ENGAGING FAMILIES IN THE ACADEMIC LIVES OF PRESCHOOL CHILDREN: AN ACTION RESEARCH STUDY

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Dedication

I dedicate this work to my mom and to the memory of my dad. The strength of your unconditional love and support traverses my past, present, and future. I share the honor of reaching this milestone with you.

Acknowledgments

I would like to express sincere and heartfelt appreciation to Dr. Margaret Constantino, my dissertation chair, for your guidance and encouragement throughout the dissertation process. You always knew the words I needed to hear to keep momentum moving forward. You believed in me, and I thank you. I would like to thank Dr. Steven Constantino, whose research guided this study. The knowledge I've gained from studying your work has transformed my beliefs and improved my practice. I would like to thank Dr. Jennifer Parish and Dr. Steven Staples for your encouragement and support extended from the inaugural summer that began my dissertation journey to the culminating end that marked its completion. I am honored you were a part of my team. To the faculty and staff of William & Mary, particularly the School of Education, who played a part in the realization of a longtime aspiration, I thank you. I would like to thank Dr. Vin Bradley, Dr. Amy Paulson, and Dr. Adam Southall for your friendship and support. You were the cheering section that kept me in the race to the finish line.

There are no words to express the gratitude I feel toward my mom, Ruby Fultz, and my dad, the late Ronnie Fultz, Sr. Thank you for your many sacrifices along the way. I would like to thank Kevin Johnson, the one who knows me best, for your unique way of offering support. I am thankful you traveled this road with me. Finally, I would like to thank Lisa Rosenberg, Naarah Leghorn, and the families who participated in this study. I hope you enjoyed our time together as much as I did.

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Abstract

The practice of family engagement enables families and school staff to share responsibility for child development in a partnership characterized by mutual respect for the influential role each plays in a child's academic life. Unsatisfactory outcomes of family engagement practices with families of preschoolers warranted the implementation of a family engagement intervention program central to this action research study. The *Engage Every Family: Five Simple Principles* framework guided family-school collaborative efforts to increase family efficacy for engaging preschoolers in developmentally appropriate learning activities at home. Engagement activities were provided in the form of virtual workshops and collaboration on social media. Mixed methods were used to examine the degree of participation in the family engagement intervention program and any changes in behaviors and perceptions of self-efficacy for engaging preschoolers. Data analysis of the record of participation revealed higher participation in engagement activities than in previous years. Manual coding of focus group transcripts and statistical analysis of self-reported rating scale responses revealed participants perceived mixed levels of self-efficacy for engaging in the academic lives of preschoolers. Participants ascribed a higher degree of influence on child achievement to the efforts of the school and a lesser degree of influence to family experiences. The study has implications for continued efforts to engage families and develop relationships essential for building self-efficacy to potentially shift family beliefs to a level of confidence for performing in parental roles supportive of child success. An investment of time and commitment is required to produce desired outcomes.

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CHAPTER 1

INTRODUCTION

Background

Parenting can be described as a rewarding gift. With the reward comes the responsibility of fulfilling an important role toward the prosperity of a dependent individual. Each parent may perceive this role in many ways and may feel more or less competent in their ability to perform in each of them (Meunier & Roskam, 2009; Pavlov & Džinović-Kojić, 2018). This study focused on the role of the parent as their child's teacher. References to parenting or the role of the parent or the family are associated with behaviors that contribute to a child's academic success.

Educational institutions might develop parental competencies by offering workshops and trainings to cultivate engagement with learning (Pavlov & Džinović-Kojić, 2018). Preschool programs intentionally inclusive of family engagement may improve parental readiness so that parents and families feel more comfortable and competent in their role as their child's first teacher (Constantino, 2021; Pelletier & Brent, 2002; U.S. Department of Health and Human Services [USDHHS] et al., 2018; Virginia Department of Education, n.d.-a).

Parental roles can be fulfilled by individuals in varied relationships with the child. For this reason, the use of the term *parent* or *parents* in this study is representative of individuals with legal rights to the child, such as biological, adoptive, or foster parents or legal guardians. Additionally, a child's developmental support system may extend beyond individuals with legal obligations to care for the child. Therefore, the use of the term *family* or *families,* when applicable for this study, is representative of individuals with legal rights to the child and any family member or adult assisting in a child's well-being and upbringing for a more inclusive approach to examining competencies for supporting child development.

In a national study of 1,148 adults conducted by the National Parent Teacher Association & Newsweek (1993), 40% of U.S. parents acknowledged more of their time should be devoted to their child's education. Much more recently a survey of 1,807 U.S. parents of children under the age of 18 conducted by the Pew Research Center (2015) found 46% of parents self-reported a desire to be more involved in their child's education. These results indicated a 6% increase of parents admitting a need to dedicate more time to their child's schooling 20 years after the survey conducted in 1993. However, to satisfy this desire by parents for more and better involvement in their children's education, schools are challenged to design engagement opportunities that attract families and accommodate the various needs of busy families. Additional evidence for the need for schools to engage with parents and families is revealed in the findings of a nationally representative survey of 3,640 parents who had at least one child under the age of 18 conducted online by the Pew Research Center (2020): 66% of parents reported parenting is harder today than 2 decades ago. Many reasons were cited, but the most common reasons related to the impact of technologies like smartphones or tablets and social media that may interfere with quality time with children (Pew Research Center, 2020).

Time, financial, and other types of constraints of modern American life have created barriers and challenges that stand in the way of parent-school partnerships (Mapp, 2003; Olson & Hyson, 2005). A survey of a nationally representative sample of 2,200 parents of children aged birth through five with oversampling of Hispanic, African American, and low-income parents revealed 54% of parents wished they had more information about how to be a better parent (Zero to Three, 2016); 58% of the parents did not know which source to trust. If parenting experts did not know their child and their situation specifically, 63% of the parents were likely to be skeptical (Zero to Three, 2016). Furthermore, a report of a review of 95 studies on the influence of family involvement on young children's literacy, math, and social-emotional skills indicated that "with guidance, many parents—across all socioeconomic, educational, and racial or ethnic backgrounds—are interested in and able to conduct learning activities at home with their young children" (Van Voorhis et al., 2013, p. ES3). More specifically, extant studies involving populations of families living in poverty revealed that even families managing stressful economic circumstances are receptive to clear and reasonable strategies for engaging in basic learning activities with preschoolers (Van Voorhis et al., 2013).

To assist families of young children, federal- and state-funded preschool programs were created to meet the needs of underrepresented and low to moderate income families to prepare children for success in the primary grades (Friedman-Krauss et al., 2020; Hinitz, 2014). The federal government commissioned Edmund Gordon to be the research director leading the Head Start movement begun in 1965 to service preschool children from low-income families (Gordon, 1968, 2021; Price, 2011). The state-funded Virginia Preschool Initiative (VPI) was established in 1995 for 4- and 5-year-old children from low-income families who might be at risk of being unsuccessful in school (Joint Legislative Audit and Review Commission, 2017). These federal and state initiatives are intended to provide developmentally appropriate preschool programs that utilize practices in response to the needs of children as individuals (Charlesworth, 1998; National Association for the Education of Young Children, 2009). Within the programs, preschool educators scaffold the learning activities by observing, supporting, and extending the child play as appropriate (Schweinhart, 2013; Schweinhart & Weikart, 1999). The use of the phrase *developmentally appropriate learning activities* in this study is representative of learning experiences for preschoolers that encourage problem solving, hands-on manipulation of materials, and active movement (A. Epstein, 2007; Gainsley, 2014; Schweinhart, 2013; Schweinhart & Weikart, 1999).

Federal- and state-funded preschool program guidelines include a component of family engagement in an effort to mirror developmentally appropriate learning in the classroom with the learning occurring at home (USDHHS et al., 2018; Virginia Department of Education, n.d.-a). However, in a study conducted by Stacer and Perrucci (2013), a counter-intuitive finding emerged. As parents perceived and experienced satisfaction with the school, parent involvement with children in the home decreased. In this case, parents might not have discerned a reason to be actively involved in educating their child at home. In the same study, “parents who experienced more school contact and more school outreach were more involved with their children in the home than parents who reported less school contact and outreach” (Stacer & Perrucci, 2013, p. 348). The findings of Stacer and Perrucci (2013) suggest educators must be cognizant of the effects and types of family interactions with the school to successfully bridge and extend the developmentally appropriate learning experiences in the classroom to learning experiences at home.

Cordry and Wilson (2004) illustrated the significant number of hours parents spend with their child to accentuate the role parents play in nurturing, guiding, and molding children. In 1 year of school, teachers spend 1,260 hours with children, whereas parents spend 4,580 hours with children (accounting for 8 hours of sleep). Parents potentially interact with children 2.5 times more than the teacher. Clearly, schools need parents as partners to maximize the frequency of high-quality early childhood learning experiences for preschoolers.

Through the Supporting Teachers, Strengthening Families initiative coordinated by Maril Olson, the National Association for the Education of Young Children commissioned Greenberg Quinlan and Rosner Research, Incorporated to conduct a national qualitative and quantitative research study from September–October 2004 of more than 1,000 parents of children between the ages of birth–8 who participated in an early childcare or early education program to glean what extent parents look to early childhood programs and educators as sources of information for guiding and supporting their child's learning (Olson & Hyson, 2005). Key findings indicate parents want a reciprocal relationship with educators characterized by mutual respect, cooperation, and collaboration. When a close, supportive relationship exists between educators and families, shared learning and responsibility can be established (Constantino, 2021; Mapp & Kuttner, 2013; Olson & Hyson, 2005). To grow the trust essential in close, reciprocal relationships, an effective system of communication must relay a message of value in connecting with families (Constantino, 2021).

Cooperation between the school and parents strengthens family efficacy and a family's sense of empowerment in their key role in raising responsible children cognizant of their own learning (Pavlov & Džinović-Kojić, 2018; Piaget, 1964). School processes designed to include families will welcome families into the learning setting and strengthen learning experiences at home (Constantino, 2021). Recognizing the parent as a child's first teacher is a prerequisite to collaborative partnerships between families and educational institutions.

A parent's belief in their ability to engage in positive parenting behaviors is central for parental competence that positively influences the growth and development of a child in an "adaptive, stimulating, and nurturing child-rearing environment" provided at home (Coleman & Karraker, 2000, p. 13). Confident parents with strong parental self-efficacy have a positive perception of their competence to perform in their parental role (Coleman & Karraker, 2000; Pavlov & Džinović-Kojić, 2018). Schools have a responsibility to communicate and collaborate effectively with parents to develop relationships to build parental and family efficacy and support the development of family capacity, especially in instances in which parents might believe in a particular course of parenting action to achieve desired outcomes but might doubt their personal capabilities (Constantino, 2021; Meunier & Roskam, 2009; Pavlov & Džinović-Kojić, 2018).

Statement of the Action Research Problem

From 2015 through 2020, the year COVID-19 created social distancing challenges, the Johnson City School District (JCSD; pseudonym) offered in-person parent workshops, typically between September to April, to build trusting relationships between the parents of preschoolers in the state-funded VPI program and the JCSD. A second goal of the parent workshop was to provide information to support parents as they supported all aspects of their child's development, including academics. Consistently poor attendance from month to month and year to year indicated a lack of success in achieving the desired parent engagement and parent-school partnerships essential for a quality preschool experience for early learners (Barnett et al., 2020; Stacer & Perrucci, 2013). In fact, the current parent workshop model provided little data to determine any impact of the workshops on improved parental self-efficacy to support child development. Thus, immediate action to implement an effective intervention was needed to increase family-school engagement and to support improved family efficacy to engage in the academic life of preschoolers.

The action research for this study examined the effects of the implementation of a family engagement program focused on building family efficacy for families of preschoolers.

Gainsley's (2014) application of the principles of the HighScope active learning approach when designing workshops for preschool parents was adapted for use in a family engagement model that served as the intervention in this study. Research findings suggest a family-school partnership will improve competencies to empower families to perform successfully in parental roles such as their child's teacher (Barnett et al., 2020; Constantino, 2021; Stacer & Perrucci, 2013).

Evidence Supporting the Existence of the Problem

The Joint Legislative Audit and Review Commission (2017) found nearly one-third of Virginia's children were not prepared for school success when entering kindergarten. Fall 2020 data reported by the Virginia Department of Education indicated 45% of Virginia's kindergarteners started school without key literacy, math, and social-emotional skills needed for academic success to mark a nearly 12% increase in unprepared students entering kindergarten over three years and to also highlight a possible negative impact of the COVID-19 pandemic (Meehling, 2021). Using the Phonological Awareness Literacy Screening (PALS) for kindergarten, a comprehensive assessment of a child's literacy skills that may be predictive of future success, 93 out of 496, or 18.8%, of children entering kindergarten in Fall 2018 in the JCSD fell below the PALS benchmark (Virginia Literacy Partnerships, n.d.). In Fall 2019 (before the onset of COVID-19), 104 out of 479, or 21.7%, of kindergarteners in the JCSD fell below the PALS benchmark. By Fall 2021, 2 years into the COVID-19 pandemic, 162 out of 469, or 34.5%, of kindergarteners in the JCSD fell below the PALS benchmark, a 15.7 percentage point increase since 2018. Data indicated a rising trend in kindergarteners in the JCSD identified as high risk for reading difficulties even before the onset of the COVID-19 pandemic and to a larger extent during the pandemic.

During the 2019-2020 school year, participation in the five workshops provided by the JCSD for the families of preschoolers in the VPI program ranged from 2%–6% of the 267 VPI families invited to attend. As anecdotal information regarding the pervasive problem of disengaged families, during a Fall 2020 virtual administration of PALS for preschoolers, a VPI Teacher reported a parent was unaware of and surprised by the skills required to complete the screening tasks. Quantitative data indicating a measure of children entering kindergarten lack skills for success, unsuccessful collaborative parent-school partnerships, and qualitative data indicating parents might lack understanding of how to support their child's early learning provided evidence for a move to a family-school engagement intervention to engage families of preschoolers more effectively in close, collaborative relationships with the school educators.

Possible Causes Related to the Problem

Green et al. (2007) identified three factors that influence motivation related to decisions parents make about participation in activities designed to improve their ability to support their child's learning. One source of motivation is parents' beliefs in their role in child rearing for child development, including parents' beliefs in their role at home in their child's education. A second source of motivation is how parents perceive and value the invitation for parent involvement. Finally, personal life factors create a context for a source of motivation. For example, parents' perceptions of their personal skills and knowledge and parents' perceptions of demands on their time and energy may influence parent involvement. Galindo and Sheldon (2012) found the kind of school outreach and the way parents are invited to engage in their child's learning could influence whether parent-school engagement efforts carry over into the home. The findings by Galindo and Shelton (2012) and Green et al. (2007) provide insight into reasons why past efforts by the JCSD to engage VPI parents in workshops were unsuccessful.

To illustrate, a digital flyer shared via a classroom newsletter from the school or social media platform from the school district were the modes for extending invitations to parents of preschoolers to participate in parent workshops. Topics of the workshops were selected by the preschool facilitator because of the convenience in securing certain presenters, ease in following the routine of doing what had always been done, and presumption that the topics were what the parents needed. Parent workshops were scheduled during the morning and repeated in the evening to accommodate various schedules. Nonetheless, historically poor parent participation in the past parent workshops confirmed the current parent engagement outreach program was ineffective.

The possible causes of low participation might include the following: (a) narrow target audience instead of inclusion of the entire family unit (e.g., parent vs. family workshops); (b) insufficient personal connections between the school district level and the families to form trusting relationships; (c) absence of the solicitation of input from families about topics for the workshops that were of interest to them; (d) insufficient communication of the potential reward to families and preschoolers gained by participation in the workshops; and (e) ineffective platform for participation to meet the needs of families (e.g., in-person sessions versus virtual or recorded sessions; Constantino, 2021). Additionally, the potentiality of parent perception of the workshops as a top-down model versus a true partnership might have suppressed interest and deterred participation.

Context of the Action Research Problem

According to data collected by the U.S. Census Bureau in 2021, the JCSD had a population of approximately 50,250 residents. The targeted audience of this action research study was the families of 4- and 5-year-old preschoolers in the JCSD. Families of preschoolers in one preschool classroom were invited to participate in the study with the preschool teacher, preschool assistant, and the preschool facilitator for the JCSD, who served as the researcher. Due to unforeseen circumstances, the preschool assistant acted solely in her role as a teacher in the classroom setting; however, the implementation and facilitation of the activities associated with the family engagement intervention program were planned to be inclusive of both teachers in the preschool classroom to communicate both teachers valued the families. Personal obligations arose that required the preschool assistant to operate as an indirect participant in the study as a teacher in the classroom rather than in an extended, direct role as co-facilitator of the intervention activities with the families as anticipated.

The action research intervention program for this study occurred over a period of six weeks. Intervention activities were designed to bridge learning experiences occurring in the school setting with learning experiences at home.

Information Related to the Organization

JCSD is positioned in a rural area of Virginia. According to local economic data collected in 2019, the median household income was $37,952, and the median property value was $93,900. The school district is comprised of nine elementary schools, two middle schools, and two high schools with approximately 7,400 students. The student population consists of 52.6% White, 22.8% Black, 15.7% Hispanic, 8.4% Multiple Races, .4% Asian, and .1% American Indian (Virginia Department of Education, 2022). The nine elementary schools are identified as Title I schools, indicating "high numbers or percentages of children from low-income families" (U.S. Department of Education, n.d.).

VPI programs are housed in each of the nine elementary schools. VPI is a state-funded initiative with the goal of providing a quality preschool experience for 4- and 5-year-old children developing in challenging environments (Joint Legislative Audit and Review Commission, 2017). The state funding is determined by using a state funding formula based on the number of eligible VPI students reported in the school district's fall student record collection submitted to the state. Local funding balances remaining expenses for the VPI program (Virginia Department of Education, n.d.-b). Children are eligible to participate in the VPI program if families meet one of the following criteria:

1. family income at or below 200% of federal poverty guidelines
2. homelessness
3. parent inability to achieve high school graduation
4. family income at or above 200% but at or below 350% of federal poverty guidelines in the case of a child with special needs or a disability
5. locally determined eligibility factors (e.g., COVID-related disadvantages, single family, academic developmental delays, social developmental delays; Virginia Department of Education, n.d.-a)

The poverty guidelines applicable to the VPI eligibility criteria are based on federal poverty guidelines. The poverty guidelines percentage thresholds for the VPI are identified by the four income reporting categories listed below:

1. at or below 130% of the 100% federal poverty guideline
2. above 130% but at or below 200% of the 100% federal poverty guideline
3. above 200% but at or below 350% of the 100% federal poverty guideline
4. above 350% of the 100% federal poverty guideline (Virginia Department of Education, n.d.-c)

Families reporting income within the first two reporting categories meet the eligibility criteria for VPI. Families reporting income within the last two reporting categories might be eligible for VPI based on the circumstances of children with special needs or a disability or locally determined eligibility criteria. In the 2021-2022 school year JCSD had a total of 14 VPI classrooms and 234 four- and five-year-old preschoolers. Table 1 provides the income reporting categories for the preschool families for the 2021-2022 school year.

Table 1

Income Reporting Categories for Preschool Families in the Target School District for 2021-2022

Income reporting category	English-speaking families	English-learning families
At or below 130% of the 100% federal poverty guideline	115	19
Above 130% but at or below 200% of the 100% federal poverty guideline	43	5
Above 200% but at or below 350% of the 100% federal poverty guideline	37	2
Above 350% of the 100% federal poverty guideline	13	0
Total	208	26

Note. *N* = 234. Annually, the Virginia Department of Education (n.d.-c) provides guidelines for using family income criteria in determining student eligibility for the state-funded Virginia Preschool Initiative program.

The VPI classrooms in the JCSD implement the state-approved HighScope preschool curriculum, an active learning approach to support cognitive, social-emotional, and physical development (A. Epstein & Hohmann, 2012; Heckman et al., 2010). Family engagement is a component of the VPI grant that funds the VPI classrooms (Virginia Department of Education, n.d.-a). Using the principles of HighScope in a family engagement program provided an avenue for the JCSD to build family efficacy such that the developmentally appropriate active learning approach extended to the home.

Information Related to the Intended Stakeholders

The family engagement intervention program for this study aimed to cultivate a family-school partnership with families of preschoolers in one VPI classroom in the JCSD during the 2021-2022 school year. The primary stakeholders who benefited from the study were the families of preschoolers, who were positioned to gain knowledge to promote lifelong learning skills for their child, and the preschoolers, who were positioned to be beneficiaries of engagement from confident and competent families. To broaden and sustain support for families across all the school district's VPI programs, non-participating VPI Teachers and VPI Assistants were informed of successful family-school engagement practices resulting from the intervention of this study. School level administrators were informed of findings for the potential extension of successful practices to higher grade levels. School district leaders may use the findings to replicate successful family engagement practices with other family populations. Additionally, community organizations supporting early learning, such as the United Way and Smart Beginnings, may conduct similar research to engage the families of children aged birth to five who attend private childcare operations. Furthermore, VPI leaders at the state level are positioned to share the successful practices identified in this study across the commonwealth since all school districts in the state participate in the VPI program.

Conceptual Framework

Constantino (2021) identified five simple principles, ordered hierarchically, that are essential for successful family engagement that promotes family efficacy. The five principles are: (a) a culture that engages every family, (b) communicate effectively and develop relationships, (c) build family efficacy, (d) engage every family in decision making, and (e) engage the greater community. Figure 1 provides the logic model for the five simple principles.

Figure 1

Engage Every Family: Five Simple Principles Logic Model

Note. The logic model provides the hierarchical order of the principles encompassing the process of successful family engagement as constructed by Dr. Steven M. Constantino. From *Engage Every Family: Five Simple Principles* (2nd ed., p. 61), by S. M. Constantino, 2021, Corwin. Copyright 2021 by Corwin Press, Inc.

Constantino's (2021) idea of an orderly process of sequential actions for engaging families provided the conceptual framework for developing a family-school engagement intervention designed to increase family efficacy for providing learning at home. The action research intervention for this study applied the *Engage Every Family: Five Simple Principles* model within a small community of participants sampled from the families of preschoolers in one preschool classroom. The study generated data related to all five principles; however, the focus of the action research was the influence of the intervention on building family efficacy, Principle 3.

The first principle of engagement, *A Culture that Engages Every Family*, provides the foundation for a collaborative setting for families and school staff to develop and promote the idea of shared responsibility in a child's academic life (Constantino, 2021). Whereas Constantino (2021) conceptualized culture from a schoolwide perspective that evolved over time, the application of the term *culture* with regard to this study was indicative of the perceived beliefs, values, and behaviors of the families of the preschool classroom identified for the study unless otherwise indicated. Relationships and interactions among the teachers (i.e., any teacher in the school), parents and families of the preschoolers, preschoolers, office support staff, and school administrator contributed to the conceptualization of culture in this study. However, the relationships and interactions considered to have most likely influenced participants' perceptions of culture were developed within the parameters of the preschool classroom experience.

Designing a family engagement program that values families as a core component of their child's learning while seamlessly connecting the home and school learning process embraced the notion of "families as the first and most influential teachers of children" (Constantino, 2021, p. 90). The family engagement intervention program aimed to nurture an organically collaborative culture among the participants that was characteristically supportive of the school and family working together to develop self-efficacy to extend learning from the school to the home. For example, three virtual family meetings were conducted in the evenings during November and December 2021 to provide an opportunity for preschool families to ask questions about their child's learning experiences and have conversations with other families in their child's preschool classroom to grow a culture that was "real…and not contrived" for family-school partnerships (Constantino, 2021, p. 77).

The second principle, *Communicate Effectively and Develop Relationships*, encourages practices that welcome families into the learning setting and communicates the value in building trusting relationships with families. Establishing relationships committed to two-way communication provides a medium for sharing ideas for home learning (Constantino, 2021). Strong, two-way communication emerges via provisions for families to have the "same opportunities to communicate directly with teachers as teachers do with families" (Constantino, 2021, p. 137). To nurture developing relationships, the preschool teacher and the researcher communicated with families via text messaging, phone calls, written communications, and virtual meetings. A family engagement program inclusive of concepts such as effective communication and trusting relationships is essential for a collaborative culture for engaging families.

The third principle, *Build Family Efficacy*, was the primary focus of the family engagement intervention program for this study. Family efficacy encompasses the notion that families can be contributors toward positive learning outcomes as active participants in their child's academic life (Constantino, 2021). Families with strong efficacy beliefs possess the skills and knowledge to effectively perform parental roles to help their child be successful. The family engagement intervention program engaged families in meaningful and relevant experiences that promoted the efficacy beliefs of the family to support learning at home (Constantino, 2021). Preliminary efforts to build self-efficacy began in the pre-intervention stage during virtual family meetings that shaped the virtual workshops for the intervention cycle of the action research for this study. For example, during a virtual meeting with families, families engaged in conversation and language modeling with their preschooler while decorating gingerbread houses using materials provided by the school. Similarly, language skills were developed when families of preschoolers engaged in a virtual game night to play children's games provided by the school. In addition, strategies for reading a book with a child were modeled for families by the preschool assistant via video recording during a virtual meeting. Afterward, parents practiced the strategies with their preschooler using a book provided by the school. Prior to the conclusion of the meeting, parents asked questions for clarification.

The fourth principle, *Engage Every Family in Decision Making*, aligns to the collaborative, participative nature of action research (Constantino, 2021; Mertler, 2020). Families participated in the iterative process necessary for developing the design of the family engagement program. As family efficacy increased while participating in the process, the capabilities for families to engage in well-informed decision making increased. Engaging families in decision making communicated a belief in the value of inclusive practices for shared responsibility in children's learning (Constantino, 2021). Families participated in decision making in both the pre-intervention and intervention cycles of this study.

