 4:05 PM
To: Walker, Joan T. <jwalker@pace.edu>
Subject: Parental Involvement Scales - Permission to Use

Dear Dr. Walker,

Good afternoon. I hope you are doing well through this extremely trying time. Presently, I am a doctoral student at the University of Southern Indiana focusing on parental involvement in the rural school setting during the COVID-19 pandemic. To this end, I am seeking approval from you for the use of your scales to access parents' decisions to get involved in their children's educations. From my research, I hope to glean information that may be useful to rural schools as they develop policies and practices for family engagement during times of long-term instructional disruption. To be specific, I wish to use the following scales: role activity beliefs, parental self-efficacy, parent perceptions of invitations for involvement from the school, and parent involvement in home-based and school-based activities.

Appendix B: Notice of IRB Approval

UNIVERSITY OF SOUTHERN INDIANA

Office of Sponsored Projects and Research Administration
8600 University Boulevard * Evansville, Indiana 47712 * 812-465-1126
www.usi.edu/ospra - rcr@usi.edu

DATE:	April 6, 2021
TO:	Allison Grabert
FROM:	USI Office of Sponsored Projects and Research Administration
PROJECT TITLE:	[1722934-1] Exploration of School-Influenced Parental Motivators of Family-School Engagement During the COVID-19 Pandemic in the Rural Setting
REFERENCE #:	2021-088-SEE
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
IRB APPROVAL DATE:	April 6, 2021
EXPIRATION DATE:	April 6, 2022
REVIEW CATEGORY:	TYPE 1 RESEARCH - Exempt Category # 2

The above project has been approved by USI's IRB under the provision of Federal Regulations 45 CFR 46.

This approval is based on the following conditions:

1. The materials you submitted to the IRB (through IRBNet) provide a complete and accurate account of how human subjects are involved in your project.
2. You will carry on your research strictly according to the procedures described in the materials presented to the IRB.
3. If any changes are made, you will submit the Amendment Form through IRBNet.
4. You will immediately report to the Office of Sponsored Projects and Research Administration any problems or adverse events encountered while using human subjects.
5. Prior to expiration, you will submit a Continuing Review Form through IRBNet.

This project requires continuing IRB review on an annual basis. Please use the Continuing Review Form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of April 6, 2022.

To renew this project or make a modification, please see the IRBNet User Manual on our website at usi.edu/ospra for step-by-step instructions on submitting the Continuing Review Form or the Amendment Form.

If you have any questions, please contact us at 812-465-7000 or rcr@usi.edu.

Please include your project title and reference number in all correspondence with this committee.

Appendix F: Research Survey Instrument

UNIVERSITY OF SOUTHERN INDIANA
Exploration of School-Influenced Parental Motivators of Family-School Engagement During the COVID-19 Pandemic in the Rural Setting
1722934-1

You are invited to participate in a survey research study that examines how school-influenced motivators of parental involvement are related to home-based parental involvement in school activities in rural elementary schools during the COVID-19 pandemic.

This study is being conducted by Allison Grabert, a doctoral student in the Department of Teacher Education at the University of Southern Indiana and Dr. Bonnie Beach, faculty sponsor. Allison Grabert can be reached at:

University of Southern Indiana
c/o Allison Grabert
8600 University Blvd
Evansville, IN 47712
Email: afgrabert@usi.edu
Phone: 812-774-3739

This study will take approximately 10 minutes of your time. You will be asked to complete an online survey about your perceptions of a few factors that influence your home-based involvement with your child school-related activities.

Your decision to participate or decline participation in this study is completely voluntary and you have the right to terminate your participation at any time without penalty. You may skip any questions you do not wish to answer. If you do not wish to complete this survey simply close your browser.

Your participation in this research will be completely confidential. No personally identifiable data will be collected from this survey; however data collected will be housed on a secured server at the University of Southern Indiana for ten years and access will be restricted to the principal investigator, Allison Grabert, the researcher's faculty sponsor, Dr. Bonnie Beach, and the

researcher's dissertation committee members, Dr. Paul Theobald and Dr. Kelly Sparks. There are no risks to individuals participating in this survey beyond those that exist in daily life.