The fifth and final principle, *Engage the Greater Community*, expands family efficacy and child development through external community partnerships that support learning outside of the school environment. Community resources and opportunities that extended capacity building, such as a learning experience at a library, were provided within the family engagement design when applicable. Successful family engagement with a community resource is attributed to previous work with the first four principles.

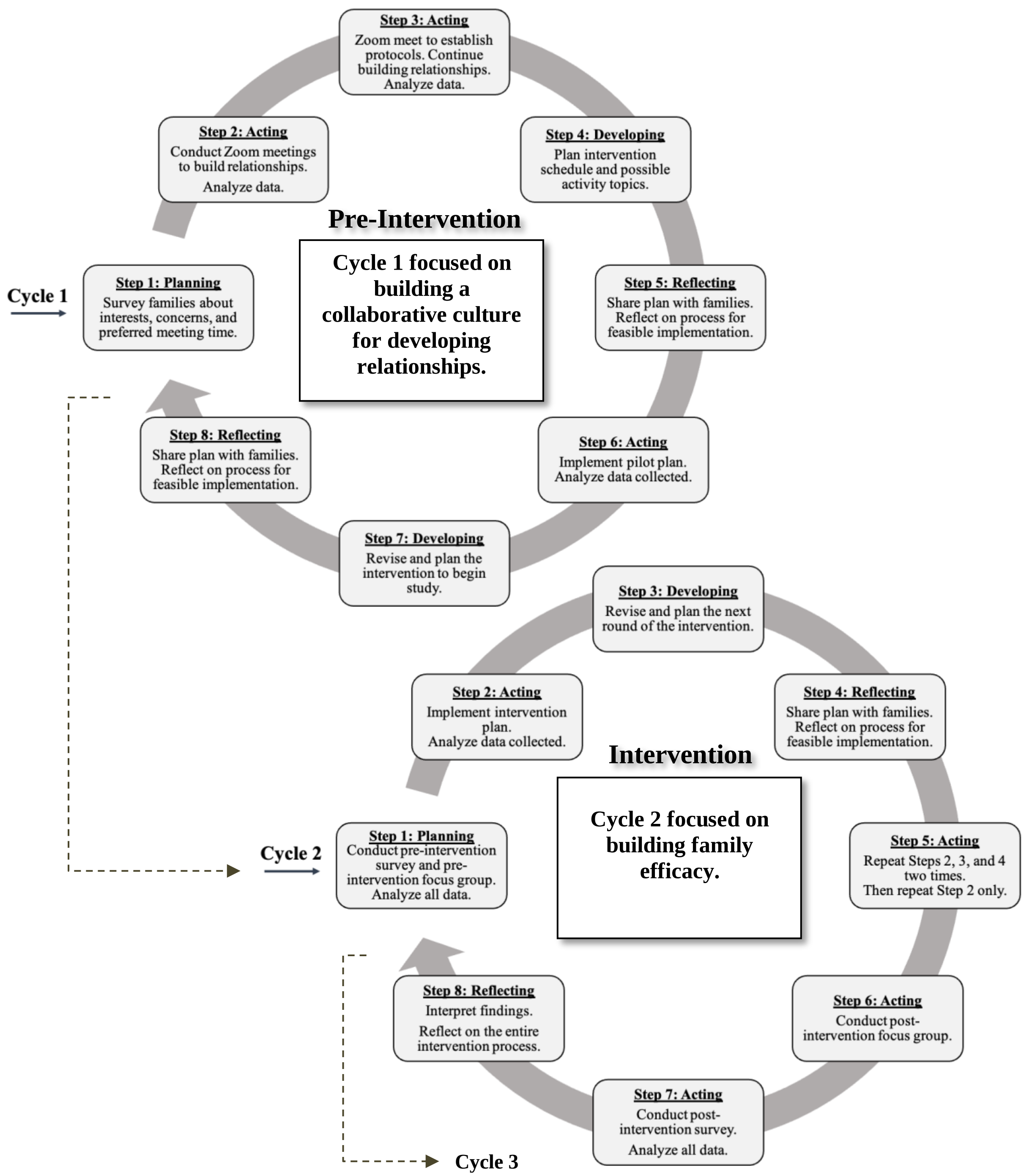
In his book *Engage Every Family: Five Simple Principles*, Constantino (2021) explicitly communicates the importance of creating a culture that engages *every* family. The families of preschoolers who participated in this study may serve as ambassadors in their communities to build family efficacy and bring other families closer to building relationships with the school. As the impact of effective family engagement programs permeate into communities, more opportunities arise for every family to build their efficacy beliefs.

Action Research Model

Mertler (2020) described an action research model that served as the guide for this action research study. The model employs four stages, or steps, that constitute the cyclical process of action research. First, the problem is identified, and research is conducted to develop a plan of action. Second, the plan is executed, and data are collected and analyzed. Third, revisions to the plan are completed, and future cycles are designed. Finally, the results of the implemented action plan are shared, and reflection on the entire process drives the preparation for the next cycle. The sequential order of the stages is only a guideline. The steps may be skipped, reordered, or repeated (Mertler, 2020). Figure 2 depicts the initial application of Mertler's model of action research for this study.

Figure 2

Action Research Model for a Family Engagement Intervention Program



Note. Initial application of Mertler's (2020) model of the ongoing, cyclical process of action research. Adapted from *Action Research: Improving Schools and Empowering Educators* (p. 38), by C. A. Mertler, 2020, SAGE. Copyright 2020 by SAGE Publications, Inc.

Brief Overview of the Action Research Intervention

An imperative reflection on the last rendition of the parent engagement program delivered by the JCSD for families of preschoolers in the VPI led to the identification of an urgent problem of practice suited for an action research study. Consequently, the focus of this action research study was the perceptions of families of preschoolers who participated in a family engagement program that was designed to build self-efficacy for engaging preschoolers in active learning experiences at home. Efficacy beliefs were examined through self-reported perception of parenting capabilities; artifacts providing evidence of home activities (e.g., photographs, video footage, descriptive narrative, child work samples); and level of participation in activities for building self-efficacy.

Participants

Families of preschoolers participating in one VPI classroom in the JCSD were invited to participate in the family engagement intervention program for this study. The VPI Teacher for the selected preschool classroom and the researcher collaborated with families of the preschoolers to design and implement the program. Furthermore, due to unforeseen circumstances, the VPI Assistant acted solely in her role as a teacher in the classroom setting; however, the implementation and facilitation of the activities associated with the family engagement intervention program were planned to be inclusive of both teachers in the preschool classroom to communicate both teachers valued the families. Personal obligations arose that required the preschool assistant to operate as an indirect participant in the study as a teacher in the classroom rather than in an extended, direct role as co-facilitator of the intervention activities with the families as anticipated.

Initial invitations as a flyer sent home with the preschoolers and text message extended to families to participate in the family engagement intervention program resulted in success with approximately one-third of the families. Subsequent invitations via phone calls and recorded video invitations from the preschoolers increased participation to approximately one half of the families. To build relationships with the remaining families, additional efforts, such as a home visit, were considered; however, no home visits were conducted (Bronfenbrenner, 1974; Constantino, 2021). Alternatively, personal phone calls were increased. In the end, seven mothers representing 7 out of 16 families in the selected preschool classroom consented to be participants in the study. In addition, some family members decided to participate in engagement activities as non-study participants. Therefore, in some cases, multiple members of one family (e.g., parent, grandparent, aunt) participated in the intervention activities.

Family Engagement Intervention Program

A comprehensive family engagement program that is used as an intervention may include multiple components. For this reason, the use of the term *family engagement intervention program* or *intervention program* in this study is representative of the instrumentation (e.g., pre- and post-intervention focus groups, pre- and post-intervention rating scale) and the activities for building self-efficacy (i.e., four virtual workshops, social media group) associated with participation in the study. The use of the term *intervention* or *intervention activities* when directly related to this study is representative of the activities specifically planned to engage families and build family efficacy (i.e., four virtual workshops, social media group).

To align learning experiences in school and at home, activities for the intervention were designed around the HighScope active learning approach and the eight HighScope preschool curriculum content areas that support children's learning in the VPI classrooms in the JCSD (A.

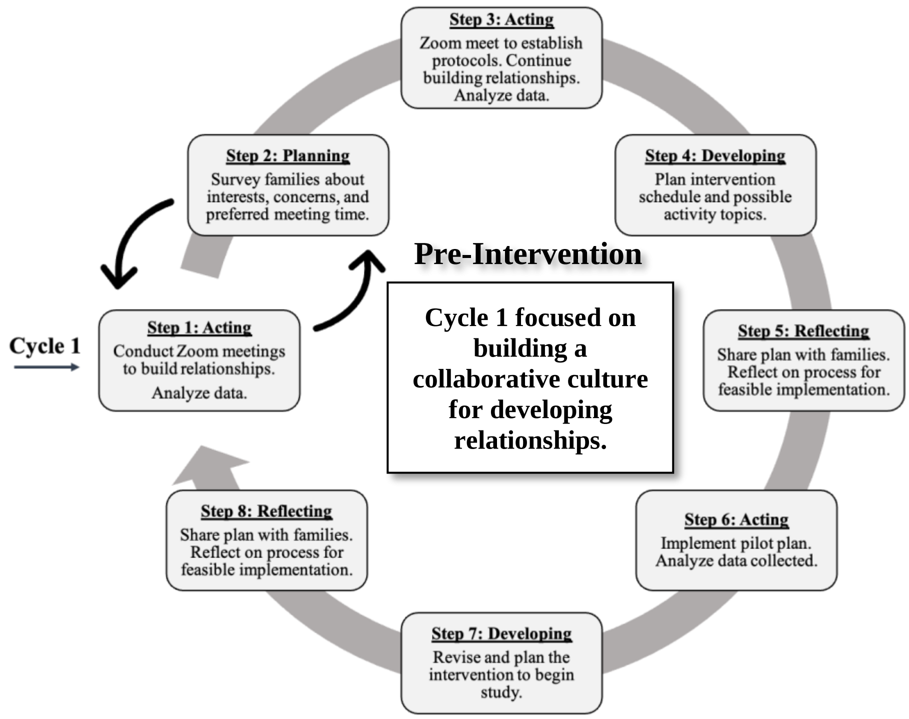
Epstein & Hohmann, 2012; Gainsley, 2014). The intervention activities focused on one or more of the following areas: (a) approaches to learning (e.g., active learning); (b) social and emotional development; (c) physical development; (d) language, literacy, and communication; (e) mathematics; (f) creative arts; (g) science and technology; and (h) social studies (A. Epstein & Hohmann, 2012; Gainsley, 2014). For a collaborative effort between the school and families, families were included as decision-makers by identifying topics of personal interest to center activities for building capacity in the active learning approach, an approach that is appropriate across all content areas. The intervention activities were planned around the interests and needs of the families. The practice of connecting the preschooler's school and home aligned with Constantino's (2021) five simple principles for engaging every family.

Pre-Intervention Cycle. As with most action research studies, early cycles provide the groundwork for subsequent cycles of action and reflection (Mertler, 2020). In this study, the pre-intervention cycle conducted from December 2021–March 2022 established a perceived culture among the participants for engaging families by building relationships between participants and building relationships between families and the school. The activities conducted during the pre-intervention cycle are part of my work as the school district's VPI Facilitator. For example, one responsibility of the VPI Facilitator is to support VPI Teachers and VPI Assistants in engaging families as partners in their child's education. As a collaborator in planning the pre-intervention cycle of action research for this study, I built personal capacity to engage families that can be transferred across all VPI classrooms in the school district. Additionally, practices in shared decision making with families prior to initiating the study promoted an environment conducive to accurate data collection when the study began in the second cycle of the action research.

The pre-intervention cycle of the action research involved the process for planning the family engagement intervention program around the needs and interests of the participants. Initiating *planning* prior to *acting* did not prove to yield desired results. Few families initially responded to written communications to gather information for planning family engagement potentially due to a lack of established relationships, which necessitated more time and effort to establish a culture among the participants and build the relationships essential for shared planning of the intervention program in the pre-intervention cycle. Therefore, building relationships will precede surveying families in future applications of the model to better align to the ordered steps of the *Engage Every Family: Five Simple Principles* model (Constantino, 2021). Figure 3 communicates the revised pre-intervention cycle of the action research model for the family engagement intervention program originally depicted in Figure 2.

Figure 3

Revised Pre-Intervention Action Research Cycle for a Family Engagement Intervention Program



Note. The revised application of Mertler's (2020) model of the ongoing, cyclical process of action research is provided. The original version may be found in Figure 2. *Acting* moved from Step 2 to Step 1. *Planning* moved from Step 1 to Step 2. Adapted from *Action Research: Improving Schools and Empowering Educators* (p. 38), by C. A. Mertler, 2020, SAGE. Copyright 2020 by SAGE Publications, Inc.

Hoover-Dempsey and Sandler (2005) concluded parents' perceptions of invitations for parent involvement from their children was a strong motivator for parents to be involved in their child's education. As a modification to invitations to previous engagement activities in previous years, invitations to participate in family engagement activities designed for this study were extended in part from the preschooler to their family as a strategy to secure and maintain family participation in the intervention activities. Invitation to families in the form of flyers were non-traditional and more eye-catching than in the past and included a designated area for the preschooler to write or draw a message to their family. A video message from the preschoolers to families was an additional method for inviting parents to participate in the intervention program activities. Personal phone calls from the teacher and researcher were made to extend invitations to less engaged families and to build relationships. The strategies improved home-school relationships with some of the families during the pre-intervention cycle of action research.

For example, personal phone contacts extended to disengaged families increased family participation in the pre-intervention Zoom meetings designed for building relationships. Continuous data analysis during the pre-intervention cycle guided the decisions for planning the family engagement intervention program, including program expectations for the school and the families, topics for exploration, at-home activities, program timeline, and workshop schedule for the intervention cycle. During the pre-intervention cycle, the procedural steps for the intervention program were developed, including fine-tuning the logistics of virtual workshops. Specifically, logistics for interpreter services for the English-learning family during virtual meetings required fine-tuning throughout the pre-intervention cycle. Constant data analysis guided revisions to the execution of the procedures for the forthcoming intervention. Families were given opportunities to reflect and give feedback on the intervention program model to influence revisions for more effective implementation. Families were active participants in developing the design for the family engagement intervention program, which aligns to the principles of the *Engage Every Family: Five Simple Principles* framework that guided this study. To summarize, the pre-intervention cycle focused on the following goals: (a) building a perceived collaborative culture among the participants, (b) communicating effectively with the participants, and (c) developing positive relationships, all essential elements prior to the implementation of the intervention to build family efficacy that constituted the second cycle of action research for this study.

Intervention Cycle. The intervention program for this study began with the second cycle of action research conducted from March–April 2022. The intervention cycle included multiple cycles of activities to build self-efficacy. Examples of the activities to build self-efficacy included the following: (a) observations of modeled engagement behaviors recorded from inside or outside the preschoolers' classroom; (b) examination of accessible resources for self-driven efforts; (c) application of what was learned to at-home engagement activities; (d) collaboration with other families that were part of the preschool classroom; and (e) exploration of a community resource (i.e., public library), all with the intent of building capacity for providing learning experiences for preschoolers at home. Data were collected to examine any change in perceived self-efficacy of families of preschoolers who participated in the intervention activities. Findings may guide subsequent action research cycles or justify a redesign of the family engagement model.

The 6-week family engagement intervention program for this study consisted of the following components of family participation:

- pre- and post-intervention rating scale
- pre- and post-intervention focus groups
- four, weekly 30-minute workshops
- ongoing collaboration via social media (i.e., Facebook Group)

The pre- and post-intervention rating scale measured participants' self-efficacy for supporting their preschooler's academic success and participants' perceptions of the role of the family and the role of the school in their preschooler's academic success. The first administration of the10-item rating scale launched the action research for this study. The same rating scale was administered upon completion of the post-intervention focus group.

A 15-question, semi-structured focus group protocol was administered two times to gather anecdotal data to understand changes in participants' self-efficacy for supporting their preschooler's academic success and changes in participants' beliefs about the role of the family and the role of the school in their preschooler's academic success. The first focus group was conducted following the administration of the pre-intervention rating scale and prior to the first workshop. The second focus group was conducted upon completion of the four workshops and prior to the post-intervention rating scale. The open-ended questions included in the focus group protocol prompted additional questions as directed by the situation and strengthened accurate data collection (Mertler, 2020).

The 6 weeks of collaboration via social media (i.e., Facebook Group) and the 4 weeks of virtual workshops constituted the intervention. As the researcher, I observed and participated in a minimal capacity with participants in virtual workshops facilitated by the VPI Teacher. The agenda for each workshop included the following: an objective, a short video of activities occurring in the preschool classroom when applicable, an opportunity to practice an activity when applicable, oral reflection of the workshop experience, and discussion focused on the application of the activity at home. The learning targets were aligned to an objective, HighScope Key Developmental Indicators, and the state Early Learning and Development Standards (A. Epstein & Hohmann, 2012; Virginia Board of Education, 2021). The objectives and content of the workshops were planned according to families' interests and needs that developed during Cycle 2 (i.e., intervention cycle) of the action research. As an example, an outline of the learning targets and methods for facilitating Workshop 1 is in Appendix A.

Each workshop was recorded. Links to the recordings were emailed to all families in the preschool classroom to provide access to the information. A message expressing sentiments that families who were unable to participate were missed was part of the email to enhance the relationships with disengaged families and to potentially increase engagement. Additionally, the recordings were accessible to families via postings to the Facebook Group, a popular social media platform. The frequency of views of each recording was tracked to monitor interest. A compilation of strategies and practices identified during each workshop was included in the email to families and in a posting by the researcher to the Facebook Group.

A Facebook Group for the participating families of the preschoolers complemented and extended the collaboration occurring in the weekly workshops. Families used Facebook to post ideas, share visual media, pose questions, and seek assistance. The VPI Teacher and I used the Facebook Group as an avenue for collaborating with families to cultivate a culture for engaging the families of the preschoolers, nurture developing relationships, and build family efficacy.

Active participation in the virtual workshops and collaborative interactions via social media served as the forum for increasing family efficacy for supporting the academic development of preschoolers. Therefore, monitoring participation in the activities for building self-efficacy was an important responsibility for the researcher. Table 2 provides the timeline for the intervention for this study.

Table 2

Family Engagement Intervention Program Intervention Timeline

Intervention Week	Activity
1	Pre-intervention rating scale Pre-intervention semi-structured focus group
2	Workshop 1
3	Workshop 2
4	Workshop 3
5	Workshop 4
6	Post-intervention semi-structured focus group Post-intervention rating scale

Note. The intervention included ongoing collaboration via the social media group during the 6 weeks.

Justification of Virtual Delivery Platform

During the 2019-2020 and the 2020-2021 school years, the challenges of safety protocols amidst the COVID-19 pandemic necessitated implementation of virtual platforms for instruction and connecting with families. Therefore, families of the preschoolers with school-age children were familiar with procedures for engaging in virtual activities. A recorded video demonstrating how to successfully navigate virtual platforms was accessible to families to increase the ease of participation. Additionally, virtual platforms such as Facebook and YouTube allowed families to retrieve information at any time. The family engagement intervention program was designed so families might engage in most activities when convenient for families. Opportunities for participation in activities via back-and-forth written communication and verbal conversations between school personnel and families supported families who preferred an alternative to the virtual platform at times.

The virtual platform adhered to the school district's guidelines for mitigating the challenges of safety practices imposed by the COVID-19 pandemic. Additionally, the virtual platform helped mitigate some barriers to participation, such as lack of transportation, childcare needs, and time constraints. To provide an equitable experience for our English-learning family, an interpreter provided live, simultaneous translation during the four virtual workshops and provided assistance as needed to eliminate communication barriers with the school.

The JCSD provided iPads for each of the preschoolers to use with their family at home. To assist with internet access, JCSD was positioned to provide a Kajeet, a device for connecting to internet services at home, upon request; however, the service was not needed. Parents had reliable technology to participate in the activities for this study.

Action Research Questions

The goal of this mixed-methods action research study was to examine the influence of a family engagement intervention program on self-efficacy for providing developmentally appropriate learning activities at home. The study examined participants' participation in family engagement activities, participants' perceptions of their capabilities for providing developmentally appropriate learning activities for their preschooler at home, participants' actions to employ those capabilities, and participants' perceptions of the role of the family and the role of the school in academic success. Therefore, the study was guided by the following research questions.

1. To what extent do families participate in the activities of a family engagement program?

2. After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?
3. In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?
4. How do families describe the role of the family and the role of the school in their preschooler's academic success?

Definitions of Terms

Academic socialization – families socializing their children to the importance of academic attitudes in the pursuit to achieve learning goals (Constantino, 2021)

Canva – an online graphic design platform

Culture (specific to this study) – the perceived beliefs, values, and behaviors of the families of the preschool classroom identified for this study unless otherwise indicated (Constantino, 2021); the participants' perceptions of classroom culture and participants' perceptions of their interactions between school personnel (e.g., any teacher in the school, support staff, administrator) within the window of time the action research occurred rather than representation of schoolwide culture established over a longer period of time

Developmentally appropriate learning activities – learning experiences for preschoolers that encourage problem solving, hands-on manipulation of materials, and active movement (A. Epstein, 2007; Gainsley, 2014; Schweinhart, 2013; Schweinhart & Weikart, 1999)

Efficacy – the ability to produce a desired effect (Bandura, 1994)

Engagement – gaining families as active partners in a leading role for shared decision-making toward a child's academic success (Constantino, 2021; Ferlazzo, 2011)

Experience – "interaction between the individual and his or her environment" (Tierney & Nelson, 2009, p. 7).

Facebook or *Facebook group* – a popular social media platform

Facebook messenger – an instant messaging feature built into Facebook

Family or families – representative of individuals with legal rights to a child, such as biological, adoptive, or foster parents or legal guardians, and any family member or adult assisting in a child's well-being and upbringing

Family efficacy – the belief that all persons who play a parenting role in a child's life are influential resources that can produce positive developmental outcomes for their child (Constantino, 2021)

Family engagement – systematic process of practices and procedures for building family efficacy that are shaped from the lens of families (Constantino, 2021)

Family engagement intervention program or *intervention program* – the instrumentation (e.g., pre- and post-intervention semi-structured focus groups, pre- and post-intervention rating scale) and the activities (i.e., four virtual workshops, social media group created for the preschool classroom invited to participate in this study) comprising the 6-week study

Family unit – a social group of adults and children related by blood, marriage, adoption, friendship, or other association who may or may not reside together and who provide care for its members

Google docs – an online word processor supported by Google

Google sheets – an online spreadsheet supported by Google

JCSD – acronym for Johnson City School District

Home-based involvement – "taking place between the child and parent outside of school" (Hoover-Dempsey & Sandler, 2005, p. 21)

Intervention or *intervention activities (specific to this study)* – the engagement activities designed to engage families and build self-efficacy (i.e., four virtual workshops, social media group created for the preschool classroom invited to participate in this study)

Invisible engagement – learning that happens away from school but results in outcomes seen by the school (Constantino, 2021)

Involvement – supporting a child's education by showing interest in activities decided by the school (Ferlazzo, 2011)

Parent or parents – representative of individuals with legal rights to a child, such as biological, adoptive, or foster parents or legal guardians

Parental efficacy – possessing the "skills, abilities and resources to parent effectively…[and be] empowered to produce a positive effect on their child's developmental outcomes" (Constantino, 2021, p. 145)

Parental self-efficacy – "one's perceived ability to exercise positive influence on the behavior and development of one's children" (Coleman & Karraker, 1998, p. 58)

Perceived self-efficacy – "people's beliefs about their capabilities to produce effects" (Bandura, 1994, p. 2)

Qualtrics – an online survey software program

School-based involvement – "activities…typically undertaken by parents at school…(e.g., attend a parent-teacher conference, observe the child in class, watch a child's performance)" (Hoover-Dempsey & Sandler, 2005, pp. 21-22); may also include attending a school open house or volunteering to assist on class field trips

Self-efficacy – “the belief that one has the ability or capability to act in ways that will produce whatever outcomes are desired” (Constantino, 2021, p. 146)

SPSS – a statistical software program (version 28.0)

Total involvement – home-based involvement and school-based involvement combined (Hoover-Dempsey & Sandler, 2005)

Two-way communication – provisions (e.g., shared cell phone numbers, shared emails, shared instant messaging in the Facebook Group, in-person) for families to have the “same opportunities to communicate directly with teachers as teachers do with families” (Constantino, 2021, p. 137); may involve back-and-forth exchanges of speaking and listening (Ferlazzo, 2011)

USDHHS – U.S. Department of Health and Human Services

VPI – acronym for Virginia Preschool Initiative, the state-funded preschool program in the JCSD that provided the parent selection pool for the study

YouTube – a video sharing website

Zoom – a video teleconferencing software program

CHAPTER 2

REVIEW OF RELATED LITERATURE

A preschooler's experiences during their early years of life impact future health and well-being (Schweinhart, 2013; Stiles & Jernigan, 2010). As a child's first and most influential teacher, a parent, along with other caregivers, plays a significant role in a child's development (Constantino, 2021). Extant literature and developmental theory suggest the quality and quantity of family-child interactions influence a child's academic and social development for school readiness and later academic success (Anders et al., 2012; Grindal et al., 2016; Joo et al., 2020; Schweinhart, 2013). Given the important role parents and families play in a child's success, establishing an effective family engagement program is a logical way for schools to build family efficacy to nurture children's learning in the early years.

A review of literature relevant to an effective family engagement program highlighted elements worth considering when designing a program to connect home and school learning to build family efficacy. Key factors pertinent to the study are presented in this chapter. First, the characteristics of select parent- and family-school models for building family efficacy are analyzed to inform the construction of an intervention for potentially building family efficacy. Second, Bandura's social cognitive theory and self-efficacy theory are examined to provide a foundation for capacity building for preschool families. Third, a description of an early childhood education program is presented to illustrate how a preschool program can serve in a dual role to promote school readiness and provide continuity in home and school learning. Finally, salient themes that emerged from the literature are summarized.

Bridging Home and School Learning to Build Family Efficacy

Educational institutions are positioned to serve as mediums for bridging learning that occurs at school with learning that occurs at home for seamless and complementary learning experiences for a child (Constantino, 2021; Schweinhart, 2004). Numerous frameworks for involving and engaging parents and families exist to guide educational agencies in ways to connect with families as partners in their child's learning. Five influential models for parent- and family-school interactions for building self-efficacy were examined in a review of literature related to family engagement to gain knowledge for designing a family engagement intervention for families of preschoolers.

Conceptual Models of Parent and Family Engagement

Parent and family engagement initiatives that are purposefully designed to produce outcomes for improving student learning and overall school improvement emphasize shared responsibility among families and schools to attain the expected results (Mapp, 2012). A systematic approach for building the capacity of families and school personnel to develop and sustain partnerships prepare both units to engage in effective ways to benefit the children they support. The five parent- and family-school models selected for review for this study are representative of ways to build capacity for supporting positive outcomes for children. Each model includes attributes worth considering when designing an effective intervention for engaging families of preschoolers in their child's learning.

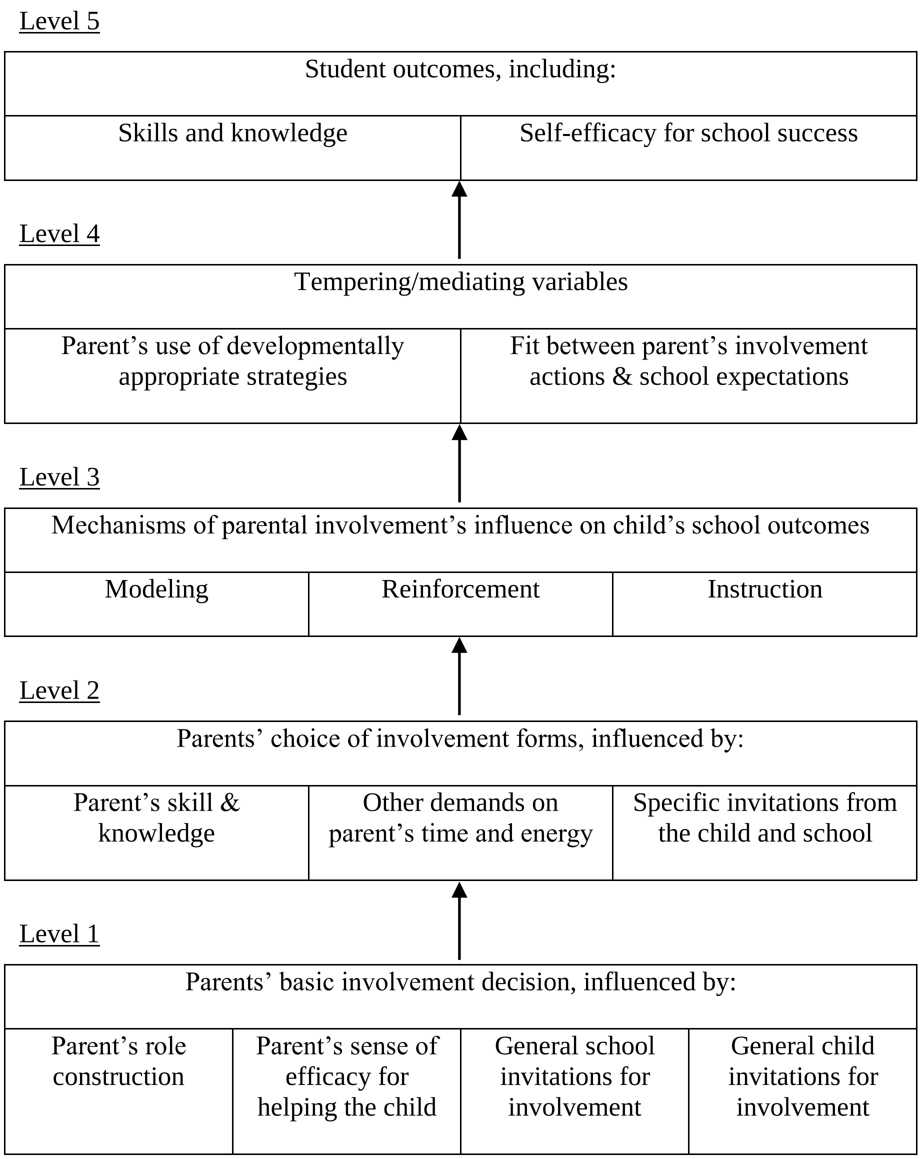
Authors use of the terms *involvement* and *engagement* in the models may be considered interchangeable; however, the terms have different meanings. Involvement connotes the idea that the school predetermines what parents need to do for their child's success and accordingly communicates to parents how parents can support the school's efforts. Engagement suggests an inclusive approach for student success by inviting families to be partners in deciding action steps that meet the needs of the family (Ferlazzo, 2011; Mapp, 2012). Based on the review of literature related to the five models examined for this study, the intended use of the terms involvement and engagement are inferred to be interchangeable, and both terms are applicable according to the description of engagement.

Hoover-Dempsey and Sandler's Theoretical Model of the Parent Involvement Process. Hoover-Dempsey and Sandler (1995, 1997) constructed a framework representing their theoretical explanation from a psychology stance why parents become involved in their child's education and the impact of parent's involvement on student achievement (Walker et al., 2005). The framework was intended to simply explain the process of parent involvement relative to the parents who are involved; yet it supported the ultimate goal of improving involvement. A revised version was created as an outcome of a 3-year study from 2001–2004 with samples of families of kindergarten through sixth-grade students from the public schools of generally diverse socioeconomic and ethnic backgrounds (Hoover-Dempsey & Sandler, 2005).

In the original version of the theoretical model, Hoover-Dempsey and Sandler (1995, 1997, 2005) mapped five sequential levels of parental involvement: (a) psychological contributors, (b) contextual factors, (c) mechanisms of influence, (d) mediating variables, and (e) student outcomes. The first level focused on cognitive motivators for involvement, such as role construction (i.e., parent's belief in their role in their child's education), parents' sense of efficacy, and perceptions of general invitations extended for involvement. The second level focused on the contextual influences (e.g., parent's knowledge and skills, time and energy, invitations extended from their child and the school) on parent's choices of forms of involvement. The third level focused on hypothesized techniques parents use during involvement activities that influence student outcome (e.g., modeling, reinforcement, instruction). The fourth level focused on the fit between a parent's choice of involvement activities and their child's development and the fit between a parent's choice of involvement activities and the school's expectation for parent involvement. The fifth level focused on student outcomes as a result of parental involvement (e.g., skills and knowledge, self-efficacy; Hoover-Dempsey & Sandler, 2005). Figure 4 provides a visual representation of the original version of the Hoover-Dempsey and Sandler model of the parental involvement process (Hoover-Dempsey & Sandler, 1995, 1997, 2005; Walker et al., 2005).

Figure 4

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

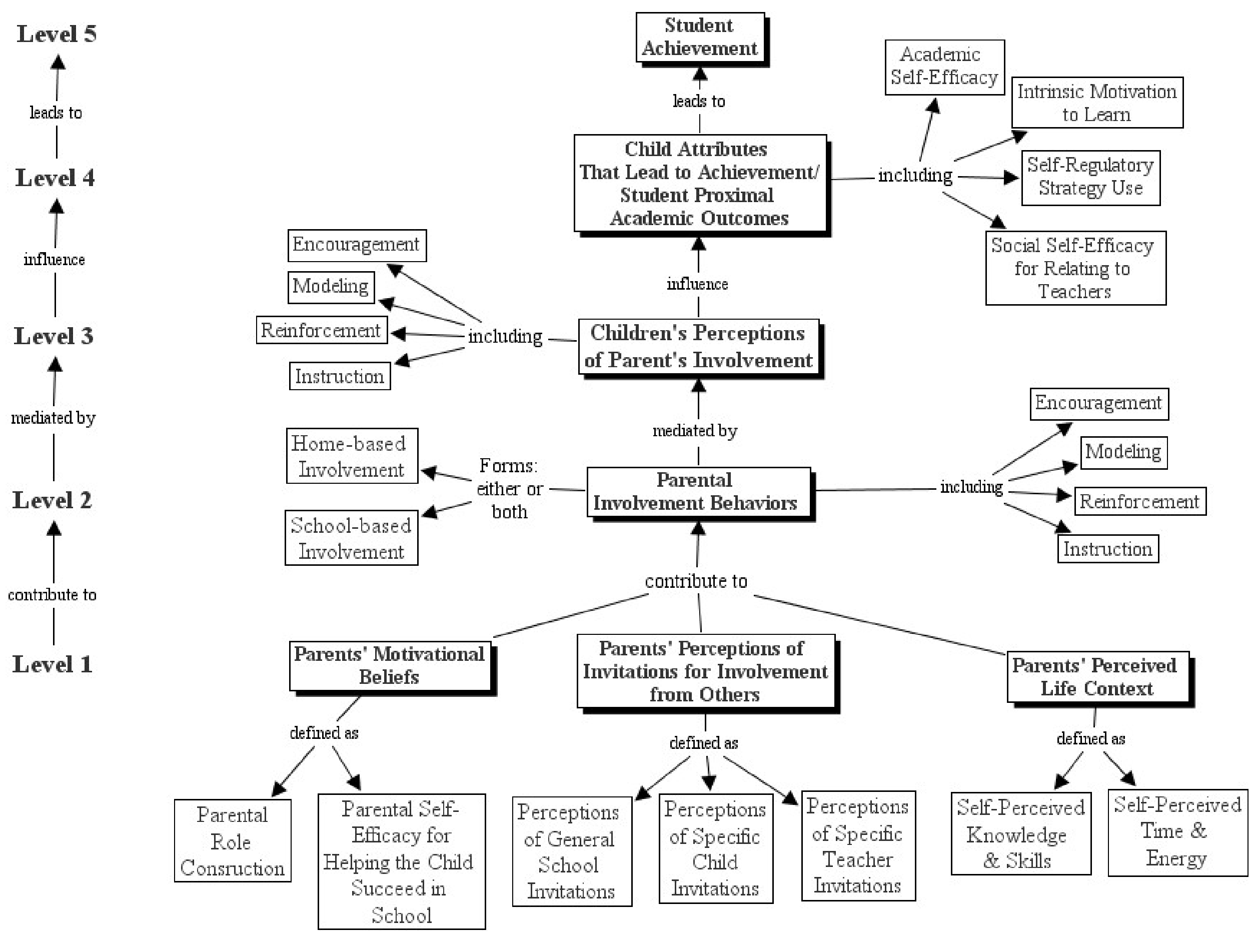


Note. From "Parental Involvement: Model Revision Through Scale Development," by J. M. T. Walker, A. S. Wilkins, J. R. Dallaire, H. M. Sandler, and K. V. Hoover-Dempsey, 2005, *The Elementary School Journal*, *106*(2), p. 86 (https://doi.org/10.1086/499193). Copyright 2005 by The University of Chicago.

Grant funding supported four studies conducted over three years to develop valid and reliable measures for the conceptual elements included at each level and to test hypotheses about the parent involvement process identified in the Hoover-Dempsey and Sandler model. Scale development to measure the constructs at each level and conceptual and theoretical discussions led to revisions of the original model (Hoover-Dempsey & Sandler, 1995, 1997, 2005). Figure 5 provides a visual representation of Version 2 of the Hoover-Dempsey and Sandler model.

Figure 5

Hoover-Dempsey and Sandler Model of the Parental Involvement Process (Version 2)



Note. From “Final Performance Report for OERI Grant No. R305T010673: The Social Context of Parental Involvement: A Path to Enhanced Achievement,” by K. V. Hoover-Dempsey and H. M. Sandler, 2005, p. 74 (https://hdl.handle.net/1803/7595).

Study 1. Scales designed to assess Level 1 constructs of the original model were tested in Study 1 (see Figure 4). Level 1 constructs related to why parents become involved in their child's education. Alpha tests for Level 1 constructs yielded levels for alpha ranging from .60–.88 indicating acceptable levels of consistency. Hierarchical regression analyses identified parental role construction (i.e., belief in what activities one should do when considering the attributes of one's child [Walker, 2005; Whitaker, 2019]) as the strongest motivator of parental involvement (Hoover-Dempsey & Sandler, 2005). Specifically, partnership-focused role construction emerged as an important predictor suggesting "schools and parents who build a strong sense that the child's educational success is the responsibility of a parent-school partnership create and experience greater levels of parental involvement" (Hoover-Dempsey & Sandler, 2005, p. 40). These findings support the family-school partnership efforts evident in later models of family engagement (Constantino, 2021; J. Epstein, 1995; Mapp & Kuttner, 2013; USDHHS et al., 2011, 2018). For example, the first two principles of Constantino's (2021) *Engage Every Family: Five Simple Principles* framework communicate the essentiality of creating a culture to engage every family in trusting family-school relationships. Accordingly, the family engagement intervention for this study began with developing relationships with families in the pre-intervention cycle with protocols and norms that created a safe environment conducive to increasing self-efficacy.

Study 2. The reliability of measures for constructs in Level 2 of the original model was assessed in Study 2. Revisions to the model after Study 1 combined Level 1 and Level 2 to construct a new Level 1 that examines what motivates parents to become involved in their child's education (see Figure 5). The new Level 1 was the focus of Study 2. Alpha tests for combined original Level 1 and Level 2 constructs yielded levels for alpha ranging from .60–.88

indicating acceptable levels of consistency. Perceptions of invitations from children was a strong predictor of total involvement (i.e., home- and school-based combined). Perceptions of invitations from children was followed by parents' sense of efficacy for helping their child succeed in school as strong predictors of home-based involvement (Hoover-Dempsey & Sandler, 2005). For school-based involvement, parents' perceptions of invitations from the teacher was the strongest predictor of involvement. Results may be similar for parents and families of preschool-age children. Invitations from a family's preschooler to participate in parent involvement at home or at school may yield more involvement than invitations originating from other sources. For this study, invitations from the school extended to families to participate in activities to build self-efficacy were in multiple forms, including non-traditional, eye-catching flyers from the teacher that included a section for the preschooler to write or draw a message to their family to potentially spark family interest to participate. Video messages from the preschoolers to families was an additional method for extending an invitation from the children utilizing social media. Additionally, the preschool teacher and researcher made personal phone calls to extend invitations to families to participate in family engagement activities.

Study 3. Instruments to measure reliability in the revised model were examined in Study 3 at the following three levels:

- Level 2 (i.e., mechanisms used by parents during involvement activities)
- Level 3 (i.e., child's perceptions of mechanisms used by parents during involvement activities), not included in the original model, and
- Level 4 (i.e., child attributes that lead to learning / student proximal academic outcomes)

Table 3 shows the statistically significant correlations between Level 3 of the revised model, *Student Perceptions of Parental Involvement*, and Level 4 of the revised model, *Student Proximal Outcomes* (i.e., student attributes that lead to learning) (Hoover-Dempsey & Sandler, 2005).

Table 3

Bivariate Correlations: Student-Reported Perceptions of Parents' Involvement and Proximal Outcomes

Outcome	Parental Encouragement	Parental Modeling	Parental Reinforcement	Parental Instruction
Academic self-efficacy	.36	.36	.42	.38
Intrinsic motivation	.36	.42	.40	.45
Self-regulatory strategy use	.45	.43	.58	.56
Social self-efficacy for relating to teachers	.21	.29	.32	.32

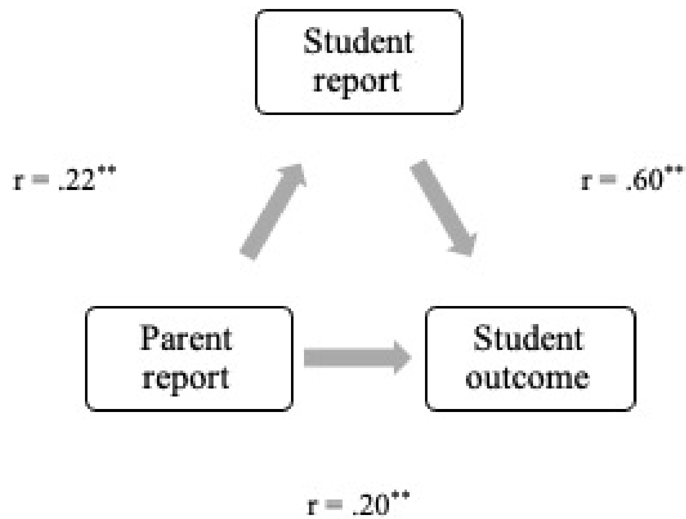
Note. Adapted from "Final Performance Report for OERI Grant No. R305T010673: The Social Context of Parental Involvement: A Path to Enhanced Achievement," by K. V. Hoover-Dempsey and H. M. Sandler, 2005, p. 47 (https://hdl.handle.net/1803/7595).

The results indicated positive links between student-reported perceptions of parent involvement and student attributes that lead to learning. To examine parent reports of learning mechanisms they use for involvement activities (i.e., Level 2 of the revised model), student perceptions of the learning mechanisms parents use for involvement activities (i.e., Level 3 of the revised model), and student proximal academic outcomes influenced by student perceptions (i.e., Level 4 of the revised model), a mediational analysis was performed to determine if one variable influenced another variable. There was significant bivariate correlation at a large level between student reports of parents' involvement and student proximal academic outcomes (r =

.60, $p < .01$). Figure 6 depicts the correlation.

Figure 6

Mediational Analysis: Parent Report of Involvement Mechanisms, Student Perception of Parent Involvement Activities, and Student Proximal Outcomes



Note. From "Final Performance Report for OERI Grant No. R305T010673: The Social Context of Parental Involvement: A Path to Enhanced Achievement," by K. V. Hoover-Dempsey and H. M. Sandler, 2005, p. 48 (https://hdl.handle.net/1803/7595).
$^{**}p < .01$.

Regression analysis suggested that both parent reports of involvement mechanisms and student reports of parental involvement were significant in predicting student proximal outcomes. When parent reports of involvement and student reports of parental involvement were analyzed together for predicting proximal academic student outcomes, "the direct path between parent reports and student outcomes became insignificant, while the path between student reports and student outcomes remained significant" (Hoover-Dempsey & Sandler, 2005, p. 49). The results suggest "the influence of parent-reported involvement mechanisms on proximal [short-term] student outcomes is mediated by student perceptions of parents' involvement activities"

(Hoover-Dempsey & Sandler, 2005, p. 49). That is, the influence of parent-reported involvement behaviors (e.g., encouragement, modeling, reinforcement, instruction) on student achievement is mediated by children's perceptions of their parent's execution of the behaviors (Hoover-Dempsey & Sandler, 2005).

The results may be applicable to preschoolers' perceptions of parent involvement as well. Young children's perceptions of the activities parents engage in with them at home may influence the development of similar attributes that lead to academic achievement identified at Level 4 of the revised model. The goal of this study was to develop a successful school-family engagement program resulting in family practices for supporting education modeled in the early stages of a child's academic life that may prove to develop child behaviors that lead to present and future academic success. Children who perceive their families as involved in their education may have high academic achievement throughout their educational journey (Hoover-Dempsey & Sandler, 2005). Likewise, Constantino (2021) conceptualized the idea of *academic socialization* as families socializing their children to the importance of academic attitudes in the pursuit to achieve learning goals. Thus, the significant role of the family in a child's academic success is further highlighted.

Study 4. To conclude the full study and to evaluate the constructs of the entire revised theoretical model of parental involvement, all the construct measures in shortened form for parents and students from Studies 1, 2, and 3 were examined in Study 4. An unpredictable issue with the school district at the time of the study limited the model's prediction of the influence of the parental involvement process on student achievement at Level 5 (Hoover-Dempsey & Sandler, 2005).

A key finding of Study 4 was parents' perceptions of invitations to involvement from their child and parents' perceptions of knowledge and skills for involvement emerged as significant predictors across three measures of involvement (i.e., home-based, school-based, total) (Hoover-Dempsey & Sandler, 2005). Additionally, beliefs in one's parental role emerged as a predictor of both home-based and school-based involvement, and parents' sense of efficacy emerged as a predictor of home-based involvement (Hoover-Dempsey & Sandler, 2005). The findings from Study 4 support designing engagement programs to promote the significant role families play in their child's education and also prepare families to be confident in their role. The findings from the research conducted by Hoover-Dempsey and Sandler (2005) influenced later models examined in this literature review and the design of the family engagement intervention for this study.

Additional findings from Study 4 suggest parents of children in the primary grades are more involved than parents of children in upper elementary and middle school (Hoover-Dempsey & Sandler, 2005). Establishing strong, trusting relationships with families in the early years of a child's education might improve the likelihood of sustaining relationships with families throughout a child's schooling. Implications derived from perceptions of time and energy varied in Study 2 and Study 4. Findings suggest time and energy factors are more significant to parents of younger children (i.e., Grades 1–3) than parents of older children (i.e., Grades 4–6). These findings have implications for the type and duration of activities included in involvement and engagement programs for families of preschoolers. Structured, weekly activities to build self-efficacy for this study were designed around time factors that might affect family participation.

Overall, the full study achieved the goal of developing reliable measures for assessing the function of the constructs at each level of the original and revised model. Ongoing investigation has led to at least two additional versions of the Hoover-Dempsey and Sandler Theoretical Model of the Parental Involvement Process (Hoover-Dempsey & Sandler, 1995, 1997, 2005; The Parent Institute, 2012; Whitaker, 2019).

Consideration of a child's perceptions of their parent's involvement may be a unique feature of the Hoover-Dempsey and Sandler model in comparison to the other four models examined for this study, although academic socialization present in the *Engage Every Family: Five Simple Principles* model is comparable (Constantino, 2021). A comparison of the models in this study also revealed Hoover-Dempsey and Sandler (1995, 1997, 2005) focused solely on the parent-school dynamic; whereas the frameworks developed by J. Epstein (1995), USDHHS et al. (2011, 2018), Mapp and Kuttner (2013), and Constantino (2021) included a component of community partnership. Additionally, as caregivers of children have evolved to include not only parents, but also other family members and trusted adults, more recent home-school partnership models emphasize a focus on engaging a broader conceptual family unit (Constantino, 2021; J. Epstein, 1995; Mapp & Kuttner, 2013; USDHHS et al., 2011, 2018).

J. Epstein's Framework of Six Types of Parent Involvement. According to J. Epstein and Salinas (2004), a school learning community is inclusive of "educators, students, parents, and community partners who work together to improve the school and enhance students' learning opportunities" (p. 12). Teachers, parents, and students at the elementary, middle, and high school levels completed surveys and participated in field studies to inform the conceptualization of J. Epstein's six types of parental involvement to guide educators in cultivating comprehensive, organizational family and school partnerships (J. Epstein, 1995).

Table 4 identifies and describes each of J. Epstein's six types of parental involvement. By engaging families in each of the six types of involvement, J. Epstein believes schools help parents become proactive partners in their child's educational success (J. Epstein, 1995; J. Epstein & Salinas, 2004; J. Epstein et al., 2019).

The most recent edition of J. Epstein's Framework of Six Types of Involvement for Comprehensive Programs maintains the original six types of parental involvement thus supporting temporal stability of the framework (J. Epstein, 1995; J. Epstein et al., 2019). J. Epstein's six types of involvement are presented as stand-alone practices; whereas the other four models examined in the study indicated a hierarchical or causal, sequential theory for engaging families. A reasonable inference can be drawn that J. Epstein's framework considers the six types of involvement collectively for improved student achievement.

Table 4

J. Epstein's Framework of Six Types of Parental Involvement

Type of involvement	Description
Parenting	Assist families with parenting skills, family support, understanding child and adolescent development, and setting home conditions to support learning at each age and grade level. Assist schools in understanding families' backgrounds, cultures, and goals.
Communicating	Communicate with families about school programs and student progress, create two-way communication channels between school and home.
Volunteering	Improve recruitment, training, activities, and schedule to involve families as volunteers and as audiences at the school or in other locations. Enable educators to work with volunteers who support students and the school.
Learning at home	Involve families with their children in academic learning at home, including homework, goal setting, and other curriculum-related activities. Encourage teachers to design homework that enable students to share and discuss interesting tasks.
Decision-making	Include families as participants in school decisions, governance, and advocacy activities through school councils or improvement teams, committees, and parent organizations.
Collaborating with the community	Coordinate resources and services for families, students, and the school with community groups, including businesses, agencies, cultural and civic organizations, and colleges or universities. Enable all to contribute service to the community.

Note. From "Partnering with Families and Communities," by J. L. Epstein and K. C. Salinas, 2004, *Educational Leadership*, *61*(8), p. 15 (https://www.ascd.org/el/articles/partnering-with-families-and-communities).

The family engagement program for this study was influenced by and aligned with the following types of involvement as conceptualized by J. Epstein (1995): (a) parenting, (b) communicating, (c) learning at home, and (d) decision-making. For example, workshops on parenting and child development were designed to help families of preschoolers understand how to create home environments to support their child as a learner. Effective two-way communication connected schools and families for sharing pertinent information and for sharing views and beliefs on education. The family engagement intervention program promoted capacity building for families to help children learn at home. Shared decision making when designing the intervention communicated to families their input was valued.