Thank you very much for your time and consideration. Your feedback is appreciated and is important to the advancement of rural-centric educational research.

Please print a copy of this consent form for your records, if you so desire.

This survey is intended to be completed by a parent or guardian of an elementary school-aged child (grades K-5) attending [redacted]

Please answer the following questions as they pertain to your experiences with your child and your child's school during the 2020-21 academic year. Only one parent from each household should complete this survey.

If more than one child lives in your household, please complete the survey by using only one of your children to draw upon for all of your responses

End of Block: Directions

Start of Block: District Verification Question

In which district does your child attend school?

[redacted]

○ None of these

Skip To: End of Survey If In which district does your child attend school? = None of these

End of Block: District Verification Question

Start of Block: Grade Level Verification Question

Is your child in grades K - 5?

- Kindergarten
- 1st Grade
- 2nd Grade
- 3rd Grade
- 4th Grade
- 5th Grade
- None of these.

Skip To: End of Survey If Is your child in grades K - 5? = None of these.

End of Block: Grade Level Verification Question

Start of Block: Respondent's Relationship to the Child

What is your relationship to the child?

- Mother/Step-mother
- Father/Step-father
- Grandparent
- Other (Please describe.) _____

End of Block: Respondent's Relationship to the Child

Start of Block: Respondent's Gender

What is your gender?

- Male
- Female
- Non-binary / third gender

End of Block: Respondent's Gender

Start of Block: Respondent's Race/Ethnicity

What is your race/ethnicity? (You may select more than one.)

- ☐ White
- ☐ Hispanic or Latino
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian or Hawaiian/Pacific Islander
- ☐ Two or more races (Please provide a description if you would like.) _____
- ☐ Other (Please provide a description if you would like.) _____

End of Block: Respondent's Race/Ethnicity

Start of Block: Respondent's Marital Status

What is your marital status?

- ○ Single (never married, widowed, divorced, separated)
- ○ Married or domestic partnership

End of Block: Respondent's Marital Status

Start of Block: Respondent's Educational Attainment

What is the highest degree or level of school you have completed?

- ○ Some high school, no diploma
- ○ High school graduate, diploma or the equivalent (for example: GED)
- ○ Some college credit, including trade/technical/vocational training
- ○ College graduate (BA/BS degree)
- ○ Advanced college degree (master's/doctorate)

End of Block: Respondent's Educational Attainment

Start of Block: Average Household Income

What is your average annual household income?

- ○ $0 - $30,000
- ○ $30,001 - $60,000
- ○ $60,001 and up

End of Block: Average Household Income

Start of Block: Virtual/At-Home Instruction

Approximately, how many days has your child participated in remote instruction during the 2020-21 academic year?

- ○ Less than 10 days
- ○ 11-20 days
- ○ 21-30 days
- ○ More than 30 days

End of Block: Virtual/At-Home Instruction

Start of Block: Parental Role Construction - Role Activity Beliefs

Please indicate how much you AGREE or DISAGREE with each of the following statements. Please think about the current school year (academic year 2020-2021) as you consider each statement.

I believe it is my responsibility to . . .

	Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
volunteer at the school.	○	○	○	○	○	○
communicate with my child's teacher regularly.	○	○	○	○	○	○
help my child with homework.	○	○	○	○	○	○
make sure the school has what it needs.	○	○	○	○	○	○
support decisions made by the teacher.	○	○	○	○	○	○
stay on top of things at school.	○	○	○	○	○	○
explain tough assignments to my child.	○	○	○	○	○	○
talk with other parents from my child's school.	○	○	○	○	○	○
make the school better.	○	○	○	○	○	○
talk with my child about the school day.	○	○	○	○	○	○

Please indicate how much you AGREE or DISAGREE with each of the following statements. Please think about the current school year academic year 2020-2021) as you consider each statement.

	Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
I know how to help my child do well in school.	○	○	○	○	○	○
I don't know if I'm getting through to my child.	○	○	○	○	○	○
I don't know how to help my child make good grades in school.	○	○	○	○	○	○
I feel successful about my efforts to help my child learn.	○	○	○	○	○	○
Other children have more influence on my child's grades than I do.	○	○	○	○	○	○
I don't know how to help my child learn.	○	○	○	○	○	○
I make a significant difference in my child's school performance.	○	○	○	○	○	○

End of Block: Parental Self-Efficacy

Please indicate how much you AGREE or DISAGREE with each of the following statements. Please think about the current school year (academic year 2020-2021) as you consider each statement.

	Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
Teachers at this school are interested and cooperative when they discuss my child.	○	○	○	○	○	○
I feel welcome at this school.	○	○	○	○	○	○
Parent activities are scheduled at this school so that I can attend.	○	○	○	○	○	○
This school lets me know about meetings and special school events.	○	○	○	○	○	○
This school's staff contacts me promptly about any problems involving my child.	○	○	○	○	○	○
The teachers at this school keep me informed about my child's progress in school.	○	○	○	○	○	○

Families do many different things when they are involved in their children's education. We would like to know how true the following statements are for your family. Please think about the current school year academic year (2020-2021) as you consider each statement.
Someone in this family . . .

	Never	1-2 times this year	4-5 times this year	once a week	a few times a week	daily
talks with this child about the school day.	○	○	○	○	○	○
supervises this child's homework.	○	○	○	○	○	○
helps this child study for tests.	○	○	○	○	○	○
practices spelling, math, or other skills with this child.	○	○	○	○	○	○
reads with this child.	○	○	○	○	○	○
helps out at this child's school.	○	○	○	○	○	○
attends special events at school.	○	○	○	○	○	○
volunteers to go on class field trips.	○	○	○	○	○	○
attends PTA meetings.	○	○	○	○	○	○
goes to the school's open house.	○	○	○	○	○	○

End of Block: Parental Involvement in Home-based School Activities

Start of Block: Qualitative Question

Explain how your work schedule during the COVID-19 pandemic has impacted your involvement in your child's home-based school activities.

_____

_____

_____

_____

_____

End of Block: Qualitative Question

Appendix G: Parent Recruitment Letter

Appendix D: Parent Recruitment Letter

Dear parents,

The parents of your school district have a unique opportunity to participate in a survey research study that examines how school-influenced motivators of parental involvement are related to home-based parental involvement in school activities in rural elementary schools during the COVID-19 pandemic. Also under investigation is whether home-based parental involvement in school activities differs based upon various family background characteristics during the pandemic.

Your responses to this survey will help inform rural schools and districts as they work to devise strategic plans of action for potential long-term educational disruptions in the future due to pandemics.

The survey should take approximately 10 minutes for you to complete. You will be asked to answer questions about your perceptions of a few factors that influence your home-based involvement with your child's school-related activities. Within the survey, you will progress through six sections: (a) family background characteristics, (b) beliefs regarding parent's role in their child's education, (c) beliefs regarding the parent's ability to help their child succeed in school, (d) parent perceptions of general invitations for involvement from the school, (e) parent involvement in school activities, and (f) parent perceptions of the impact of their work schedules on their involvement in home-based school activities

Your participation in the survey is voluntary and all responses are completely confidential as no personally identifiable information will be associated with your responses. Please consider taking a few moments of your time to complete the survey which may be accessed by clicking on the link below or copying and pasting the link into your Internet browser.

Survey link: https://tinyurl.com/ruralparent

Should you have any comments or questions, please contact Allison Grabert, doctoral student at the University of Southern Indiana, at afgrabert@usi.edu or 812-774-3739.

Thank you very much for your time and consideration. Your feedback is appreciated and is important to the advancement of rural-centric educational research.

Sincerely,

Allison Grabert

Doctoral Student

University of Southern Indiana

Appendix H: Thematic Coding