A key element that may be embedded in J. Epstein's framework but not explicated stated in the framework is the concept of *relationships*. Involvement implies *doing to*; however, families are more than simply involved based on the descriptors of the six types of involvement. Families are engaged. Engagement implies *doing with* (Ferlazzo, 2011). Indeed, the intended message of J. Epstein's (1995) framework is the importance of partnering with families. To truly view families as partners, trusting relationships must be intentionally cultivated and explicitly perceived as valued (Constantino, 2021). Therefore, the idea of family-school relationships may be inferred to be an implicit component of J. Epstein's framework.

Hoover-Dempsey and Sandler (1995, 1997, 2005) and J. Epstein (1995) published the early versions of their models during the same year. Hoover-Dempsey and Sandler (1995, 1997, 2005) proposed a theory of why *parents* are involved; whereas J. Epstein (1995) theorized how schools could build partnerships with *families*. Hoover-Dempsey and Sandler (1995, 1997, 2005) studied the *parents* and their child. In comparison, J. Epstein's (1995) framework acknowledges *families* as the target audience for student success (J. Epstein & Salinas, 2004). Nonetheless, both theories contributed to current practices for engaging families in partnerships with schools. For example, more recent models of family engagement include aspects of building family efficacy, which is consistent with Hoover-Dempsey and Sandler's theoretical model and J. Epstein's

Framework of the Six Types of Parental Involvement (Constantino, 2021; Mapp & Kuttner, 2013; USDHHS et al., 2011, 2018).

Head Start Parent, Family, and Community Engagement Framework. The first Head Start Parent, Family, and Community Engagement (PFCE) Framework was published in 2011 as a guide to assist programs in implementing program standards for engaging parent, family, and community partners (USDHHS et al., 2011). The first version of the Head Start PFCE is in Appendix B. After 5 years of reflection on the use of the guide in the field and anecdotal feedback from interested stakeholders, a revised framework was published in 2018 (USDHHS et al., 2018). The second version of the Head Start PFCE model is in Appendix B.

The Head Start PFCE model illustrates the shared responsibility between parents, families, and community members for promoting positive child and family outcomes as conveyed in the naming of the framework. Family partnerships is explicitly identified in both versions of the framework as a core program element for achieving desired family and child outcomes (National Center on Parent, Family, and Community Engagement, 2011; USDHHS et al., 2018). Similarly, the significance of partnering with families and valuing the role of families for student achievement is a common theme communicated in the models examined in this study. Likewise, family-school partnerships were an intended outcome of the family engagement intervention program of the action research for this study.

To meet the end goals of positive family and child outcomes, the parent, family, and community engagement elements identified in the Head Start PFCE are systemic, integrated, and comprehensive. All program staff work together to coordinate systems and services for maximum impact. Families are supported from a holistic perspective with the idea that well-being in one area, such as secure housing and food assistance, will reinforce well-being in other areas, such as health, development, and learning. Since each family's needs and program experiences are unique, program staff work with each family to set goals determined by the interests, needs, and strengths of the family. The Head Start PFCE Framework intends to provide a coordinated system facilitated by program staff to encourage collaboration between families and community partners in order to achieve positive outcomes for children and families (USDHHS et al., 2018). The Head Start approach focuses on removing environmental distractions that may hinder engagement for building confidence and self-efficacy. Similarly, resources, within reasonable bounds, were provided upon individual request or as deemed appropriate for all participants in this study to assist families in supporting the academic success of their preschooler.

The PFCE Framework's attention to the holistic needs of the family attempts to establish an equitable learning environment for preschoolers. The focus on ensuring that the basic needs of the family are met might set the Head Start PFCE Framework apart from the other models for parent involvement and family engagement presented in this study; however, elements of a holistic approach to a family-school partnership may be inferred in the other models. In addition, the systemic and integrated Dual Capacity-Building logic model shows similarities to the Head Start PFCE Framework by designing program goals and conditions toward effective family engagement linked to student achievement and school improvement, albeit the Head Start PFCE identifies outcomes for both the total well-being of the family and child as well as academic success (Mapp & Kuttner, 2013; USDHHS et al., 2018).

Dual Capacity-Building Framework for Family-School Partnerships. Mapp and Kuttner (2013) derived a conceptual framework for family-school partnerships from "decades of work by teachers, parents, researchers, administrators, policy makers, and community members" to combat the challenge created by a lack of opportunities for school staff and families to build capacity for working together for the betterment of children (Mapp & Kuttner, 2013, p. 26). To develop the family-school model, Mapp and Kuttner (2013) examined research that linked the various roles of families to student achievement (Byrk et al., 2010; Jeynes, 2005, 2012). For example, a meta-analysis of the relationship of parental involvement to student achievement in urban elementary schools conducted by Jeynes (2005) found programs purposed to encourage parental support of their child's education yielded positive outcomes related to the child's academic achievement. The first version of the Dual Capacity-Building Framework conceptualized by Mapp and Kuttner (2013) is in Appendix C.

The Dual Capacity-Building framework serves as a compass to orient objectives toward *conditions* for effective family engagement as opposed to serving as a universal roadmap with step-by-step directions. The open-endedness of the framework provides opportunity for customization according to the needs of an organization. Partnership initiatives to build capacity among families and schools toward student success serve as the fundamental premise underlying the framework (Mapp & Kuttner, 2013). The framework is crafted so that capacity building for school staff and families overlap and occur simultaneously rather than in isolation and asynchronously (Mapp & Kuttner, 2013). The conceptualization of school staff and families building capacity synchronously in the Dual Capacity-Building Framework may signify the importance of valuing the role of each unit for successful student outcomes at possibly an even higher level than projected in the work of Hoover-Dempsey and Sandler (1995, 1997, 2005), J. Epstein (1995), and USDHHS et al. (2011, 2018). Hence, the same message of dual capacity-building was communicated in the family engagement intervention for this study. School staff and participating families of preschoolers engaged in a program of activities as partners to simultaneously build capacity for effectively supporting the preschoolers.

Mapp and Kuttner (2013) identify respectful and trusting relationships between home and school as a key condition for developing the capacity for families and school staff to partner in ways to support a child's development. Trusting relationships, a familiar theme in engagement models, are a prerequisite to meaningful family engagement (Constantino, 2021; Mapp & Kuttner, 2013). Effective engagement activities build capacity by providing opportunities to apply what is learned. As follow up, coaching and feedback are provided to solidify and internalize gained knowledge (Mapp & Kuttner, 2013). Likewise, opportunities for families to practice strategies learned and receive feedback were incorporated into the intervention of this study. For example, during workshops, participants shared persuasive comments or helpful suggestions to build participants' efficacy beliefs. Similarly, participants replied to posts in the classroom's social media group (i.e., Facebook Group) to confirm or enhance another participant's post.

Extant research and current best practices led Mapp and Bergman (2019) to revise the Dual Capacity-Building framework. Data collected from users of the original framework, including data collected from a survey of over 1000 attendees at the June 2017 Institute of Educational Leadership, prompted changes that led to the new framework (Mapp & Bergman, 2019). A change in the directional flow of the graphic from top to bottom to left to right improved the visual depiction representing the shift from ineffective to effective partnerships. The second version of the Dual Capacity-Building Framework conceptualized by Mapp and Bergman (2019) is in Appendix C.

Version 2 provides more detailed descriptors for certain components of the framework. The explicit challenges described in Version 2 present a better understanding of barriers to family-school partnerships that merit immediate attention. For example, families may feel their contribution to their child's education is unwelcomed by the school. To counter any similar sentiments, Constantino (2021) identifies *Communicate Effectively and Develop Relationships* as the second principle of the *Engage Every Family: Five Simple Principles* framework to impress upon schools the importance of creating a welcoming environment for engaging families. Mapp and Bergman's (2019) reframing of the header, *Opportunity Conditions*, to the header, *Essential Conditions*, included the addition of *asset-based* partnerships and *culturally responsive and respectful* partnerships to highlight the importance of valuing the strengths of families. Respect for families' cultural differences acknowledges the growing diversity of families and the need to design family engagement programs in response to the assets of each family. The family engagement intervention program for this study included interactive activities that allowed families to demonstrate knowledge and strengths that might have positively influenced the efficacy beliefs of other families. Additionally, the non-judgmental setting for the intervention and open-ended activities potentially stimulated perceptions of self-efficacy by allowing families the freedom to explore their personal views, opinions, and understandings about engaging with their preschooler in learning experiences.

Similar to the Head Start PFCE Framework and the Dual Capacity-Building Framework, a family engagement program that establishes goals and outcomes for the program may be more tuned to planning activities to achieve set objectives. Furthermore, including families in the decision making for determining goals and outcomes may enhance the culture in which the family-school partnerships operate (Constantino, 2019; J. Epstein, 1995; Mapp & Kuttner, 2013;

USDHHS et al., 2018). For these reasons, participants were contributors in designing the program and determining goals and objectives for the weekly activities developed for the intervention for this study.

Engage Every Family: Five Simple Principles Model. Research conducted by Hoover-Dempsey and Sandler (1995, 1997, 2005), J. Epstein (1995), USDHHS et al. (2011, 2018), and Mapp and Kuttner (2013) led to theories about programs and conditions for family-school interactions that produced desired student outcomes. Furthermore, creating conditions for collaborative family-school partnerships to help families build personal efficacy beliefs for supporting their child's learning at home emerged as a common theme. Building on the theories of Hoover-Dempsey and Sandler (1995, 1997, 2005), J. Epstein (1995), USDHHS et al. (2011, 2018), and Mapp and Kuttner (2013), Constantino (2021) reasoned that a hierarchical order of logical, sequential actions guide family engagement and the development of family efficacy. Figure 1 depicts Constantino's (2021) logic model of the sequential order of five simple principles for engaging families. The *Engage Every Family: Five Simple Principles* model should not be construed as prescriptive, but rather a description of the sequential order of actions that lead to engaging every family in partnerships for student success. The specific activity at each step is tailored to the organization. Constantino (2021) presents simplistic terminology that encapsulates the complex dimensions of family engagement for easy cognitive retrieval and application.

According to Constantino (2021), family-school engagement begins with a culture that engages every family. Additionally, a unified culture is naturally positioned for building relationships. Trusting relationships develop from welcoming school environments that are attentive to two-way communication that effectively connects families and school personnel

(Constantino, 2021). Moreover, families engaged in trusting relationships with school personnel may be more receptive to partnering with schools in activities to build self-efficacy. Furthermore, increased self-efficacy builds capacity to engage families in informed decision making for school improvement. Finally, a school learning community comprised of educators, students, parents and families, and community partners integrates the strengths of the families, the school, and the greater community in recognition that all have roles in promoting academic success for all students.

Principle 1. *A Culture That Engages Every Family* is the first principle of the *Engage Every Family: Five Simple Principles* framework. A culture that engages every family shapes and defines practices of family engagement to be inclusive of every family. Engaging every family reflects a belief in "families as a foundational core component" for school improvement and higher child success (Constantino, 2021, p. 71). The first principle is akin to the starting point of a board game. A culture that engages every family is a condition that must be in place before attempting to initiate the action of the principles that follow. The first principle is a non-negotiable state for beginning effective family engagement.

Success for every student is dependent upon a culture that embraces family engagement. A school culture that engages every family is foundational for the systemic process of the five simple principles. "Simply put, culture shapes what people think and how they act and is shaped by the very same" (Constantino, 2021, p. 76). The first principle communicates an imperative belief system that portrays the role of parents and other family members as active agents in their child's development. The pre-intervention cycle was the context for initiating the establishment of a culture for every family of the preschool classroom to feel welcome to participate in family-school engagement activities. An assessment of culture as the fundamental component of family engagement may be distinctive among the five models examined in this study (Constantino, 2021).

Typically, culture evolves over time and represents historical patterns of actions based on attitudes, values, and beliefs within an organization (Constantino, 2021). For this study, conceptualization of culture evolved from the perceptions of families of the preschool classroom identified. Unless otherwise indicated, references to culture in this study are related to participants' perceptions of classroom culture and participants' perceptions of their interactions between school personnel (e.g., any teacher in the school, support staff, administrator) rather than representation of schoolwide culture. The relationship between Principle 1 and this study are limited to the perceptions of the culture evoked within the window of time the action research occurred. However, since the seven study participants had older children enrolled or previously enrolled in the school, perceptions of classroom culture might be influenced by previous interactions with the school that were associated with their other children.

Principle 2. *Communicate Effectively and Develop Relationships* is the second principle of the *Engage Every Family: Five Simple Principles* framework. Effective communication and trusting relationships create an inviting school environment conducive to effective family engagement (Constantino, 2021). Understanding the importance of relationships between families and schools and cultivating those relationships is critical for high achievement for every student. A welcoming school environment communicates a message to families that they are valued for their essential role in educating their child (Mapp & Kuttner, 2013). Mapp & Kuttner (2013) explicitly identify a welcoming environment as a component of the Dual Capacity-Building framework, which can be linked to Principle 2. Constantino (2021) emphasizes the importance of customer service in public education with the following example:

> Our students and their families must always feel respected and well cared for. Each family…must instinctively sense our desire to make an important personal connection with them, to value their role in the educational partnership, and to support the notion they are important. (p. 128)

Educational settings that nurture the important role of families open an avenue for bidirectional sharing of information for increased dual capacity-building to advance a child's academic success. Furthermore, Mapp and Kuttner (2013) identify descriptors such as relational, mutual trust, collaborative, and interactive as essential conditions for the process of partnering with families, which provides another link to Principle 2.

Principle 3. *Build Family Efficacy* is the third principle of the *Engage Every Family: Five Simple Principles* framework. To support families in their influential role in their child's development, schools must be intentional in efforts to educate families in understanding how to foster their child's learning outside of school. As families become more knowledgeable, confidence in capabilities to act in ways to make a difference in their child's learning outcomes may increase. A study conducted by Hoover-Dempsey and Sandler (2005) found parents' sense of efficacy for helping their child succeed in school was a strong predictor of the extent parents engage children in activities at home. In a later study, Hoover-Dempsey and Sandler (2005) found parents' perceptions of knowledge and skills for involvement emerged as a significant predictor across three measures of involvement (i.e., home-based, school-based, total). Collectively, the two findings provide evidence to corroborate the inclusion of a principle focused on building family efficacy in a family engagement model (Constantino, 2021; Hoover-Dempsey-Sandler, 2005).

Principle 3 builds on two of the six types of involvement described by J. Epstein (1995). When describing *Parenting* and *Learning at Home*, J. Epstein (1995) focuses on family capacity to establish a supportive home learning environment. Constantino (2021) promotes efficacious family engagement not only in the home and in the school but in the broader view of all aspects of a child's life. Constantino (2021) conceptualizes the idea of building family efficacy as families knowing how to assist a child in order to be a positive difference for the child. Furthermore, the Head Start PFCE model specifically identifies *Families as Learners* as an outcome of family engagement (USDHHS et al., 2018). The language of the outcome measure suggests a perpetual quality that may be similar to the ideas conveyed by Constantino (2021) such that building family efficacy does not cease at the end of the year in the Head Start program but remains a characteristic of family practice in the years that follow.

Additional findings from a study by Hoover-Dempsey and Sandler (2005) may have implications linked to Principle 3 and this study. The findings suggest parents of children in the primary grades are more involved than parents of children in upper elementary and middle school (Hoover-Dempsey & Sandler, 2005). Establishing strong, trusting school-family relationships in the early years of a child's education may improve the likelihood of sustaining relationships with families throughout a child's schooling thus increasing opportunities for building self-efficacy that may lead to a greater impact on a child's life than if relationships are established later. The implementation of the engagement program for this study with families of preschoolers might result in long-term family practices that positively affect the preschoolers' academic achievement for multiple years.

Role construction may contribute to the development of family efficacy. In one study, Hoover-Dempsey and Sandler (2005) found parents' perceptions of their role in their child's success was the strongest motivator of involvement in their child's academic life. Interaction with every family is critical for families to understand "that supporting and extending learning is a basic function of the parental role" (Constantino, 2021, p. 156). Furthermore, Mapp and Kuttner (2013), proponents of dual capacity-building, may assert that school personnel actively shape the perceptions created by parents and families of the role they play in engagement with the school and in their child's academic performance. Since research indicates families play such a critical role in a child's success, greater understanding of practices for constructing positive family-school relations for building family efficacy was a focus of this study.

Principle 4. *Engage Every Family in Decision Making* is the fourth principle of the *Engage Every Family: Five Simple Principles* framework. Providing families with a voice in the decision making of policy and practice directly affecting their child communicates that parents and families are a valued part of efforts to strengthen and improve the school and student learning. Implementing a system of family engagement in a way that every family is represented shows respect for the diversity of the school population. An inclusive approach to decision making "creates a sense of shared responsibility among families, students, community members, educators, and administrators" (Constantino, 2021, p. 194). The effectiveness of the fourth principle relies on the success of the third principle to ensure families are skilled, knowledgeable, and confident in their ability to make appropriate decisions regarding their child's development.

Families as shared decision makers may also be found in other engagement models examined in this study in such forms as the following: (a) decision making (J. Epstein, 1995); (b) families as advocates and leaders (USDHHS et al., 2018); and (c) families in the role of co-creator (Mapp & Bergman, 2019). To afford families a voice in decisions for implementing the family engagement intervention for this study, the practice of shared decision making was incorporated into the pre-intervention and intervention action research cycles.

***Principle 5*.** The fifth principle, *Engage the Greater Community*, focuses on creating partnerships between the school and the individuals and organizations outside of the school setting (Constantino, 2021). The principle emphasizes the potential for external assets to positively "influence student learning and development…[and] to strengthen and support the school, students and their families" (Constantino, 2021, p. 200). Analogous to the African proverb, *It takes a village to raise a child*, the fifth family engagement principle acknowledges the greater community as an integral part of the shared responsibility of educating every child.

Once the central structures associated with the first four principles are in place, families and schools are poised to engage the greater community to promote student achievement. For instance, as schools gain understanding about the resources accessible within the community, informative decision making for using the resources will complement the school's efforts previously applied to the first four principles. Furthermore, by reason of successful measures for building the trust in schools that grows from the first four principles, families in this study were receptive to engaging with a community partner recommended by the school (Constantino, 2021). For example, a connection with a community resource was evident by the family participation in a story time activity at the local library provided specifically for the families in the study. The importance of community relationships is also represented in other engagement models examined in this study in such forms as the following: (a) collaborating with the community (J. Epstein, 1995); (b) community partnerships (USDHHS et al., 2018); and (c) connections with community agencies and services (Mapp & Kuttner, 2013).

Model Revision. The original *Engage Every Family: Five Simple Principles* logic model was developed in 2015. Similar to the rationale for the revision of other family engagement and family involvement models in this study, anecdotal data led Constantino to conclude an update was needed for the *Engage Every Family: Five Simple Principles* framework to drive the desired outcomes. To better promote the idea of families working alongside teachers, the third principle was revised in 2021 from *Empower Every Family* to *Build Family Efficacy* to convey the importance of a partnership with families to build capacity for improved student learning (Constantino, 2021).

By nature of the naming of the framework, Constantino (2021) advocates for equitable practices of inclusivity by educational institutions so critical for a contemporary society made up of diverse family structures. As a recently developed family engagement model sensitive to present society, application of the five simple principles for engaging every family proposed by Constantino (2021) is appropriate for a family engagement program to celebrate the diverse families of preschoolers in the JCSD.

Barriers to Successful Family Engagement

Families play a critical role in their child's development (Constantino, 2021). Most parents want their children to perform well, and most parents want to help their children succeed (Mapp, 2003). In a recent policy statement, the USDHHS and U.S. Department of Education (2016) communicated the significance of strong family engagement in early childhood programs for promoting "lifelong health, developmental, and academic outcomes" (p. 1). With the plethora of research to support the affirmative attitude of parents, schools, and governing agencies toward the benefits of a collaborative partnership between families and educational institutes, it is worthwhile to examine the obstacles that hinder successful family engagement practices (J. Epstein & Salinas, 2004; Mapp, 2003; USDHHS et al., 2018).

In a study of 288 families participating in Head Start programs serving low-income African American communities in a southern city region, Mendez (2010) reported a pattern of low engagement of eligible parents in monthly parenting workshops designed to increase parent involvement and to nurture parent-teacher relationships. The nine-month parenting program spanned September to May. Several contextual barriers were identified by parents who completed an end-of-year survey. Work schedule conflict was the most frequently reported barrier to participation at a rate of approximately 47% for one cohort of parents and approximately 40% for a second cohort of parents. An approximate average of 16% of parents reported lack of transportation as an impediment to participation. Other barriers less frequently communicated by parents but justifiable to note included:

- not interested
- childcare
- night classes
- program not relevant
- too crowded
- too tired
- church/church activities
- timing
- illness/health reasons
- not aware of program
- other activities/plans

- pregnancy
- other

Mapp's (2003) qualitative case study involving 18 parents from an elementary school in Boston, Massachusetts focused on identifying factors that lead to successful parent-school partnerships. Data in the form of in-depth, one-on-one interviews were collected from 1996–1999. An examination of the positive attributes of family engagement revealed barriers as well. All 18 parents agreed that the demands of personal responsibilities and day-to-day obligations were influential factors in determining how they were involved in their child's school activities. External constraints such as work schedules, care for children and elderly parents, lack of transportation, and night classes limited family engagement in certain activities whether at home or at school. Additionally, many parents expressed a noticeable correlation between changes in personal circumstances and a decline in involvement; however, specific examples of life events that affected parent involvement were undisclosed. To mitigate barriers to family engagement reported by Mapp (2003) and Mendez (2010) that might be applicable for the families in the JCSD, participants were decision makers in designing the family engagement intervention for this study.

Parent and Family as Child's First Teacher

Implementing efforts to ensure parents and families are skilled and confident in their parenting roles is a logical strategy when recognizing parents and families as the child's first source for learning and socialization. Evidence from as far back as prehistoric times portrays parents as their child's first educators (Berger, 1991). Parents served in dual roles as nurturer and educator through modeling, care giving, and guidance. Life experiences, environmental factors, and cultural norms of the time defined the skills and values parents imparted to their children. In more modern times, parental roles extend across the family. Hence, parents *and* the broader family unit may be viewed as a child's first and most influential teachers.

Vygotsky (1978) concluded that an interconnectedness exists between learning and development from a child's very first day of life. A child learns speech through the spoken language they hear from adults. When children begin to ask questions about their surroundings, the responses from adults govern what children learn about environmental objects. By way of imitating adults, a child learns social skills to regulate behavior (Bandura, 1989; Vygotsky, 1978). The immediate role played by adults when a child is born supports the position that "parents and families are the first and most influential teachers of children" (Constantino, 2021, p. 173).

The meaning a child applies to the activities experienced from the very first days of life is derived from the child's environment (Vygotsky, 1978). As a child's first teacher, parents and families must understand how children develop and how to nurture healthy growth (Dancy, 2012). According to Bandura (1997), a child's initial efficacy beliefs emerge from family experiences. Thus, a parent's responsiveness to their child's behavior as early as the infancy stage affects the development of cognitive and social competencies and skills for children to manage the various conditions encountered each day (Bandura, 1989, 1997; Bradley et al., 1979). A parent or caregiver plays a critical role in how their child learns to solve problems, interact with other people, and quite notably, form an understanding of who they are and what they can do (Barger & Chip Taylor Communications, 2008). As their child's first teachers, parents and caregivers are responsible for creating a home environment with developmentally appropriate learning experiences and materials to stimulate learning and to nurture positive efficacy beliefs toward education in both the child and family. Bandura (1989) believed social experiences influence efficacy beliefs. Based on Bandura's theory, effective family-school partnerships may produce confident families capable of providing stimulating home learning environments. With respect to Bandura's position in the context of this study, social experiences were framed as workshops for building self-beliefs of efficacy and interactions on social media aimed to increase family efficacy for engaging preschoolers in learning experiences at home.

Bandura's Social Cognitive Theory

Albert Bandura is well known for his social learning theory proposed in the 1960s, which later became known as social cognitive theory in the 1980s (Bandura, 1971, 1989). According to Bandura (1971), social learning theory proposes an interdependence of environmental stimulus, reinforcement, and cognitive control systems for a comprehensive understanding of human behavior. Bandura (1971) noted patterns of behaviors are learned from direct experiences or by observing the behavior of others (e.g., modeling) in social learning systems. Bandura (1989) reinforced the interconnectedness of cognitive and social development in renaming his theory to social cognitive theory in the 1980s to better describe how we learn from our social experiences (Bandura, 1989). The terms *social learning theory* and *social cognitive theory* will be used interchangeably in this paper.

Social learning theory assumes modeling operates as an informative process for observers to formulate symbolic representations of modeled activities (Bandura, 1971). Bandura (1971, 1989) identified four interrelated sub-processes that govern observational learning. *Attentional processes* enable the observer to accurately perceive what is modeled. *Retention processes* enable the observer to cognitively store memorable representations of modeled behavior to retrieve for later use. *Motoric reproduction processes* or *behavioral production processes* enable the observer to retrieve cognitive representations to guide courses of action. *Reinforcement* and *motivational processes* regulate open expressions of observational learning. Individuals are more likely to replicate modeled behavior if the modeled behavior is valued by the observer (Bandura, 1989). Mere exposure to a modeled behavior may not sufficiently produce a change in behavior; however, advance communication of the payoff value of adopting modeled behavior may facilitate a higher level of observational learning (Bandura, 1971).

During weekly workshops designed as part of the intervention for this study, recorded interactions between the teachers and preschoolers occurring during the daily routine in the preschool classroom were shared with participants as a means of building self-efficacy in the form of modeling as proposed by Bandura (1971). The significance of the modeled behavior was communicated to tune participants' attentiveness. To activate sub-processes governing observational learning prior to the viewing of the recording, families were asked to watch through the lens of the specific focus of the observation (i.e., attentional processes) and to make mental or written notes of what was observed (i.e., retention processes). To activate the sub-processes governing observational learning after viewing the recording, families were asked to think about how what they observed could be applied in interactions at home (i.e., motoric reproduction processes) and to decide actions for applying what was observed to at-home experiences (i.e., motivational processes).

As contributors to their own motivation, behavior, and development, people need social supports to cultivate competencies, self-beliefs of efficacy, and self-regulation skills to select, influence, and construct circumstances they view as meaningful and worthwhile (Bandura, 1989). The degree societal systems provide assistance to individuals impacts a person's level of influence over their life. A person's judgment of their own capabilities to exercise control over life events plays a central role in their actions. An effective parenting program builds families' sense of confidence in their capabilities to interact with their children in a developmentally appropriate learning environment. By the launch of the intervention for this study, a culture built on trusting relationships was established among the participants. The established environment was safe for participants to take risks (e.g., ask and answer questions, model practices, share ideas) and receive encouragement and affirmation to build confidence and capabilities in the parental role of their child's most important teacher.

Bandura's Theory of Self-Efficacy in the Context of Home Learning Environments for Preschoolers

Preschoolers observe and learn the standards and behavior patterns of the individuals (e.g., parents, siblings, peers, other adults) present in their environment (Bandura, 1989). Parental self-efficacy and family efficacy contribute to how a preschoolers' home environment is shaped. Self-beliefs of efficacy influence the behaviors exhibited by influential persons in a preschooler's home thus impacting the choice of behaviors a preschooler projects or modifies and the choice of new behaviors to add. The perceived self-efficacy of the individuals who interact with the preschooler in the home environment indirectly affects the behavior patterns that take shape in the preschooler (Bandura, 1989; Hoover-Dempsey & Sandler, 2005). For these reasons, building family efficacy for the families of preschoolers in the JCSD may lead to home environments conducive to practices that lead to school achievement.

Definition of Self-Efficacy

Bandura's (1982, 1994, 1997) theory of self-efficacy is concerned with people's beliefs about their capabilities to execute courses of action to exercise control over situations that affect their lives (Coleman & Karraker, 1998). How people think about their capabilities influences behavior and motivation (Bandura, 1982). How people judge their capabilities influences how well a capability is executed (Bandura, 1982). As a proponent of Bandura's efficacy theory, Constantino (2021) affirmed the significance of efficacy beliefs by naming *Build Family Efficacy* as the third principle in the *Engage Every Family: Five Simple Principles* model. In recognition of the potential positive impact of perceptions of self-efficacy, Principle 3, *Build Family Efficacy*, was the focus of this study.

Efficacy beliefs of the families of the preschoolers in the JCSD may be shaped by a family engagement intervention program designed to specifically build family efficacy. As family efficacy increases, a home environment might emerge to nurture behaviors of the preschoolers that lead to academic success. Families in this study became attuned to their efficacy beliefs to some degree by participating in activities such as observations of recorded modeled behaviors, group discussions, and at-home family activities.

Maddux's (2002) juxtaposition of characteristics of what is self-efficacy and what is not self-efficacy provided language that was available to incorporate into the workshops for this study to help increase perceptions of self-efficacy. However, the language was underutilized. Table 5 depicts a comparison of what is self-efficacy and what is not self-efficacy. A greater emphasis on the descriptors defining self-efficacy as proposed by Maddux (2002) is suggested for inclusion in future cycles of action research.

Table 5

A Comparison of What Self-Efficacy Is and Is Not

Self-efficacy is about …	Self-efficacy is not about …
my beliefs in what I can accomplish with my skills under given circumstances.	perceived skill.
my beliefs in my ability to coordinate, integrate, and execute skills and abilities in fluid and challenging situations.	my beliefs in my ability to perform specific and trivial acts.
my beliefs in what I *can* do.	my beliefs in what I *will* do.
my judgments of personal capabilities.	my judgments of self-worth.
my beliefs that I can perform the behavior that produces a desired outcome.	my beliefs in a specific behavior leading to a specific outcome under specific conditions.
my belief in my capability to coordinate skills and abilities to reach a desired goal in a particular situation.	a personality trait.

Note. Adapted from "The Power of Believing You Can," by J. E. Maddux, in C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology*, (p. 278), 2002, Oxford University Press. Copyright 2002 by Oxford University Press.

Parental Self-Efficacy. The basic tenets of Bandura's (1997) self-efficacy theory are applicable to parental self-efficacy. Coleman and Karraker (1998) suggested parental self-efficacy is "one's perceived ability to exercise positive influence on the behavior and development of one's children" (p. 58). Parental self-efficacy incorporates knowledge and understanding of behaviors associated with appropriate child rearing and the belief in one's ability to perform the related behaviors associated with the parental role (Coleman & Karraker, 1998). Once parents achieve an internal sense of proficiency in their capabilities in their parental role, satisfaction in effective parenting and the resulting quality of life becomes attainable even under marginal economic conditions (Coleman & Karraker, 1998).

Parental efficacy from the academic lens, used interchangeably with parental self-efficacy, may be described as having the skills, abilities, and resources to demonstrate parental behaviors that positively influence the educational outcomes of one's child (Constantino, 2021). Parents with high self-efficacy are empowered to make a positive difference for their child, the school, and the community (Constantino, 2021). Moreover, parents with high self-efficacy act as strong advocates for their children when interacting with social and educational institutions that affect their children's development during their formative years of life (Bandura, 1997; Mapp & Kuttner, 2013).

In a review of current literature, Wittkowski et al. (2016) analyzed 15 studies that used a randomized control design to evaluate a group-based intervention for increasing parental self-efficacy in parents of preschool children ranging in age from 4 months–6 years. Seven studies were from the United States, three were from Canada, and five were from Australia. Sample sizes ranged from 24–797 parents who were primarily mothers. The intervention for all reviewed studies focused on parenting skills training. Didactic instruction, group discussions, roleplays, and modeling were incorporated across all intervention models. Video vignettes and homework activities between sessions were used in many of the studies. Assessment of parental self-efficacy was an outcome measure.

The length of the interventions varied greatly. Single session group intervention ranged from 2–4 hours in four studies. In two studies, 1- to 2-hour sessions were offered four times. Between 8 and 15 weekly sessions were offered in nine studies. The methodological quality of each study was rated using the Clinical Tool for Assessment of Methodology (Tarrier & Wykes, 2004). A standardized measure of parental self-efficacy was used for all studies except for one. Effect sizes were calculated using Cohen's *d* to indicate the degree of difference in parental self-efficacy between the group intervention participants and the no intervention control group participants at post-intervention for studies that reported means and standard deviation data (Wittkowski et al., 2016).

Wittkowski et al. (2016) found an overall majority of the studies reported a significant positive impact from group-based interventions focused on parental self-efficacy for parents of preschool-age children. Similarly, the group-based design of activities to build self-efficacy for this study yielded positive outcomes. Participants in this study participated in weekly workshops as a group and contributed or viewed social media posts in a social media group created for the group of participants.

Wittkowski et al. (2016) found differences emerged in the effect sizes of the studies. The ten studies that used a task-specific measure of parental self-efficacy were found to have medium to large effect sizes ranging from 0.42–1.25, suggesting task-specific measures may be more sensitive to detecting parental self-efficacy. Whereas the five studies that used general measures of parental self-efficacy were found to be incalculable, had no effect, or had small to medium effect sizes ranging from 0.26–0.74. Of note, interventions conducted for a single session were shown to produce significant increases in parental self-efficacy, which conveyed possibilities for potentially effective intervention when faced with limited time or funding sources.

Methodological quality must be considered when accepting the findings of the benefits of group intervention on parental self-efficacy for any parental role. Of the 15 studies reviewed by Wittkowski et al. (2016), eight were rated as having inadequate methodological quality according to the Clinical Tool for Assessment of Methodology. Additionally, all studies reviewed used a self-reporting questionnaire as the only means of collecting data to measure parental self-efficacy. The lack of an independent instrument that could be completed by an independent rater to measure parental self-efficacy indicates the highly personal nature of the concept of parental self-efficacy. Finally, the variation in how the concept of parental self-efficacy was operationalized (i.e., general versus task-specific measures or variation in individual questionnaires) made synthesis of research difficult thus resulting in potentially inconclusive findings (Wittkowski et al., 2016). For this action research, qualitative and quantitative data were triangulated as a measure to increase the trustworthiness of the findings (Mertler, 2020).

Family Efficacy. In a policy statement on family engagement, the USDHHS and U.S. Department of Education (2016) defined family to be "inclusive of all adults who interact with early childhood systems in support of their child, to include biological, adoptive, and foster parents; grandparents; legal and informal guardians; and adult siblings" (p. 1). Since members of the family know their children best, family members are key players on the team of decision makers who construct a child's learning experience (Constantino, 2021).

Bandura et al. (2011) defined perceived collective family efficacy as "members' belief in the capabilities of the family to work together to promote each other's development and well-being" (p. 424). Family members do not work independently. Rather, the family unit operates interdependently to achieve goals (Bandura et al., 2011). As a social system, the family is positioned as the ideal structural establishment for family members to pool knowledge, skills, and resources to work together to accomplish what cannot be accomplished individually (Bandura et al., 2011; Costa et al., 2016).

Perceived collective family efficacy is rooted in self-efficacy, but it is not simply a sum of the perceived self-efficacy of each family member (Bandura, 1982). Rather, collective family efficacy beliefs rest on the family's operative capabilities to act coordinately on a shared belief (Bandura, 1997, 2000; Bandura et al., 2011). Consequently, efficacy beliefs of parents and other adults who make up a child's family affect beliefs of collective family efficacy of the family unit. Families with a high sense of family efficacy can positively affect a child's learning outcomes (Constantino, 2021). They seize challenges as opportunities rather than obstacles. They communicate high expectations for their children and believe their children can be successful in school (Constantino, 2021). Families with high efficacy beliefs are equipped to "socialize their child[ren] to the importance of learning" and are effective in using their parental role for mediating positive learning outcomes (Constantino, 2021, p. 50). By engaging in academic socialization, families understand the importance of academic achievement and translate that message to their children (Constantino, 2021). The design of the intervention for this study was intentionally family-focused to develop and support common family practices that might result in high child achievement.

Sources of Self-Efficacy

The social cognitive theory provides a familiar context for understanding the development of self-efficacy (Bandura, 1994, 1997; Maddux, 2002). Self-efficacy emerges from four influential sources: (a) mastery experiences that provide evidence of levels of skills and capabilities, (b) vicarious experiences that appraise one's capabilities in relation to social models, (c) verbal persuasion that others express to convey faith in another person's capabilities to master tasks, and (d) physiological and affective states that provide somatic information for judging capabilities (Bandura 1994, 1997).

Mastery Experiences. The most influential source for affecting self-efficacy is mastery experiences (Bandura 1994, 1997). Personal accomplishments build beliefs in one's capabilities to act in a manner to successfully manage effects. Failures threaten such self-efficacy, especially if self-beliefs of efficacy are wavering (Bandura, 1995; Maddux, 2002). Activities included in the family engagement intervention for this study were designed for participants to experience success. The activities were open-ended as an attempt to better match the comfort level of participants. For example, participants observed the preschool assistant reading a story to preschoolers and using questioning strategies to promote higher-level thinking. Participants had an opportunity to incorporate what they learned from the observation when reading to their preschooler at home. The practice of reading to the preschooler at home was a measure of success. Incorporating strategies to encourage high-level thinking raised the level of success according to participants' perceptions of self-efficacy.

Vicarious Experiences. A second way of influencing self-efficacy is by judging one's capabilities in relation to the observed capabilities of a similar social model (Bandura, 1989, 1997). The stronger the association the observer makes with the model, the greater the impact of modeling on the observer's perceived self-efficacy (Bandura 1994, 1995). Conversely, if observers perceive the model to be significantly different from themselves, perceived self-efficacy tends to be unaffected (Bandura, 1994, 1995). To increase perception of similar social standing among participants in the family engagement intervention provided in the study, a partnership model was consistently communicated when building the culture for engaging the families. Participants were valued in their role, and the message of learning together and from each other was constantly conveyed to strengthen individual perceptions of self-efficacy.

Verbal Persuasion. Bandura (1989, 1994, 1997) identified verbal persuasion as a third way to boost a person's belief in one's capability to perform successfully. Verbal persuasion is a means to enact social influence to convince a person that they possess the skills and abilities to accomplish what they desire to achieve (Bandura, 1997). Efficacy beliefs are influenced by the words others use to communicate to us what they believe we can do or are not able to do

(Maddux, 2002). It is easier to overcome challenges when others convey encouraging verbal messages about one's capabilities. When establishing the norms for participating in the activities for the family engagement intervention in this study, one condition was the expectation for participants to be conscientious of making comments and displaying behaviors that were encouraging and supportive of building self-efficacy. Activities were structured to position participants in situations for verbal persuasion that gave rise to successes. For example, as families shared personal accounts of learning experiences at home, participants in the role of social persuaders were free to reply with a positive verbal response or in text on social media.

Physiological and Emotional States. Perceptions of self-efficacy are shaped in part by information conveyed by physiological and emotional states, the fourth source for modifying efficacy beliefs (Bandura, 1994, 1997). Stressful and tense situations are often associated with poor performance and perceived failure, whereas enjoyable states are associated with success (Bandura, 1997; Maddux, 2002). The impact of physiological and emotional stimulation on efficacy beliefs will vary according to how situational factors are singled out and assigned meaning. For example, people characterized with a high sense of self-efficacy will more likely assess a highly affective state as a motivator, whereas those distressed with self-doubts will be debilitated by extreme states of physiological and emotional stimulation (Bandura, 1995). The intensity of physical and emotional reactions is not what is significant but rather how the reactions to physical and emotional stimulations are perceived and interpreted is of most importance (Bandura, 1995). Since participants were decision makers in designing the family engagement intervention for this study, participants had a voice in planning enjoyable activities that might induce positive emotions for creating conditions to potentially increase self-efficacy.

Potential Effects of Early Childhood Education Programs for 4- and 5-Year-Old Preschoolers on School Readiness and Family Efficacy

Early childhood education programs have been established to support parents in preparing their children to be ready for school. School readiness is a widely used phrase with multiple interpretations of its meaning (Ackerman & Barnett, 2005). Since defining school readiness can be a complicated task that is unlikely to meet consensus of local, state, and national stakeholders, the concept of school readiness for this study will be described as the ability to access skills to perform successfully in the areas of physical, social, language, and academic development in addition to the ability to problem-solve upon entering kindergarten (National Center on Parent, Family, and Community Engagement, 2018).

White et al. (1992) analyzed 172 differential early childhood intervention studies involving early childhood programs with a parent involvement component to advance school readiness. The intervention studies were organized according to the three following attributes: (a) a study cited by prominent reviewers of early intervention research literature, (b) a study defined as treatment versus non-treatment study, and (c) a study designed as a direct comparison of interventions involving parents and interventions not involving parents. White et al. (1992) found little evidence from the three data sources to support frequently cited claims that involving parents in their child's early childhood intervention program would produce more effective outcomes for the child and the family. Ten years later Mattingly et al. (2002) extended the work of White et al. (1992) by examining 41 intervention programs involving parents of children in Grades kindergarten through 12. Thirty-one (75.6%) of the 41 programs focused on increasing parent support at home, the most common type of parent engagement intervention identified in the examination of the programs. Of the 31 programs, 56.1% lacked measures to evaluate the impact of the program. The analyses conducted by Mattingly et al. (2002) yielded similar conclusions as the findings of White et al. (1992). Thus, a lack of evidence prohibited a stance on the effectiveness of parent involvement programs.

Grindal et al. (2016) conducted a meta-analysis of the added value of parenting education embedded in early childhood education programs. The study sample consisted of 46 preschool studies, 70 contrasts (i.e., targeted group comparisons), and 455 effect sizes. Analyses found no differences in short-term measures of cognitive ability or pre-academic skills of children who attended a preschool program that did or did not provide a component of parent engagement. One explanation of the findings may be the quality of the parenting program (i.e., level of attention toward planning the parent engagement component) and the frequency of contact with parents (Grindal et al., 2016). When the parenting program included one or more home visits per month, the effect size for cognitive outcomes was significantly larger than parenting programs with less frequent home visits. Additionally, the length of the home visit was linked to program impact on children's cognitive skills. These findings suggest changes in parent behaviors to improve children's cognitive skills may occur by building trusting relationships with families through frequent personal contacts (i.e., a minimum of monthly) for the purpose of two-way sharing of information to meet the individual needs of the child and the needs of the collective family unit. When home visits may not be an option, as was the case for the family engagement intervention for this study due to challenges associated with the COVID-19 pandemic, trusting relationships were built by connecting with families through phone calls, text messages, social media, written correspondences, and virtual gatherings.

Bronfenbrenner (1974), a pioneer in the movement to establish well-designed early childhood interventions, examined 12 studies involving children ages 1–6 who participated in a preschool intervention in a group setting outside of the home. Contrary to the findings of Grindal et al. (2016), Mattingly et al. (2002), and White et al. (1992), results indicated substantial gains in cognitive measures during the initial year of the program intervention. However, by the first or second year after program completion, children showed a decline. By the third year, children returned to at-risk status. The sharpest decline appeared after the child began regular school. Preliminary data suggested preschool invention programs with a strong parent engagement component into the primary grades might counter regression children experience without such continuous support in place (Bronfenbrenner, 1974). The findings have implications for continuing family-school engagement into the primary grades and beyond to develop efficacious families capable of sustaining and potentially extending a child’s learning gains experienced in preschool.

A child’s success may be more attributable to what goes on out of the school setting than what goes on in the school setting (Bronfenbrenner, 1974). The parent-child system, or the more inclusive family-child system, is a key element of an effective family-school engagement that has enduring power (Bronfenbrenner, 1974; Constantino, 2021). By projecting families as the primary agent of any engagement opportunity, families are more likely to perceive the importance of their role as influential teachers. Preschool programs that coordinate at-home activities with instructional practices in the classroom build family practices to promote continuity in a child’s learning experiences (Constantino, 2021; A. Epstein, 2007; Gainsley, 2014). A similar illustration was evident in the engagement practices self-reported by participants in this study. Participants’ comments indicated families engaged in activities at home that were the same or similar to activities provided at school.

State-Funded Early Childhood Education Program

State-funded preschool programs have been created to meet the needs of underrepresented and low- and moderate- income families to prepare children for success in the primary grades (Friedman-Krauss et al., 2020). Perhaps influenced by The Goals 2000: Educate America Act (Earley, 1994), the state-funded VPI was established in 1995 for 3- and 4-year-old children unserved by Head Start and 5-year-old children who were not eligible to attend kindergarten (USDHHS et al., 2018; VPI, 2020). The VPI program uses an inclusive family-school approach to child development by incorporating parent involvement and family engagement into the program guidelines (Virginia Department of Education, n.d.-a). A well-crafted plan for engagement for families of VPI children begins with activities and strategies to build relationships between the school and family members at the onset of the process for enrollment into the program. Families of VPI children are viewed as partners in their child's school experience (Virginia Department of Education, n.d.-a). The Virginia Department of Education (n.d.-a) acknowledged the significant role parents play in their child's education by including an expectation for VPI programs to promote activities to engage parents and families. A VPI classroom in the JCSD provided an appropriate context for the family engagement intervention program for this study.

Significance of Program Curriculum

By nature of the profession, preschool teachers are trained to be experts on child development and equipped with a set of basic skills for teaching young learners. Even the most highly skilled teacher would have difficulty single-handedly planning daily, systematic, proven educational experiences for preschoolers and their families. Therefore, using a single, established preschool curriculum validated by years of research unifies the instructional practices critical for high-quality early childhood programs (A. Epstein, 2007; Schweinhart, 2004). The family engagement model for this study partners with families of preschoolers in the VPI program to extend researched practices for a child's academic development (i.e., preschool curriculum developed from research) into the home.

HighScope Preschool Curriculum. The Perry Preschool project was conducted from Fall 1962–Spring 1967 for 3- and 4-year-old children from low-income families in an area of predominantly African American children in Ypsilanti, Michigan, to examine the long-term effects of a high-quality preschool program (Schweinhart, 2013). The strength of the project lies in the experimental design of randomly assigned participants into a program or no-program group, a characteristic of the project which justified assessment of program effects even years later. A total of 58 children were in the initial program cohort; 65 were in the no-program group. Children in the program group attended 150-minute classes led by the program's teachers each weekday morning, and teachers conducted 90-minute home visits with each mother and child once a week in the afternoon (Schweinhart, 2013).

The program was based on the idea that learning activities should be defined and initiated by both teachers and children. The education model used in the Perry Preschool classroom drew on the theories of child development of Jean Piaget, Lev Vygotsky, and John Dewey (Marion, 2015; Piaget 1972/1973; Schweinhart, 2004, 2013; Vygotsky, 1978). Eventually named HighScope, the early childhood educational model of the Perry Preschool emphasized the idea that children are "intentional learners, who learn best from activities that they themselves plan, carry out, and review afterwards" (Schweinhart, 2013, p. 394). Children are active participants in their learning. Key developmental indicators developed from child development theory served as the framework guiding the program's adults in creating opportunities that encouraged children to make choices, solve problems, and engage in interactions that advance intellectual, social, and physical development (Schweinhart, 2013). The intervention for this study aimed to increase participants' beliefs and confidence in providing shared opportunities for preschoolers to be active learners and problem-solvers at home similarly to the types of interactions occurring in the preschool classroom.

The concept of families as partners with the school directly supports tenets of the HighScope child development approach (Schweinhart, 2004). Schools as partners with families means helping families understand child development so families can develop appropriate expectations for their preschooler (Schweinhart, 2004). For instance, the workshops that were part of the intervention for this study provided opportunities for families to learn how to engage in and promote child-initiated, active learning, a key component of the HighScope curriculum. In addition, the workshops directly aligned to the *Build Family Efficacy* principle of the *Engage Every Family: Five Simple Principles* model (Constantino, 2021; Schweinhart, 2004).

Ingredients of Active Participatory Learning. HighScope teachers scaffold children's learning by thoughtfully and intentionally providing materials, planning activities, and engaging in conversations with children in ways that support and challenge what children observe, think, and do (A. Epstein, 2007). Activities are designed around children's interests and matched to their developmental level. Teachers and children as partners in shaping the learning experience is what HighScope describes as active participatory learning (A. Epstein, 2007). The concept of active participatory learning has five ingredients: (a) materials, (b) manipulation, (c) choice, (d) child language and thought, and (e) adult scaffolding (A. Epstein, 2007). In an active participatory classroom, children freely choose from an abundance of diverse, age-appropriate materials to make discoveries through hands-on examination and manipulation of the resources and communicate verbally and nonverbally what they are doing as adults support their current understanding and extend learning to the next level.

Active Participatory Learning at Home. HighScope advocates recognize and acknowledge families as “a child’s first and most important source of learning and that teachers can learn from [families] as well as vice versa” (A. Epstein, 2007, p. 81). When families and teachers have a common understanding of the five ingredients of active participatory learning, opportunity for home-school continuity increases. The HighScope educational model is an open framework without a requirement to purchase specific materials (Schweinhart, 2004, 2013). Families can easily use materials and resources readily available at home to provide active learning activities inclusive of the five ingredients of active learning. Participants in this study engaged in active learning experiences firsthand to nurture self-beliefs of efficacy for providing active learning experiences for their preschooler.

Parent-School Partnerships, Self-Efficacy, and School Readiness: Summary of Literature Findings

The most salient finding in the review of relevant literature was the essential role of the parent, or the family as in more recent research, as their child’s first and most influential teacher (Berger, 1991; Constantino, 2021; Dancy, 2012). In recognition of the parent and family as important figures responsible for shaping a child, numerous family-school models have been developed to engage parents and families as partners in their child’s learning (Berger, 1991; Bronfenbrenner, 1975; Constantino, 2021; Dancy, 2012; J. Epstein, 1995; Hoover-Dempsey & Sandler, 1995, 1997, 2005; Mapp & Kuttner, 2013; USDHHS et al., 2018). Successful family engagement practices build relationships with families and explicitly communicate to families that they are valued before directing a focus toward capacity building (Constantino, 2021; Mapp

& Kuttner, 2013). Moreover, families not only need the skills and abilities that develop from capacity building, but also a sense of belief and confidence to use their skills and abilities to support their child's academic success (Bandura, 1997; Constantino, 2021; Hoover-Dempsey & Sandler, 1995, 1997, 2005). Accordingly, building self-efficacy and building family efficacy are common threads of family-school engagement theory. Furthermore, family-school engagement is a typical component of an early childhood education program and thus provides an optimal avenue to build family efficacy to influence academic achievement.

CHAPTER 3

METHODS

The methods for executing the action research design for this study are presented in this chapter. The mixed-methods study was conducted from a pragmatic view centered on testing solutions to real-world problems of practice (Creswell & Creswell, 2018; Mertler, 2020). As a mixed-methods study, qualitative and quantitative data were collected. Quantitative data were collected in the form of a survey (i.e., pre- and post-intervention rating scale) and a record of participation in activities for building self-efficacy. Qualitative data were collected in the form of semi-structured focus groups. Quantitative and qualitative data were treated equally and were examined to build a coherent understanding of family engagement and perceptions of self-efficacy. Triangulation of data added validity to the study (Creswell & Creswell, 2018; Mertler, 2020).

Elements of the study are further elaborated in this chapter. The action research model, including the details of the intervention, is described. The participant selection process, the instrumentation, the data collection procedures, and data analysis techniques are presented. Delimitations, limitations, and assumptions associated with the study are acknowledged. Finally, ethical considerations for protecting the participants of the study are described.

Action Research Questions

The goal of this mixed-methods action research study was to offer an intervention as a means of engaging families in the academic lives of preschool children. The study examined the influence of the family engagement intervention program on beliefs and behaviors of families of preschoolers as related to engagement practices and as related to perceptions of self-efficacy for providing developmentally appropriate learning activities at home. For this study, the use of the term *developmentally appropriate* will be representative of learning experiences for preschoolers that encourage problem solving, hands-on manipulation of materials, and active movement (A. Epstein, 2007; Gainsley, 2014; Schweinhart, 2013). The study examined the extent of participants' participation in engagement activities, participants' perceptions of their capabilities for providing developmentally appropriate learning activities for their preschooler at home, participants' actions to employ their capabilities, and participants' perceptions of the role of the family and the role of the school in academic success. Therefore, the study was guided by the following research questions.

1. To what extent do families participate in the activities of a family engagement program?
2. After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?
3. In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?
4. How do families describe the role of the family and the role of the school in their preschooler's academic success?

Action Research Model

Mertler (2020) described action research as "a process by which current practice can be changed toward better practice" (p. 15). The design of the action research for this study intended to produce an outcome for developing practices that increased opportunities for active learning experiences for preschoolers at home. The cyclical nature of action research allowed for refinement of the intervention through shared decision making toward positive change (Constantino, 2021; Mertler, 2020).

Mertler (2020) described an action research model that served as the guide for this study. The model employs four stages, or steps, that constitute the cyclical process of action research. First, the problem is identified, and research is conducted to develop a plan of action. Second, the plan is executed, and data are collected and analyzed. Third, revisions to the plan are completed, and future cycles are designed. Finally, the results of the implemented action plan are shared, and reflection on the entire process drives the preparation for the next cycle. The sequential order of the stages is only a guideline. The steps may be skipped, reordered, or repeated (Mertler, 2020).

As with most action research studies, early cycles of action research provide an opportunity for reflection to refine the action research process and provide the groundwork for subsequent cycles of action (Mertler, 2020). A pre-intervention cycle was used to build a collaborative culture among the participants and develop relationships to set the stage for launching the family engagement intervention for the study. The intervention for this study began in Cycle 2 of the action research. To promote inclusivity, families were invited to provide formative feedback and share in decision making in the pre-intervention cycle and the intervention cycle to help guide effective implementation of the family engagement intervention program (Constantino, 2021). Inclusivity aligns to Principle 4, *Engage Every Family in Decision Making*, of the *Engage Every Family: Five Simple Principles* framework that served as the foundation for this study (Constantino, 2021). The application of Mertler’s model of action research as applied by the researcher for this study is communicated in Figure 2 and Figure 3.

Description of the Action Research Intervention

Research indicates parents and families are a child's first and most influential teachers (Constantino, 2021; Cordry & Wilson, 2004; Dancy, 2012). Since parental roles might be fulfilled by individuals other than or in addition to biological parents, families were the target audience of the intervention designed to build self-efficacy for engaging preschoolers in active learning experiences at home. The study was conducted among participants who were members of the families of preschoolers participating in the 2021-2022 VPI program funded by the state and coordinated by the school district.

The six-week family engagement intervention program was conducted by the preschool teacher and researcher from March–April 2022. Due to unforeseen circumstances, the preschool assistant acted solely in her role as a teacher in the classroom setting; however, the implementation and facilitation of the activities associated with the family engagement intervention program were planned to be inclusive of both teachers in the preschool classroom to communicate both teachers valued the families. Personal obligations arose that required the preschool assistant to operate as an indirect participant in the study as a classroom teacher rather than in an extended, direct role as co-facilitator of the intervention activities with the families as anticipated.

The family engagement intervention program consisted of the following: (a) pre- and post-intervention rating scale, (b) pre- and post-intervention focus groups, (c) four virtual workshops, and (d) ongoing collaboration via social media. Repeated cycles of action research were embedded in the intervention cycle to constitute most of the action research for the study. Table 2 provides the timeline for the family engagement intervention program. The use of the term *intervention* when directly related to this study specifically refers to the four virtual workshops and ongoing collaboration via social media.

The 10-item pre- and post-intervention rating scale monitored change in participants' perceptions of self-efficacy for supporting their preschooler's academic success and change in participants' perceptions of the roles of family and school in their preschooler's academic success. Participants were provided an online and hard copy option. All participants elected to complete the online version for both administrations of the rating scale.

Participants engaged in one 60-minute virtual semi-structured focus group at the beginning of the intervention and one 60-minute virtual semi-structured focus group at the end of the intervention to communicate perceptions of self-efficacy and perceptions of family engagement. Multiple focus groups were conducted to accommodate the busy schedules of families.

The preschool teacher facilitated the four virtual workshops. The workshops were delivered over Zoom, a video teleconferencing software program. The structure of each 30-minute virtual workshop was similar; however, revisions were made according to weekly feedback and data analysis. During the workshops, families observed live, modeled lessons or recorded, modeled lessons demonstrating interactive strategies occurring in the school setting that are appropriate for home learning. In addition, families were provided time to practice strategies with their preschooler using materials provided by the school. Families had an opportunity to reflect on the workshop experience in an oral discussion or after the workshop in a narrative posting on social media. Finally, a discussion of how any observed strategies might be applied in learning at home concluded the virtual family workshop when time permitted. The discussion stems included:

- Describe the most important thing you learned today and tell why.
- Name the most difficult thing you learned today and tell why.
- Name at least one thing you will do with your preschooler because of what you learned today.

An example of the learning targets and methods for facilitating one workshop is in Appendix A.

Facebook, a popular social media platform, was used as a platform for building relationships and sharing information (e.g., links to virtual workshops, video recordings, parenting resources) to complement and extend the collaboration occurring in weekly workshops. A Facebook Group was created specifically for and restricted to the families of preschoolers enrolled in the classroom invited to participate in this study. When participating in the Facebook Group, members shared pictures documenting learning experiences occurring at home and comments that could be interpreted as social engagement. Both types of activity served as a means to build relationships among members of the group and as a means to build self-efficacy. Members of the group engaged in back-and-forth exchanges or viewed the posts and interactions of others in the group. The Facebook Group was administered under the school district's Facebook account as a measure of security. YouTube, a video sharing website, was utilized as an additional resource for families to access any video recordings produced for the family engagement intervention program. The video recordings were unlisted on YouTube (i.e., invisible in search results, subscriber feeds, suggestions, and user video tabs) and links to the video recordings were only shared with the participants in the study.

All data collected were analyzed and results were organized to communicate the findings of the study. Findings will be shared with stakeholders such as the families in the study, the non-participating VPI Teachers and VPI Assistants, school-level administrators, school district leaders, community organizations supporting early learning, and state-level early childhood education leaders.

Intervention Accommodations. To accommodate individual preferences, participants were extended the option to receive a hard copy of any material upon request in addition to access to digital materials; however, no requests were made by a family. Materials and resources were provided in English and Spanish; however, recordings of the virtual workshops were created in English only and shared with families via email and the classroom's Facebook Group. The recordings were housed on YouTube. To ensure understanding, oral and written communication in the language of participants and in a family-friendly context sensitive to the language skills of the participants was a priority throughout the intervention (Mertler, 2020).

The JCSD provided iPads for each preschooler to use with their family at home. To assist with internet access, JCSD was positioned to provide a Kajeet, a device for connecting to internet services at home, upon request; however, the service was not needed as families had reliable technology to participate in the activities for this study. Prior to participation in the study, families completed a participant consent form, which is in Appendix D.

Family Engagement Model Guiding the Intervention. The *Engage Every Family: Five Simple Principles* model guided the development of the family engagement intervention program (Constantino, 2021). The five principles were intentionally incorporated into the intervention; however, the action research primarily focused on Principle 3, *Build Family Efficacy*. Figure 1 illustrates the logic model for the five simple principles.

At the time of the launching of the intervention cycle, a culture built on trusting, supportive relationships for increasing self-efficacy was evident among the participants by comments potentially revealing vulnerability and by anonymous monetary acts to support a participant in need. Two-way communication (i.e., same provisions for families to communicate with the teacher and researcher as for the teacher and researcher to communicate with families) and shared decision making promoted sustained participation in the program. The researcher's underlying objective for the intervention program was to examine and understand perceptions of self-efficacy and perceptions of engagement as related to the academic lives of preschoolers.

Role of the Researcher

As the facilitator of the VPI program in the JCSD, I often work with families of preschoolers who enter the VPI program. As the researcher for this study and a collaborator in the design of the intervention for this study, my relationship with the parents introduced potential biases driven by my background knowledge of families. In the role of participant-as-observer during the virtual workshops, participants were aware of my presence; however, most of the teaching, speaking, and answering of questions was managed by the teacher who had established the closest relationships with the families (Mertler, 2020). As a participant-as-observer, I interjected comments minimally to avoid undermining relationships between families and the teacher yet still had an opportunity to learn firsthand about perceptions of family efficacy.

To counter any impact of my biases on the study, I monitored my interactions with families and practiced weekly reflexive journaling to ensure my comments and behaviors were objective without leading the teacher or family member in any direction (Haynes, 2012). Member checks were conducted at the end of each workshop to ensure any revisions to the design of the virtual workshops reflected the interests and needs of families and supported family efficacy (Mertler, 2020). Throughout the intervention, families were encouraged to make suggestions for revisions to the intervention. Data analysis of patterns of participation and observations during the virtual workshops were conducted throughout the action research cycle to inform decisions for planning the intervention.

Participants

The family engagement intervention program designed and implemented in this action research study was conducted in a virtual setting for the families of preschoolers who were participating in one of the VPI classrooms in the JCSD during the 2021-2022 school year. All families were invited to participate in the study. Seven biological mothers of seven different preschoolers consented to participate. All seven participants were biological mothers of older school-age children, many of whom participated in the school district's preschool program. Other noncommittal families participated in intervention activities and were referenced as non-study participants when appropriate for inclusion in discussions. The VPI Teacher facilitated the implementation of the intervention. The VPI Teacher invited to participate in the study was chosen because of past success in engaging families using a social media outlet similar to the social media outlet chosen for this study (i.e., Facebook). The VPI Facilitator for the JCSD served as the researcher for the study in the role of participant-as-observer.

Preschoolers were eligible to participate in the VPI program if their family met one of the following criteria:

1. family income at or below 200% of federal poverty guidelines
2. homelessness
3. parent inability to achieve high school graduation

4. family income at or above 200% but at or below 350% of federal poverty guidelines in the case of a child with special needs or a disability
5. locally determined eligibility factors (e.g., COVID-related disadvantages, single family, academic developmental delays, social developmental delays; Virginia Department of Education, n.d.-a)

Table 6 provides the income reporting categories for all the preschool families in the classroom invited to participate in the study. Furthermore, an identification of English-learning family is indicated to provide additional descriptive information.

Table 6

Income Reporting Categories for Preschool Families in Participating Classroom

Income Reporting Category	English-speaking families	English-learning families
At or below 130% of the 100% federal poverty guideline	8	2
Above 130% but at or below 200% of the 100% federal poverty guideline	4	0
Above 200% but at or below 350% of the 100% federal poverty guideline	1	0
Above 350% of the 100% federal poverty guideline	1	0
Total	14	2

Note. *N* = 16. Annually, the Virginia Department of Education (n.d.-c) provides guidelines for using family income criteria in determining student eligibility for the state-funded Virginia Preschool Initiative program.

Table 7 provides the income reporting categories representing the seven preschool families who accepted the invitation to participate in the family engagement intervention program designed for this study. Furthermore, an identification of English-learning family is indicated to provide additional descriptive information.

Table 7

Income Reporting Categories for Preschool Families in the Study

Income Reporting Category	English-speaking families	English-learning families
At or below 130% of the 100% federal poverty guideline	4	1
Above 130% but at or below 200% of the 100% federal poverty guideline	1	0
Above 200% but at or below 350% of the 100% federal poverty guideline	0	0
Above 350% of the 100% federal poverty guideline	1	0
Total	6	1

Note. n = 7. Annually, the Virginia Department of Education (n.d.-c) provides guidelines for using family income criteria in determining student eligibility for the state-funded Virginia Preschool Initiative program.

To further understand characteristics of the preschool classroom invited to participate in this study, the race and ethnicity of the preschoolers as reported by their parents are captured in Table 8. In some instances, multiple races were represented. Additionally, preschoolers were identified as either Hispanic or non-Hispanic ethnicity.

Table 8

Ethnicity and Race Reporting Categories for Preschoolers Enrolled in Participating Virginia Preschool Initiative Classroom

Ethnicity/Race	*n*
Hispanic/American Indian or Alaskan Native	1
Hispanic/Black	1
Hispanic/White	3
Non-Hispanic/Black	6
Non-Hispanic/Black/White	2
Non-Hispanic/Native Hawaiian or other Pacific Islander/Asian/White	1
Non-Hispanic/White	2
Total	16

Note. *N* = 16. Self-reported data collected from the online preschool application completed by families in the Johnson City School District for the 2021-2022 school year.

To further understand characteristics of the preschoolers who were part of the families of the participants who consented to participate in this study, the race and ethnicity of the preschoolers as reported by their parents are captured in Table 9. In some instances, multiple races were represented. Additionally, preschoolers were identified as either Hispanic or non-Hispanic ethnicity.

Table 9

Ethnicity and Race Reporting Categories for Preschoolers in the Study

Ethnicity/Race	*n*
Hispanic/American Indian or Alaskan Native	1
Hispanic/Black	0
Hispanic/White	3
Non-Hispanic/Black	1
Non-Hispanic/Black/White	1
Non-Hispanic/Native Hawaiian or other Pacific Islander/Asian/White	1
Non-Hispanic/White	0
Total	7

Note. *n* = 7. Self-reported data collected from the online preschool application completed by families in the Johnson City School District for the 2021-2022 school year.

To further understand characteristics of the participants who consented to participate in this study, the self-reported race and ethnicity of the seven participants are captured in Table 10. Additionally, participants were identified as either Hispanic or non-Hispanic ethnicity if the identification was provided.

Table 10

Ethnicity and Race Reporting Categories for Participants in the Study

Ethnicity/Race	*n*
Black/African American	1
Hispanic	3
Hispanic/White	1
White	2
Total	7

Note. *n* = 7. The self-reported data were collected from the administration of the pre-intervention rating scale. All participants self-reported a relationship of mother to the preschooler.

Data Sources

Quantitative and qualitative data were collected to add credibility to the research and to glean a better understanding of the research problem (Creswell & Creswell, 2018; Mertler, 2020). A pre- and post-intervention rating scale and a record of participation in the activities for building self-efficacy provided quantitative data. Transcripts of pre- and post-intervention semi-structured focus groups provided qualitative data. Collectively, these data answered the overarching research questions related to engaging families in the academic lives of preschool children. Triangulation of the quantitative and qualitative data strengthened justification of themes and changes in perceptions and added validity to the study (Creswell & Creswell, 2018).

Rating Scale

Ratings scales are appropriate instruments for collecting quantitative data to measure perceptions. Rating scales consist of a set of questions formatted such that each response occurs on a continuum to indicate the strength of the response. A Likert scale is one type of rating scale in which individuals respond on a continuum typically ranging from *strongly agree* to *strongly disagree* (Mertler, 2020). A Likert scale was used for this study to provide quantitative data. The 10 items constructed for the pre- and post-intervention rating scale were constructed by modifying items from the Me as a Parent rating scale developed by Hamilton et al. (2015) that measures global beliefs about self-efficacy and two rating scales developed by Constantino (2021) that are designed to measure perceptions of family-school engagement.

The three existing rating scales were reviewed for applicability to this study. Potential scale items were matched to Action Research Questions 2 and 4. The scale items were modified to align to the applicable research question. The final 10-item version of the instrument was reviewed by individuals selected based on experience in engaging individuals or experience in the field of early childhood education. Instrument reviewers included an expert in the field of family engagement, an expert in the field of action research, and the VPI Teacher participating in this study. The rating scale was revised according to the feedback from the pool of experts.

Families were provided the option of a printable version or an online version of the pre- and post-intervention rating scale in English and Spanish. The printable pre- and post-intervention rating scale is in Appendix E. For this study, all participants preferred the online version of the rating scale. Table 11 provides the alignment of the rating scale items, the research questions, and the principles of the *Engage Every Family: Five Simple Principles* model that guided this study (Constantino, 2020).

Table 11

Alignment of Rating Scale Items, Action Research Questions, and Principles of Family Engagement

Rating Scale Item	Research Question	Principle
1. I have confidence in myself in my role as a parent.	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy
2. I have all the skills necessary to support my preschooler's learning at home.	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy
3. My role as a parent is valued by the school.	ARQ4 How do families describe the role of the family and the role of the school in their preschooler's academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
4. I feel welcome at my preschooler's school.	ARQ4 How do families describe the role of the family and the role of the school in their preschooler's academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
5. I know I am doing a good job supporting my preschooler's learning at home.	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy
6. My preschooler's school encourages me to support my child's learning at home.	ARQ4 How do families describe the role of the family and the role of the school in their preschooler's academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
7. My skills for supporting my preschooler's learning at home are effective.	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy
8. I know what my preschooler should be learning at this stage of development.	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy
9. My preschooler's school regularly provides materials for	ARQ4 How do families describe the role of the family and the role of the school in their preschooler's academic success?	P1 A Culture that Engages Every Family P2 Communicate

Rating Scale Item	Research Question	Principle
me to support my preschooler's learning at home.		Effectively and Develop Relationships
10. My preschooler's school values working with my family to help my preschooler be successful.	ARQ4 How do families describe the role of the family and the role of the school in their preschooler's academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships

Note. ARQ = action research question; P = principle of family engagement (Constantino, 2021).

Record of Participation in Activities for Building Self-Efficacy

The extent families participate in school-related activities may contribute to understanding a school's culture for engaging families (Constantino, 2021). For this study, school culture is representative of the culture of the preschool classroom unless otherwise indicated. Record-keeping of participation in activities associated with the family engagement intervention served as a data source to measure the frequency participants engaged in activities for building self-efficacy provided by the school, or more specifically, the preschool teacher. The record of participation accounted for the number of times an individual participated in a virtual workshop and the number of times an individual participated in the preschool classroom's social media group (i.e., Facebook Group). A record of participation was a source of quantitative data. The record of participation might reveal a link between family-school engagement and increased self-efficacy. An example of the Record of Participation recording form is in Appendix F.

Semi-Structured Focus Group

A focus group provides a forum for participants to share their perspectives in a small group setting (Mertler, 2020). By inviting families into a conversation about perceptions of self-efficacy, elements of the first four principles of the *Engage Every Family: Five Simple Principles* framework depicted in Figure 1 were present (Constantino, 2021).

A 60-minute, semi-structured focus group consisting of 15 open-ended questions was conducted with participants during the week prior to the four weeks of workshops and the week following the 4 weeks of workshops to gather information about changes in perceptions of self-efficacy and to guide the next steps for the family engagement intervention. The focus group was a source of qualitative data. The focus group protocol was developed by the researcher. The semi-structured focus group allowed me to ask base questions with the option to follow a response with additional questions as directed by the situation (Mertler, 2020). Each question included in the focus group protocol was designed to potentially answer one or more of the research questions and to align to the *Engage Every Family: Five Simple Principles* model (Constantino, 2021).

The protocol was reviewed by individuals selected based on experience in engaging individuals or experience in the field of early childhood education. Protocol reviewers include an expert in the field of family engagement, an expert in the field of action research, and the VPI Teacher participating in this study. The protocol was revised according to the feedback from the pool of experts for credibility in capturing the perceptions of families and dependability for collecting accurate data that was not influenced by awkwardly worded questions. For accurate data collection, feedback guided revisions to the questions, format, and instructions. Table 12 provides the alignment of the focus group questions, the research questions, and the principles of the *Engage Every Family: Five Simple Principles* model guiding this study. The pre- and post-intervention focus group protocol is in Appendix G.

Table 12

Alignment of Focus Group Questions, Action Research Questions, and Principles of Family Engagement

Focus Group Question	Research Question	Principle
1. PreI: Why did you decide to participate in the parent and family engagement program for this study? PostI: Why did you decide to complete the parent and family engagement program for this study?	ARQ4 How do families describe the role of the family and the role of the school in their preschooler's academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships P3 Build Family Efficacy
2. Describe how you engage your preschooler in learning activities at home. As a reminder, learning activities are activities that require children to think and problem solve.	ARQ3 In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?	P3 Build Family Efficacy
3. In what ways are you most confident in guiding your preschooler's learning activities at home?	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy
4. Describe the learning activities you find to be most enjoyable when engaging with your preschooler at home.	ARQ3 In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?	P3 Build Family Efficacy
5. In what ways are you least confident in guiding your preschooler's learning activities at home?	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy
6. Describe the learning activities you find to be most challenging when engaging with your preschooler at home.	ARQ3 In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?	P3 Build Family Efficacy
7. PreI: In what ways do you hope that participating in this workshop help you engage your preschooler in learning activities at home? PostI: In what ways has participating in this workshop helped you to engage your preschooler in learning activities at home?	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	P3 Build Family Efficacy

Focus Group Question	Research Question	Principle
8. PreI: How often have you participated in activities designed to engage families in the academic lives of children? How do you make the decision to participate? PostI: How likely are you to participate in future activities designed to engage families in the academic lives of children? How do you make the decision to participate?	ARQ4 How do families describe the role of the family and the role of the school in their preschooler’s academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
9. How would you describe your role in your preschooler’s academic success?	ARQ4 How do families describe the role of the family and the role of the school in their preschooler’s academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
10. How would you describe the role of the school in your preschooler’s academic success?	ARQ4 How do families describe the role of the family and the role of the school in their preschooler’s academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
11. In what ways does the school make you feel welcome?	ARQ1To what extent do families participate in the activities of a family engagement program? ARQ4 How do families describe the role of the family and the role of the school in their preschooler’s academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
12. How does the school support your preschooler’s learning at home?	ARQ4 How do families describe the role of the family and the role of the school in their preschooler’s academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships
13. Do you see any connection between at home activities and your preschooler’s progress in school? Why do you say so?	ARQ3 In what ways do families engage in developmentally appropriate learning activities with their preschooler at home? ARQ4 How do families describe the role of the family and the role of the school in their preschooler’s academic success?	P3 Build Family Efficacy
14. As your preschooler prepares to enter school, what other topics might be of interest to you?	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide	P3 Build Family Efficacy P4 Engage Every Family in Decision Making

Focus Group Question	Research Question	Principle
	developmentally appropriate learning activities for their preschooler at home? ARQ3 In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?	
15. What else would you like to share?	ARQ2 After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home? ARQ3 In what ways do families engage in developmentally appropriate learning activities with their preschooler at home? ARQ4 How do families describe the role of the family and the role of the school in their preschooler's academic success?	P1 A Culture that Engages Every Family P2 Communicate Effectively and Develop Relationships P3 Build Family Efficacy

Note. PreI = pre-intervention; PostI = post-intervention; ARQ = action research question; P = principle of family engagement (Constantino, 2021).

Data Collection

Data were collected throughout the 6-week study to answer the action research questions, guide decisions during the intervention cycle of the action research, and plan subsequent cycles of action research (Mertler, 2020). Participants' responses to a pre- and post-intervention rating scale and a record of participation in activities for building self-efficacy provided quantitative data. The qualitative data were collected in the form of transcripts from the recordings of the semi-structured focus groups.

Rating Scale

Data collected from a rating scale administered at two strategic points in time may provide information about perceptual change in efficacy beliefs occurring from one point in time to the next point in time. For this study, a rating scale was administered to collect data prior to the activities for building self-efficacy and at the completion of the activities. Participants could decline the request to complete the rating scale at either point in time.

A printable copy of the pre- and post-intervention rating scale was created in English and Spanish using Canva, an online graphic design platform. As an alternative option, the pre- and post-intervention rating scale was created using Qualtrics, an online survey software program, for instant data collection upon submission. Qualtrics features a Spanish translation option to support the families who are English learners. The link to the digital version of the pre- and post-intervention rating scale was shared with families via participants' emails to limit access to the scale to the participants. Participants who completed the online scale were limited to one submission. If a participant had requested a printed copy of the rating scale, a paper copy would have been mailed to the participant; however, no such request was made. All participants preferred the online version of the rating scale. A reminder to complete the rating scale was communicated via phone call and Facebook Messenger, an instant messaging feature built into Facebook, as needed. The pre- and post-intervention rating scale is in Appendix E.

Record of Participation in Activities for Building Self-Efficacy

The level of participation in activities designed as part of the family engagement intervention was manually recorded as tallies to indicate the frequency of family engagement. Two specific examples of engagement were monitored. First, the level of family participation in each scheduled virtual workshop was recorded as a tally if the participant was present a minimum of 20 minutes or at least 60% of the total time of the workshop, whichever was greater. Second, actions in the Facebook Group performed by a participant were recorded as a tally regardless of the content, length, or type of activity. The four types of activity in the social media group that were tallied included: (a) original post, (b) view of original post, (c) reply post, and

(d) reply emoji. The tallies of activity in the Facebook Group extended for the duration of the 6-week intervention program. To illustrate, tallies of social media activity began on the day of the first pre-intervention focus group and ended on the day of the last post-intervention focus group.

A record of participation was recorded for each family member who participated in the family engagement activities (i.e., virtual workshops, social media group) whether study participant or non-study participant. An example of the Record of Participation recording form is in Appendix F. Additionally, qualitative data were collected from Facebook posts when anecdotes existed that answered research questions.

Semi-Structured Focus Group

The Zoom platform was used to conduct semi-structured focus groups during the week prior to and the week following the completion of four weeks of virtual workshops. Multiple opportunities to participate in focus groups were offered to accommodate the busy schedules of families. Recordings of the focus groups facilitated accurate data collection. Each participant provided verbal consent to the recording of the Zoom workshop prior to the notification of recording in progress. Participants could opt to leave the workshop at any time during the recording.

Recordings were downloaded to two USB drives that were secured when not in use. Upon download, recordings were permanently deleted from the Zoom platform. All recordings were deleted from the USB drives upon successful defense of the dissertation. Transcripts generated by the Zoom platform that accompanied the recordings of the focus groups were collected as qualitative data. The transcripts were formatted as digital documents using Google Docs, an online word processor supported by Google, for reviewing and editing for accuracy. Member checking of the transcripts of the focus groups were conducted no later than 2 weeks following the focus group for families to verify the accuracy of the transcripts. Each participant was mailed a hard copy of the section of the transcripts that captured responses to the focus group questions that were associated only with the participant. Feedback from participants would drive edits to the transcripts accordingly; however, no feedback was provided. Documents of the transcripts were deleted upon successful defense of the dissertation.

Data Analysis

Data analysis was employed to draw conclusions and make informed decisions (Mertler, 2020). Quantitative data in the form of participants' responses to a pre- and post-intervention rating scale and a record of participation in activities for building self-efficacy were evaluated using Google Sheets, an online spreadsheet supported by Google, and SPSS, a statistical software program. Qualitative data in the form of transcripts from the recordings of the semi-structured focus groups were evaluated using manual coding methods and Google Sheets. Participants were assigned a number for data analysis as a measure to control researcher bias. Inductive analysis was applied to reduce the data collected for the purpose of identifying and organizing patterns and themes (Creswell & Creswell, 2018; Mertler, 2020). Deductive analysis was applied to confirm the theorical principles of the *Engage Every Family: Five Simple Principles* framework that is the basis of the study (Constantino, 2021; Creswell & Creswell, 2018; Mertler, 2020).

Rating Scale

Statistical software (SPSS) was used to analyze quantitative data collected from the rating scale to determine changes in participants' perceptions from the first administration of the rating scale to the second administration of the rating scale. Raw data were imported into the software using the value set of 0 = *neither agree nor disagree*, 1 = *strongly disagree*, 2 = *disagree*, 3 =

agree, and 4 = *strongly agree* to calculate a summed score generated from the 10-item rating scale. A summed score was reported at the time of pre-intervention and the time of post-intervention. A paired samples *t*-test was conducted for each rating scale item and the summed score to determine any statistically significant difference between perceptions prior to and following participation in the intervention. A *p*-value of .05 was the measure of probability for acceptance as statistically significant and did not occur by chance.

Additionally, descriptive statistics for each rating scale item and summed score included the following: (a) mean, (b) median, (c) mode, (d) skewness, (e) kurtosis, (f) minimum score, and (g) maximum score (Dalati, 2018; Titocan Mark Solutions, 2021). Analysis of descriptive statistics led to findings relative to the averages and distribution of participants' responses.

Record of Participation in Activities for Building Self-Efficacy

Google Sheets was used to analyze the quantitative data depicting the frequency of participants' participation in activities for building self-efficacy represented by the record of participation in virtual workshops and the record of participation in the social media group. Raw data were entered manually into Google Sheets to analyze the data set for participation in virtual workshops and Facebook Group activity. Data analysis focused on the level, or degree, of participation. Nominal data, such as ethnicity and relationship to the child, were analyzed to understand any patterns relative to the two nominal variables (Dalati, 2018).

Virtual Workshops. Descriptive data associated with the degree of participation in virtual workshops were reported in Google Sheets. For example, ratio data detailing the frequency of participation in weekly Zoom workshops were reported using a value set of 1 = *did participate* and 0 = *did not participate*. Frequency of participation for each participant was analyzed to determine patterns of participation in the workshops. For example, data analysis informed the rate of participation each week over the 4-week period and the week(s) of highest and lowest participation. In addition, nominal data, such as ethnicity and relationship to the child, were coded to understand patterns in weekly participation in virtual workshops (Dalati, 2018). By reason of the small sample size, data analysis was conducted at the individual participant level. Since the workshops were available for all families in the preschool classroom whether study participant or non-study participant, data analysis was conducted at a level representative of the collective of all families in the preschool classroom as well. Findings are reported in tables to reveal specific patterns in participation.

Social Media Postings. Descriptive data associated with the degree of participation in the classroom's Facebook Group were reported in Google Sheets. The number of actions in the Facebook Group performed by a participant was reported by adding the number of tallies to calculate individual and summed frequency counts each week and at the end of the engagement program marked by the seventh day following the last virtual workshop. The frequency counts were analyzed to determine the level, or degree, of activity each week. Nominal data, such as ethnicity and relationship to the child, were analyzed to understand any patterns relative to the two nominal variables (Dalati, 2018). Findings are reported in tables to reveal specific patterns in participants' level of activity. Additionally, any relevant qualitative data collected from Facebook posts underwent first and second cycle coding methods as conducted for data analysis of the transcripts from the semi-structured focus groups.

Semi-Structured Focus Group

Transcripts of the recordings of each pre- and post-intervention semi-structured focus groups were formatted as Google Docs by the researcher for reflection and analysis. Observational notes and inferential comments were recorded on the digital documents by the researcher. A document was created for each participant to report the participant's responses to the focus group questions and the accompanying analytical notes recorded by the researcher. For member checking, each participant was mailed a hard copy of the document prepared for the participant no later than 2 weeks following the pre-intervention focus group and no later than 2 weeks following the post-intervention focus group for families to verify the accuracy of data analysis. Feedback from participants would drive edits to the transcripts accordingly; however, no feedback was provided.

Coding to analyze qualitative data involved an inductive analysis that was cyclical in nature by coding and recoding data to move to broad categories, patterns, and themes (Mertler, 2020; Saldaña, 2016). Coding methods were selected to inform the researcher of concepts and themes that improved or hindered parents' capacity to promote school readiness for preschoolers while at home. Coding served to substantiate any changes in participants' perceptions and actions during the period from the beginning of the family engagement intervention to the conclusion of the intervention. A codebook was organized and defined *a priori* and emerging codes. My codebook is in Appendix H.

Transcripts of focus groups underwent three types of preliminary coding (i.e., In Vivo, Values, Process) and one second-cycle coding (i.e., Pattern) using manual techniques. The first cycle of coding included In Vivo coding to capture meaning from the words of the participants. Values coding captured the values and beliefs communicated by families about family engagement and engaging their preschooler in learning activities at home. Process coding conceptualized families' actions and interactions over the period of time of the intervention as related to their perceptions of family engagement and at-home learning activities (Mertler, 2020). Data were prepared and oriented in specific columns in Google Sheets for data analysis as follows: (a) raw data, (b) focus group question number, (c) *a priori* code or emergent code indication, (d) code applied to the data, and (e) related research question(s). The spreadsheet assisted in the sorting of data to develop concepts and themes. Pattern coding was utilized in repeated second cycles of coding to consolidate codes to further refine the development of themes from the data (Mertler, 2020). A theme emerged when at least 4 out of 7 of the participants expressed common sentiments or similar perceptions in coded qualitative data. As a solo coder, member checking increased the credibility of the analysis. Findings are reported in tables and figures.

Action Research Question 1: To what extent do families participate in the program activities?

A Record of Participation recording sheet provided data related to the frequency of participation in the family engagement intervention activities. The data were analyzed to inform Action Research Question 1. The data collected from the record of participation were entered into Google Sheets to generate descriptive statistics for frequency rates to inform themes and changes in participants' behaviors related to participation in engagement activities.

Action Research Question 2: After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?

A pre- and post-intervention rating scale and semi-structured focus groups informed Action Research Question 2. The rating scale items from the pre- and post-intervention rating scale that provided the quantitative data to address Action Research Question 2 is in Appendix E. Quantitative data reflective of participants' responses to the rating scale prior to the intervention and following the intervention were entered into SPSS, and a paired samples *t*-test was conducted to determine any influence of the family engagement intervention on perceptions of self-efficacy for engaging preschoolers at home. Descriptive statistics for central tendency (e.g., mean, median, mode) were generated to substantiate any changes relative to participants' perceptions of self-efficacy.

Qualitative data collected from focus groups were analyzed for evidence of families' perception of beliefs in their ability to provide hands-on, active learning experiences for their preschooler at home. Active learning experiences are important since children construct knowledge by making connections from the effects of physical manipulation of objects in their environment (Bandura, 1989; Bronfenbrenner & Ceci, 1993; Piaget, 1964, 1972/1973; Vygotsky, 1978). The beliefs communicated by families that described their capabilities to create experiences for their preschooler to manipulate picture books, sort objects, complete puzzles, and create original products, for example, informed Action Research Question 2 (Piaget, 1964, 1972/1973).

Since Action Research Question 2 addressed parents' perceptions, In Vivo coding, Values coding, and Process coding were appropriate first cycle coding methods to draw meaning from the words, values and beliefs, and actions and interactions of the parents in this study as revealed in focus group transcripts (Saldaña, 2016). Qualitative data associated with Action Research Question 2 underwent second cycle Pattern coding to identify themes (Saldaña, 2016). A theme emerged when at least 4 out of 7 participants expressed common sentiments or similar perceptions in coded qualitative data. The themes supported by the most qualitative data were reported for this study. Themes that emerged from the statistical analysis of quantitative data and from coding qualitative data influenced the answer to the second research question.

Action Research Question 3: In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?

Semi-structured focus groups informed Action Research Question 3. Qualitative data collected from focus groups were analyzed for examples of hands-on, active learning experiences scaffolded by adult-child interactions as evidence of developmentally appropriate learning activities for the preschooler at home (Bronfenbrenner & Ceci, 1993; Piaget, 1964, 1972/1973; Vygotsky, 1978). Examples of developmentally appropriate learning activities for a preschooler included but were not limited to painting original pictures with watercolors, writing letters, or creating original works with playdough while engaged in supportive interactions and conversations with the family. Supportive families model behaviors to scaffold a preschooler's learning and encourage the development of creativity and originality as preschoolers respond to observations of their environment (Bandura, 1989; A. Epstein, 2007; Schweinhart, 2004).

Since Action Research Question 3 addressed parents' perceptions that influenced the frequency and types of at-home learning activities, In Vivo coding, Values coding, and Process coding were appropriate first cycle coding methods to draw meaning from the words, values and beliefs, and actions and interactions of the parents as revealed in focus group transcripts. Qualitative data associated with Action Research Question 3 underwent second cycle Pattern coding to identify themes. A theme emerged when at least 4 out of 7 participants expressed common sentiments or similar perceptions in coded qualitative data. The themes supported by the most qualitative data were reported in this study. Themes that emerged from coding qualitative data influenced the answer to the third research question.

Action Research Question 4: How do families describe the role of the family and the role of the school in their preschooler's academic success?

A pre- and post-intervention rating scale and semi-structured focus groups informed Action Research Question 4. The rating scale items from the pre- and post-intervention rating scale that provided the quantitative data to address Action Research Question 4 is in Appendix E. Quantitative data reflective of participants' responses to the rating scale prior to the intervention and following the intervention were entered into SPSS, and a paired samples *t*-test was conducted to report any statistically significant change in perceptions of the role the family and the role the school plays in a preschooler's academic success. Descriptive statistics for central tendency (e.g., mean, median, mode) were generated to substantiate any changes relative to families' perceptions of family-school engagement.

Qualitative data collected from focus groups revealed family perceptions of the roles of the family and the school as contributors to their preschooler's academic success. The beliefs communicated by families that described the influence of the family and the school in their preschooler's academic life informed Action Research Question 4.

Since Action Research Question 4 addressed parents' perceptions, In Vivo coding, Values coding, and Process coding were appropriate first cycle coding methods to draw meaning from the words, values and beliefs, and actions and interactions of the parents as revealed in focus group transcripts (Saldaña, 2016). Qualitative data associated with Action Research Question 4 underwent second cycle Pattern coding to identify themes (Saldano, 2016). A theme emerged when at least 4 out of 7 participants express common sentiments or similar perceptions in coded qualitative data. The themes supported by the most qualitative data were reported for this study. Themes that emerged from the statistical analysis of quantitative data and from coding qualitative data influenced the answer to the fourth research question. Table 13 communicates the relationship between the research questions, data sources, and analysis of the data.

Table 13

Alignment of Action Research Questions, Data Sources, and Data Analysis

Action Research Question	Data Source	Data Analysis
1. To what extent do families participate in the program activities?	Record of participation in activities for building self-efficacy (i.e., virtual workshops, social media group)	Descriptive statistics (e.g., frequency rates)
2. After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	Pre-and post- intervention semi-structured focus groups	Qualitative coding (i.e., in vivo, values, process, pattern) and inductive and deductive analysis
	Pre- and post-intervention rating scale	Descriptive statistics (e.g., mean, median, mode, frequency rates) Paired-samples *t*-test
3. In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?	Pre-and post- intervention semi-structured focus groups	Qualitative coding (i.e., in vivo, values, process, pattern) and inductive and deductive analysis
4. How do families describe the role of the family and the role of the school in their preschooler's academic success?	Pre-and post- intervention semi-structured focus groups	Qualitative coding (i.e., in vivo, values, process, pattern) and inductive and deductive analysis
	Pre- and post-intervention rating scale	Descriptive statistics (e.g., mean, median, mode, frequency rates) Paired-samples *t*-test

Delimitations, Limitations, and Assumptions

Delimitations

Certain decisions made by the researcher were necessary to ensure the viability of this study. The sampling for the study was limited to one preschool classroom in the school district where the researcher was employed for feasible management of the action research intervention. By choosing to select participants from only one classroom, a representative sample of all the families of preschoolers in the school district were not studied and might create an inequitable representation of the population. Additionally, to increase the relevancy of the study, action research was used to address a specific problem of practice in context; therefore, findings might be unique to the setting.

Limitations

Notable limitations were found in this study. First, safety precautions related to the impact of the current COVID-19 pandemic necessitated a virtual platform for workshops versus a preferable in-person model for families. Virtual workshops might have hindered and slowed the development of an inclusive culture with trusting relationships among the participants. Second, the short, 4 weeks of activities for building self-efficacy during the intervention cycle of the action research limited the time for families to make a shift in their perceptions of self-efficacy for engaging their preschooler in quality active learning experiences at home. Third, data centered on individual perceptions are inherently limiting. Fourth, the volunteers in the study might have included families already engaged and with the social capital to promote their child’s success. The families who might have benefited the most from the intervention might not have volunteered to participate. Finally, action research involves a small number of participants;

therefore, the sampling was insufficient to generalize findings but rather through the trustworthiness of the methods might be transferable to similar contexts.

Assumptions

Certain aspects of this study were accepted to be true. For example, the family engagement intervention was provided for families based on the assumption that families were interested in learning about practices to build family efficacy and would apply what was learned in workshops when planning their preschooler's learning experiences at home. Families who chose to participate in the intervention were assumed to have exhibited honesty and communicated truthfully in responses. Once families completed the pre-intervention cycle of the action research, it was assumed that at the time of the launching of the second cycle, an inclusive classroom culture built on trusting relationships would be evident among the participants, which aligns to the progressive order of the first and second principles of the *Engage Every Family: Five Simple Principles* model as shown in Figure 1 (Constantino, 2021).

I assumed families were familiar and comfortable with navigating virtual platforms because of the necessitated norm of virtual instruction and virtual communication associated with the impact of the COVID-19 pandemic during the past two school years. Since the intervention was designed to be delivered virtually, an assumption was made that participants would have access to technology and any household materials needed for the activities conducted during the virtual workshops.

Ethical Considerations

To engage families in the family engagement intervention in a culture of trust for building relationships, a measure of acquaintance and familiarity among the participants was expected; however, pseudonyms were used when identifying participants for reporting purposes.

Participants were identified by their quantitative and qualitative responses by the researcher only. Each participant was assigned a number during data collection to control for researcher bias during data analysis.

To protect the participants of the study, I communicated the purpose and benefits of the study in written and video format to families of preschoolers prior to their agreement to participate in the intervention for this study. The written document was provided in English and Spanish. Families could select the option to view the Spanish translation of the closed captions of the audio of the video recording. Furthermore, I adhered to the guidelines of the consent form found in Appendix D to build trusting relationships with the participants.

An interpreter was available to support English learners as needed. As an English Learner Teacher in the school district, the interpreter was qualified to assist the families. I met with the interpreter to provide the focus group protocol in advance to discuss any language that might get lost in translation. Protocols for interpretations during the virtual workshops were reviewed prior to facilitation of the workshop and revised as needed throughout the intervention.

The USDHHS (n.d.) regulates federal code to protect individuals from risk. I abided by 45 Code of Federal Regulations Part 46 (45 CFR 46) to protect the participants of this study. In accordance with 45 CFR 46, the following information was submitted to the William & Mary Institutional Review Board (IRB) according to the protocols of the college for approval of this research proposal: (a) a complete description of this study including the rationale; (b) a full description of the methods and procedures; (c) a description of the participants; (d) a copy of the rating scale, the focus group questions, and the informed consent form; (e) the documentation of required training to conduct a research study; and (f) other pertinent information. Any necessary revisions to the proposal would have been resubmitted to the IRB for final approval to conduct the study; however, no revisions were required.

Any information collected in this study in any form, including digital or hard copy, was secured and safeguarded for the privacy and protection of the participants. Pseudonyms were used with any results reported publicly. After successful defense of the dissertation, digital records were deleted from the USB drive, digital documents were deleted from online storage platforms, and all hard copy records were destroyed. The classroom's Facebook Group will be deleted when families cease to engage in activity or when all families leave the Facebook Group. Participants could voluntarily remove themselves from the classroom Facebook Group to end participation at any time.

As the researcher and coordinator of the study, my dual roles could have influenced the outcomes of the study. As the researcher, a conscious practice of objectivity was critical for credible and dependable qualitative data not clouded by biased interpretation. As the coordinator, comments when engaging with families remained neutral.

My experience in the role of facilitator of the preschool program in the JCSD spans 15 years. Participation in annual early childhood trainings provided by the Virginia Department of Education, the HighScope Educational Foundation, and local early childhood organizations such as Smart Beginnings, has led to my fundamental beliefs in hands-on learning experiences for preschoolers and the importance of extending the active learning experiences in the school to the home by building partnerships with all individuals responsible for the preschooler's development. The comments, questions, and behaviors toward families made by the classroom teacher and researcher were non-judgmental nor leading to create a safe environment for families to develop their beliefs about supporting their preschooler's academic success.

The VPI Teacher participating in this study was committed to the goals of building relationships with families and increasing family efficacy that were the core of the family engagement intervention. Unbeknownst to her ahead of time, I presented her with a monetary token of appreciation upon completion of the intervention. The significant role she played in the execution of the study was worthy of recognition.

Certain practices helped facilitate a valid and reliable study. Participants were given ample time to complete the rating scale for valid quantitative data collection. Member checking throughout the study increased the accuracy of conceptualizing families' perceptions for credible qualitative data analysis (Mertler, 2020; Saldaña, 2016). As a sole coder, member checking assisted in accurate interpretation of data. To improve the quality and rigor of the research, I practiced weekly reflexive journaling to manage potential researcher bias stemming from personal beliefs. A template of the Researcher Reflexive Journal is in Appendix I.

CHAPTER 4

FINDINGS

The purpose of this mixed methods action research study was to engage families in a home-school partnership to examine participants' views when engaging in the academic life of their preschooler. An examination of data led to conclusions about family engagement participation practices, self-efficacy judgments, home learning opportunities, and home-school engagement dynamics. The methodology for the study was described in Chapter 3.

A brief description of the data analysis processes that led to the findings of the study begins this chapter. Next, summaries of the findings are presented to substantiate the conclusions for each research question. The four research questions that guided the study follow.

1. To what extent do families participate in the activities of a family engagement program?
2. After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?
3. In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?
4. How do families describe the role of the family and the role of the school in their preschooler's academic success?

Data Analysis

The data sources to inform the four research questions included a pre- and post-intervention rating scale, record of participation in activities for building self-efficacy, and pre- and post-intervention semi-structured focus groups. The triangulation of the data drew on the strengths of quantitative and qualitative data to better understand the beliefs and perceptions of participants (Mertler, 2020). Inductive analysis was applied to reduce the data for the purpose of identifying and organizing patterns and themes (Creswell & Creswell, 2018; Mertler, 2020). Additionally, deductive analysis was applied to confirm the theorical principles of the *Engage Every Family: Five Simple Principles* framework that is the basis of the study (Constantino, 2021; Creswell & Creswell, 2018; Mertler, 2020).

Quantitative Data Analysis

Multiple forms of quantitative data were collected in this study. Quantitative data included a pre- and post-intervention rating scale, a record of participation in virtual workshops, and a record of participation in a social media platform known as Facebook. Data analysis procedures and results of data analysis are provided for each source of quantitative data.

Rating Scale. Descriptive statistics regarding participants' responses to the pre- and post-intervention rating scale informed Action Research Questions 2 and 4. Descriptive statistics for each rating scale item and summed score include the following: (a) mean, (b) median, (c) mode, (d) skewness, (e) kurtosis, (f) minimum score, and (g) maximum score (Dalati, 2018; Titocan Mark Solutions, 2021). The five rating scale items to inform Action Research Question 2 are Items 1, 2, 5, 7, and 8. The five rating scale items to inform Action Research Question 4 are Items 3, 4, 6, 9, and 10. The pre- and post-intervention rating scale is in Appendix E.

Participants' beliefs prior to the intervention informed any change in beliefs following the intervention. Descriptive statistics representative of the beliefs of participants prior to participation in the intervention activities are reported in Table 14.

Table 14

Pre-Intervention Rating Scale Descriptive Statistics

Descriptive statistics	Pre Item 1 [a]	Pre Item 2 [a]	Pre Item 3 [b]	Pre Item 4 [b]	Pre Item 5 [a]	Pre Item 6 [b]	Pre Item 7 [a]	Pre Item 8 [a]	Pre Item 9 [b]	Pre Item 10 [b]	Pre Summed score
M	3.4	3.4	3.4	3.7	2.7	3.6	3.0	2.9	3.7	3.4	33.3
Mdn	3.0	3.0	3.0	4.0	3.0	4.0	3.0	3.0	4.0	3.0	34.0
Mode	3.0	3.0	3.0	4.0	3.0	4.0	3.0 [c]	3.0	4.0	3.0	34.0
SD	0.5	0.5	0.5	0.5	1.4	0.5	1.4	1.4	0.5	0.5	5.0
Skewness	0.4	0.4	0.4	-1.2	-1.4	-0.4	-2.0	-2.0	-1.2	0.4	0.2
SE of skewness	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Ratio of skewness / *SE*	0.5	0.5	0.5	-1.5	-1.8	-0.5	-2.5	-.2.5	-1.5	0.5	0.3
Kurtosis	-2.8	-2.8	-2.8	-0.8	2.3	-2.8	4.4	4.6	-0.8	-2.8	-1.5
SE of kurtosis	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Ratio of kurtosis / *SE*	-1.8	-1.8	-1.8	-0.5	1.4	-1.8	2.8	2.9	-0.5	-1.8	-0.9
Minimum	3.0	3.0	3.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	27.0
Maximum	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	40.0

Note. $n = 7$ (reported as valid). Pre = pre-intervention rating scale item.
[a] Rating scale item related to self-efficacy. [b] Rating scale item related to role of family and school. [c] Multiple modes exist. The smallest value is reported.

Participants' beliefs after participating in the intervention informed any change in beliefs relative to beliefs prior to the intervention. Descriptive statistics representative of the beliefs of participants after participation in the intervention activities are reported in Table 15.

Table 15

Post-Intervention Rating Scale Descriptive Statistics

Descriptive statistics	Post Item 1 [a]	Post Item 2 [a]	Post Item 3 [b]	Post Item 4 [b]	Post Item 5 [a]	Post Item 6 [b]	Post Item 7 [a]	Post Item 8 [a]	Post Item 9 [b]	Post Item 10 [b]	Post Summed score
M	3.4	3.3	3.3	3.6	2.6	3.6	2.4	2.3	3.4	3.4	31.3
Mdn	3.0	3.0	3.0	4.0	3.0	4.0	3.0	3.0	3.0	3.0	31.0
Mode	3.0	3.0 [c]	3.0	4.0	3.0	4.0	3.0	3.0	3.0	3.0	30.0 [c]
SD	0.5	0.8	0.5	0.5	1.3	0.5	1.7	1.6	0.5	0.5	5.5
Skewness	0.4	-0.6	1.2	-0.4	-1.6	-0.4	-1.0	-1.0	0.4	0.4	-0.1
SE of skewness	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Ratio of skewness / *SE*	0.5	-0.8	1.5	-0.5	-2.0	-0.5	-1.3	-1.3	0.5	0.5	-0.1
Kurtosis	-2.8	-0.4	-0.8	-2.8	3.2	-2.8	-1.0	-0.9	-2.8	-2.8	1.6
SE of kurtosis	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Ratio of kurtosis / *SE*	-1.8	-0.3	-0.5	-1.8	2.0	-1.8	-0.6	-0.6	-1.8	-1.8	1.0
Minimum	3.0	2.0	3.0	3.0	0.0	3.0	0.0	0.0	3.0	3.0	22.0
Maximum	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	40.0

Note. $n = 7$ (reported as valid). Post = post-intervention rating scale item.
[a] Rating scale item related to self-efficacy. [b] Rating scale item related to role of family and school. [c] Multiple modes exist. The smallest value is reported.

When drawing conclusions from descriptive data, the distribution of data is a factor for consideration. In a normal distribution of data, the mean, median, and mode are equal, and skewness and kurtosis equal 0 (Killam, 2014). A contradiction exists in the data analysis for this study. Pre-intervention data for Item 7 indicated the mean, mode, and median were equal; skewness was reported as -2.0, or negatively to the right (see Table 14). The entry of a participant's rating of 0 for Item 7 skewed the data and invalidated the accepted conditions for normal distribution (i.e., values for skewness and kurtosis between -2 and +2 are accepted as fairly normally distributed [George & Mallery, 2022]). The example raises questions about normal distribution of data when a rating of 0 is associated with *neither agree* nor *disagree*. In such case, the distribution for a rating of 0 will be pulled to the left whereas the rating of 0 actually represents a neutral belief.

Values for skewness and kurtosis between -2 and +2 have been accepted as fairly normally distributed (George & Mallery, 2022). In other cases, the range of -1 to +1 has been the rule of thumb for the accepted range for normal distribution of values for skewness and kurtosis (BurkeyAcademy, 2017). Hence, the acceptable range for normal distribution of data may be dependent upon the researcher.

Furthermore, "the ratio of skewness to its standard error can be used as a test of normality" (IBM, 2021, Standard Error of Kurtosis section). Normality may be accepted if the ratio is in the range of -2 to +2 (IBM, 2021). The same calculation is applicable as a test of normality for kurtosis. The example represents another factor for consideration when determining normal distribution of data.

The validity of judgments related to normal distribution may increase when multiple data analyses are considered. In the discussion of findings for this study, data were accepted as fairly normally distributed when the values for skewness and kurtosis were between -2 and +2. In addition, normality was accepted if the ratio of skewness to its standard error and the ratio of kurtosis to its standard error were in the range of -2 to +2 (IBM, 2021). Furthermore, histograms generated using SPSS illustrated the distribution of rating scale data in a convenient form for analysis and were used as an additional source to draw conclusions about data distribution (see Appendix J).

Pre-Intervention Statistics. Pre-intervention rating scale data analysis revealed findings related to data distribution statistics (see Table 14). Eight of the 10 rating scale items were within the acceptable range of distribution for skewness for the pre-intervention administration of the rating scale to indicate acceptance for additional statistical analysis. However, the histograms for Items 4, 5, and 9 might be interpreted as negatively skewed to the right (see Appendix J). Items 7 and 8 were not within the acceptable range, and the histogram depicted visible skewness to the right (see Appendix J).

Five rating scale items measured -2.8 for kurtosis to typically indicate a flat distribution of data. In this case, participants' responses were within one of each other thus creating a concentrated, level distribution of data that was too flat to be normal (Killam, 2014). However, when the ratio of kurtosis to its standard error was calculated, the data were within the acceptable range of distribution. Similarly, one item measured 2.3 for kurtosis (i.e., Item 5) to indicate a taller than normal distribution of data. However, the ratio analysis calculation provided evidence of normality. Data for Items 4 and 9 were within the acceptable range for kurtosis. Data for Items 7 and 8 measured 4.4 and 4.6 for kurtosis, respectively, to indicate distribution too peaked to be considered normal. The small sample of data should be taken into consideration when examining skewness and kurtosis for normal distribution.

Post-Intervention Statistics. Post-intervention rating scale data analysis revealed findings related to data distribution statistics (see Table 15). The 10 rating scale items were within the acceptable range of distribution for skewness for the post-intervention administration of the rating scale to indicate acceptance for additional statistical analysis. However, the histograms for Items 3 and 5 might be interpreted as positively skewed to the left and negatively skewed to the right, respectively (see Appendix J)

Five rating scale items measured -2.8 for kurtosis to typically indicate a flat distribution of data. In this case, participants' responses were within one of each other thus creating a concentrated, level distribution of data that was too flat to be normal (Killam, 2014). When the ratio of kurtosis to its standard error was calculated, the data were within the acceptable range of distribution. Similarly, one item measured 3.2 for kurtosis (i.e., Item 5) to indicate a taller than normal distribution of data. However, the ratio analysis calculation provided evidence of normality. Data for Items 2, 3, 7, and 8 were within the acceptable range for kurtosis. The small sample of data should be taken into consideration when examining skewness and kurtosis for normal distribution.

Paired Samples t-test. Certain assumptions are made for valid statistical analysis of a comparison of quantitative data at two points in time. For example, a paired samples *t*-test utilizing data collected from the pre-intervention rating scale and data collected from the post-intervention rating scale was planned to inform Action Research Questions 2 and 4. For a *t*-test to be valid, dependent variables must be continuous and measured at the interval or ratio level, measured at two different times, normally distributed, and absent of outliers (Titocan Mark Solutions, 2021).

Descriptive analysis of data collected from the rating scale revealed certain items were outside the acceptable distribution of values for skewness and kurtosis when considering the acceptable range of values for normality. In addition, consider a small sample of data were analyzed. Hence, further statistical analysis may be invalid. The results of the *t*-test should be considered with caution. Consequently, the raw data collected might provide greater insight into any changes in the beliefs and perceptions of the participants.

Even though the conditions for conducting the paired samples *t*-test were not optimal, a noteworthy observation is data analysis produced *p*-values greater than .05 to indicate no statistical evidence of change in beliefs and perceptions from pre-intervention to post-intervention as reported in Table 16. In addition, the small sample of data for this study should be taken into consideration when considering statistical evidence of program effectiveness.

Table 16

Paired Samples t-test: Pre- and Post-Intervention Rating Scale Data

Scale items	*MD*	*SD*	*SEM*	*t*	*df*	*p*
Pair1	0.00	0.58	0.22	0.00	6	1.00*
Pair2	0.14	0.69	0.26	0.55	6	0.60*
Pair3	0.14	0.38	0.14	1.00	6	0.36*
Pair4	0.14	0.38	0.14	1.00	6	0.36*
Pair5	0.14	0.38	0.14	1.00	6	0.36*
Pair7	0.57	1.13	0.43	1.33	6	0.23*
Pair8	0.57	2.07	0.78	0.73	6	0.49*
Pair9	0.29	0.76	0.29	1.00	6	0.36*
Summed score	2.00	3.46	1.31	1.53	6	0.18*

Note. Pair6 and Pair10 were unchanged and thus not reported.
* $p < .05$.

Record of Participation in Virtual Workshops. Participants' attendance in each family engagement workshop was manually recorded by the researcher. Participants were provided the opportunity to participate in a maximum of four virtual workshops. Google Sheets was used to organize data to increase the validity of data collection and data analysis.

Record of Participation in Social Media. Participants' level of activity in the Facebook Group created for this study was manually captured by the researcher. Four types of activity were recorded:

- **original post**: any post created by a participant to begin a thread
- **view of original post**: viewing any original post not created by the participant as an original post

- **reply post**: posting a response or reply to any post, including an original post created by the participant
- **reply emoji**: posting a specific emoji to any post, including an original post created by the participant, to communicate any of the following ideas or emotions: *like*, *love*, *care*, *haha*, *wow*, *sad*, or *angry*

An account of the four types of data were recorded during the six weeks of the intervention program beginning on the day of the first pre-intervention focus group and ending on the day of the last post-intervention focus group. Google Sheets was used to organize data to increase the validity of data collection and data analysis.

Qualitative Data Analysis

Analysis of the qualitative data collected from the transcripts of the pre- and post-intervention semi-structured focus groups began with recording manual preliminary coding of impressionable moments in the margins of the documents (Saldaña, 2016). A codebook explaining the definitions of codes was created for the purpose of assisting in managing a consistent coding process (Saldaña, 2016). The researcher's codebook is in Appendix H. Additionally, Google Sheets was used to organize, sort, and group the data during the coding process. The methods of splitting the data into smaller moments and lumping the data for big-picture representations were used to format the data into manageable codable segments (Saldaña, 2016).

The coding of the transcripts of the pre-intervention focus groups was completed before the coding of the post-intervention focus group transcripts. Three columns were created in the spreadsheet to record codes for each of the three first cycle coding methods, namely In Vivo coding, Values coding, and Process coding, selected for the study. The transcript of one participant was coded at a time. Each method of coding was completed before the next method of coding began. However, if one coding triggered a code for another method of coding, the code was recorded in the appropriate column.

By nature, coding is a cyclic process of repeated coding and recoding to avoid misinterpretation, misrepresentation, and omission of data (Mertler, 2020; Saldaña, 2016). To increase the validity of the codes assigned to participants' responses and to understand patterns to develop categories and themes, multiple cycles of manual first cycle coding were performed. As a second cycle method, Pattern coding was used to bring cohesion to first cycle coding. Pattern coding aided in the identification of emerging themes and supported existing theory (Saldaña, 2016). Repeated cycles of manual Pattern coding were employed to increase the validity of drawn conclusions.

Pre-Intervention Action Research Cycle

The pre-intervention action research cycle included family engagement activities that potentially influenced family beliefs prior to the launch of the intervention cycle. However, the findings reported in Chapter 4 are reflective of data collected during the six weeks of the second cycle of action research for the study (i.e., the intervention cycle).

Action Research Question 1: To what extent do families participate in the activities of a family engagement program?

Schools may take pride in providing family engagement activities, but families must participate for the activities to influence behaviors. Analysis of recordkeeping identified patterns of attendance in virtual workshops and patterns of participation in a social media group created for the families of preschoolers in the classroom invited to participate in this study. The workshops and the social media group provided opportunities for building family efficacy.

Record of Participation in Virtual Workshops

Participation in virtual workshops was a component of the family engagement intervention program for this study. All families in the preschool classroom selected for this study were invited to participate in the virtual workshops. At least one family member from 14 of the 16 families attended at least one virtual workshop. However, the data analysis of attendance in virtual workshops reported in this chapter focuses on the degree of attendance of the seven study participants. For comparison, the degree of attendance for non-study participants was reported to provide additional evidence to inform Action Research Question 1.

Participation in Virtual Workshops for Study Participants. Accurate records of participation in the four virtual workshops provided as part of the intervention for this study were maintained by the researcher. Each workshop was presented two different days to provide a choice for participants. Data indicated the highest participation occurred for the first workshop and the final workshop of the intervention as evidenced by the attendance of 6 out of 7 participants in both workshops. Two participants participated in all four workshops. Two participants participated in three workshops. Two participants participated in two workshops. One participant participated in one workshop; however, a related family member participated in the workshops for Week 1 and Week 3 when the study participant was not present. Therefore, a member of the preschooler's family experienced three of the workshops. The scenario communicates the importance of engaging the family unit, not just the parent by birth, which is the fundamental premise of the *Engage Every Family: Five Simple Principles* framework that guided this study (Bandura et al., 2011; Constantino, 2021). Table 17 depicts the level of participation in a virtual workshop per week over a period of 4 weeks.

Table 17

Record of Participation in Virtual Workshops for Study Participants

		Workshop Week					
Participant	Relationship to preschooler	1	2	3	4	Total	%
8 [a]	Mother				x	1	25%
66	Mother	x	x	x	x	4	100%
74	Mother	x			x	2	50%
102	Mother	x	x	x	x	4	100%
122	Mother	x	x			2	50%
136	Mother	x		x	x	3	75%
176	Mother	x	x		x	3	75%
Total		6	4	3	6	19	--

Note. n = 7. Maximum number of workshops provided as part of the intervention = 4.
[a] A related family member participated in the workshops for Week 1 and Week 3.

Participation in Virtual Workshops for Study and Non-Study Participants. Data analysis of participation for all family members associated with the preschoolers in the classroom invited to participate in this study (e.g., parents, grandparents, aunt) provided a representation of the attendance during the four weeks of the virtual workshops. Non-study participants who participated in the workshops might include one or more family member associated with a preschooler. A summary of activity is noteworthy for understanding the extent study participants and non-study participants participated in the workshops of the family engagement intervention program.

Of the 16 families, 14 (88%) attended at least 1 out of 4 virtual workshops. Specifically, of the 16 families, 12 (75%) participated in Workshop 1, 8 (50%) participated in Workshop 2, 7

(44%) participated in Workshop 3, and 10 (83%) participated in Workshop 4. In fact, a preschooler's mother and grandmother participated in Workshop 2 to provide additional evidence for engaging the family unit (Constantino, 2021). Furthermore, two grandmothers participated in 3 out of 4, or 75%, of the workshops, and one non-study participant identified as a mother participated in 4 out of 4, or 100%, of the workshops. In addition, siblings were noted as participants in the workshops on multiple occasions. Table 18 depicts the degree of participation in the virtual workshops by study and non-study participants.

Table 18

Record of Participation in Virtual Workshops for Study and Non-Study Participants

		Workshop Week				
Participant	Relationship to preschooler	1	2	3	4	Total
Study participants	Mother [a]	6	4	3	6	19
Non-study participant	Mother [b]	2	3	1	2	8
Non-study participant	Father [c]	1	0	0	0	1
Non-study participant	Grandmother [d]	2	2	1	2	7
Non-study participant	Great-grandmother [e]	0	0	1	0	1
Non-study participant	Aunt [f]	1	0	1	0	2
Total		12	9	7	10	38

Note. Maximum number of workshops provided as part of the intervention = 4.
[a] n = 7. [b] n = 5. [c] n = 1. [d] n = 3. [e] n = 1. [f] n = 1.

Record of Participation in Social Media

Participation in the social media Facebook Group created for the families of the preschool classroom invited to participate in this study was a component of the family engagement intervention program. All families in the preschool classroom were invited to participate in the Facebook Group. Fifteen of the 16 families accepted the invitation to join the group. Twenty-four family members were members of the Facebook Group. Consequently, multiple members of one family joined the group in some cases. Additionally, at least one family member from 15 of the 16 families participated in one of the four types of activity in the Facebook Group identified for the study. However, the data analysis of participation in the Facebook Group reported in this chapter focuses on the degree of activity of the seven study participants. For comparison, the degree of activity for non-study participants was reported to provide additional evidence to inform Action Research Question 1.

Opportunities for participation in the Facebook Group included the following: (a) original post, (b) view of original post, (c) reply post, and (d) reply emoji. Facebook records the date and the identity of the creator of an original post and a reply post. Facebook only records the identity of the person who views an original post or posts a reply emoji. A record of participation for each of the four types of activity in the Facebook Group was manually collected for data analysis. When evidence supported either of the four types of participation in the Facebook Group, a tally mark was recorded for the corresponding participant. One participant joined the Facebook Group during the fifth week of the study; therefore, the opportunities for the participant to engage in the Facebook Group were significantly lower than the other participants. Analysis of the data created by the activity in the Facebook Group was conducted by the researcher. Repeated cycles of data analysis reconciled any inconsistencies to increase the validity of the findings.

Original Posts. An original post is described as any post created by a participant in the Facebook Group to provide information or to initiate engagement with other participants. Study participants chose to initiate an original post 26 times. One study participant posted 15 of the 26 original posts created by the study participants. During the post-intervention focus group, the participant reported being an active participant in her older children's academic lives prior to participation in this study. Her previously established level of confidence for engaging with the school potentially contributed to the skewed data relative to participants' contributions of original posts. Data analysis revealed the least popular form of participation was the original post. Table 19 captures the level of study participant activity for publishing an original post.

Table 19

Record of Original Posts (OP) Per Participant

		OP Week						
Participant	Relationship to preschooler	1	2	3	4	5	6	Total
8	Mother	0	0	0	0	0	0	0
66	Mother	2	3	1	6	2	1	15
74	Mother	0	1	0	1	1	0	3
102	Mother	0	1	0	0	0	0	1
122 [a]	Mother	-	-	-	-	0	0	0
136	Mother	0	1	0	1	1	0	3
176	Mother	0	2	0	1	1	0	4
Total		2	8	1	9	5	1	26

Note. n = 7.
[a] Participant joined the social media group during Week 5.

Views of Original Posts. A view of an original post is described as the action of viewing any original post not published by the participant as the lead post (i.e., original post) in the Facebook Group. I recorded 660 views of original posts by study participants. Study participants participated most often by viewing original posts of study participants and non-study participants. Table 20 captures the level of study participant activity for viewing an original post.

Table 20

Record of Views of Original Posts (VP) Per Participant

		VP Week						
Participant	Relationship to preschooler	1	2	3	4	5	6	Total
8	Mother	11	8	3	12	18	7	59
66	Mother	11	17	18	20	40	16	122
74	Mother	20	23	20	34	44	18	159
102	Mother	19	18	17	28	35	18	135
122 [a]	Mother	-	-	-	-	16	6	22
136	Mother	14	19	17	28	24	9	111
176	Mother	5	15	6	8	17	1	52
Total		80	100	81	130	194	75	660

Note. n = 7. The views of original posts per study participant do not include the original posts posted by the study participant in Table 19. Maximum number of views of original posts per participant = 164.
[a] Participant joined the social media group during Week 5.

Reply Posts. A reply post is described as a post in response to any post, including an original post created by the study participant; 63 reply posts by study participants were recorded. The reply post was the third most popular form of participation. Table 21 captures the level of study participant activity for publishing a reply post.

Table 21

Record of Reply Posts (RP) Per Participant

Participant	Relationship to preschooler	RP Week						Total
		1	2	3	4	5	6	
8	Mother	0	0	0	0	0	0	0
66	Mother	4	13	3	6	15	2	43
74	Mother	0	0	1	1	1	0	3
102	Mother	0	0	2	1	4	1	8
122 [a]	Mother	-	-	-	-	0	0	0
136	Mother	0	0	0	0	0	0	0
176	Mother	0	4	1	0	4	0	9
Total		4	17	7	8	24	3	63

Note. n = 7.
[a] Participant joined the social media group during Week 5.

Reply Emojis. An emoji is described as a specific digital image or icon to express ideas or emotions. For this study, a reply emoji is described as the action of posting an emoji in response to any post, including an original post created by the participant, to communicate any of the following descriptors: *like, love, care*, *haha*, *wow*, *sad*, or *angry*. I recorded 262 reply emoji posts by study participants. The reply emoji was the second most popular form of participation. Table 22 captures the level of study participant activity for posting a reply emoji.

Table 22

Record of Reply Emojis (RE) Per Participant

Participant	Relationship to preschooler	RE Week						Total
		1	2	3	4	5	6	
8	Mother	3	3	0	1	4	1	12
66	Mother	12	21	10	21	28	10	102
74	Mother	10	16	7	4	18	7	62
102	Mother	4	4	2	1	10	7	28
122 [a]	Mother	-	-	-	-	6	3	9
136	Mother	4	6	3	1	8	7	29
176	Mother	2	12	1	0	5	0	20
Total		37	62	20	28	79	35	262

Note. n = 7.
[a] Participant joined the social media group during Week 5.

Record of Participation in Social Media for all Members of the Social Media Group. Data analysis of the behaviors of the 27 members in the Facebook Group provided a representation of participation during the 6 weeks of the family engagement intervention program. The Facebook Group was comprised of seven study participants, 17 non-study participants, one preschool teacher, one English Learner interpreter, and one researcher. Non-study participants might include one or more family members associated with a preschooler. Of the 17 non-study participants in the Facebook Group, 12 were identified as maternal family members (i.e., mother, grandmother, great-grandmother, aunt), while five were identified in a paternal role (i.e., father, grandfather). Further data analysis indicated a higher degree of activity in the Facebook Group was observed by maternal non-study participants than paternal non-study participants. For example, 7 out of 12 maternal non-participants participated in all four of the types of activity in the Facebook Group whereas paternal non-study participants were more passive. The five non-study participants in paternal roles participated by only viewing original posts except for one father who also posted nine emojis. A summary of activity is noteworthy since the activity of the study participants was influenced by the activity of all members of the Facebook Group.

The preschool teacher posted nearly two-thirds of the original posts for initiating a potential discussion thread. The most frequently observed type of activity for the Facebook Group was the views of original posts with a recorded 2,238 accounts. The second most frequently observed activity was the reply emojis with a recorded 600 accounts followed by reply posts with a recorded 206 accounts and original posts with a recorded 164 accounts. Table 23 depicts the degree of activity in the Facebook Group for the study participants, non-study participants, preschool teacher, English Learner interpreter, and researcher.

Table 23

Record of Participation in Social Media for all Members of the Social Media Group

Participant	TOP	%	TVP	%	TRP	%	TRE	%
study participants	26	16%	660	29%	63	31%	262	44%
non-study participants	12	7%	1273	57%	44	21%	254	42%
preschool teacher	103	63%	61	3%	49	24%	84	14%
EL interpreter	0	0%	103	5%	0	0%	0	0%
researcher	23	14%	141	6%	50	24%	0	0%
Total	164	100%	2238	100%	206	100%	600	100%

Note. *n* = 27. TOP = total original posts; TVP = total views of original posts; TRP = total reply posts; TRE = total reply emojis; EL = English learner.

Additional Program Supports

To support families in addition to virtual workshops and the Facebook Group, two additional opportunities were provided. First, the virtual workshops were recorded for families to review information at their convenience or view information for the first time when circumstances prohibited families from joining the live virtual workshop. Second, a 60-second video consisting of photos of the preschoolers engaged in active, hands-on learning activities during the school day was created as a hook for each week of a workshop and as a closure following the final workshop to give families insight into classroom activities and to provide a view of an abridged classroom experience. Five 60-second videos were created in English and Spanish and posted on YouTube. Average view time of the recordings of the workshops ranged from 1%–15% of the actual duration of the video. Average view time for the 60-second videos ranged from 67%–83% for the English version and 0%–98% for the Spanish version. The identity of the viewer of the recording of a workshop or a 60-second video was unknown. Table 24 reports the average participant view time for the recordings of the workshops and the 60-second videos to provide insight into the degree of activity.

Table 24

Average Participant View Time of Videos for Additional Program Support

Description of video	Title or language	Views	Duration (min)	Avg. view time (min)	%
60-second highlight 1	English	12	1:04	:53	83%
60-second highlight 1	Spanish	1	1:02	:14	23%
Workshop 1 [a]	Making art: Process vs product	3	38:04	:46	2%
Workshop 1[b]	Making art: Process vs product	6	31:26	1:08	4%
60-second highlight 2	English	9	1:09	:53	77%
60-second highlight 2	Spanish	1	1:09	:37	54%
Workshop 2 [a]	Alphabet scavenger hunt	2	33:29	:25	1%
Workshop 2 [b]	Alphabet scavenger hunt	3	31:33	:03	<1%
60-second highlight 3	English	8	1:03	:48	76%
60-second highlight 3	Spanish	1	1:09	:37	54%
Workshop 3 [a]	Making board games	1	33:54	:48	2%
Workshop 3 [b]	Making board games	5	26:23	2:29	9%
60-second highlight 4	English	4	:58	:43	74%
60-second highlight 4	Spanish	1	:59	:58	98%
Workshop 4 [a]	Eggstra cool science	3	40:09	:26	1%
Workshop 4 [b]	Eggstra cool science	6	35:12	5:23	15%
60-second highlight 5	English	3	1:01	:41	67%
60-second highlight 5	Spanish	1	1:02	:00	0%

Note. The same workshop was provided two times each week to give families two options.
[a] First workshop for the week. [b] Repeat of the first workshop.

Summary of Findings Related to Participation

The seven participants in the study were provided the opportunity to participate in four family engagement workshops. The potential number of total recorded attendance in all workshops equated to a maximum of 28 (i.e., seven participants times four workshops). The actual total recorded attendance equaled 19. The findings indicate 19 out of 28, or 68%, of the possible maximum recorded attendance in workshops for study participants was observed. The range of participation for individual study participants ranged from 25%–100%; however, the range of participation would reflect 50%–100% if participation by a related family member was taken into account.

Four types of activities were provided in the Facebook Group. The most frequently observed activity by the study participants was *views of the original posts* of other participants followed by the *reply emoji*, the *reply post*, and the *original post*, respectively. The preschool teacher and the researcher posted a combined total of 126 out of 164, or 77%, of the total of original posts to indicate the school emerged in a leading role in the activity of the Facebook Group. Furthermore, participation in supplemental activities (e.g., viewing of videos) was negligible.

Action Research Question 2: After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?

Data collection prior to an intervention and at the conclusion of an intervention may identify any change brought about in participants. A pre- and post-intervention rating scale and pre- and post-intervention focus groups provided data to substantiate any change in participants' self-reported efficacy beliefs for providing learning activities at home.

Rating Scale Items Related to Self-Efficacy

Five of 10 items included in a rating scale administered to participants were designed to assess participants' perceptions of self-efficacy for engaging their preschooler at home. The five items to inform Action Research Question 2 are Items 1, 2, 5, 7, and 8. The rating scale is in Appendix E.

Descriptive statistics regarding participants' responses to the pre- and post-intervention rating scale were utilized to inform Action Research Question 2 (see Table 14 and Table 15). In addition, raw data collected directly from the participants were used to inform Action Research Question 2. Raw data collected from the five rating scale items related to participants' perceptions of self-efficacy for engaging their preschooler at home are reported in Table 25.

Table 25

Analysis of Pre- and Post-Intervention Rating Scale Items Related to Self-Efficacy

Scale item	Participant														
	8		66		74		102		122		136		176		ST
1: I have confidence in myself in my role as a parent.	Pre	4	Pre	3	Pre	3	Pre	3	Pre	4	Pre	4	Pre	3	24
	Post	3	Post	3	Post	3	Post	4	Post	4	Post	4	Post	3	24
	Diff	1 [a]	Diff	0 [c]	Diff	0 [c]	Diff	-1 [b]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	--
2: I have all the skills necessary to support my preschooler's learning at home.	Pre	4	Pre	4	Pre	3	Pre	3	Pre	3	Pre	4	Pre	3	24
	Post	3	Post	4	Post	3	Post	4	Post	3	Post	4	Post	2	23
	Diff	1 [a]	Diff	0 [c]	Diff	0 [c]	Diff	-1 [b]	Diff	0 [c]	Diff	0 [c]	Diff	1 [a]	--
5: I know I am doing a good job supporting my preschooler's learning at home.	Pre	4	Pre	0	Pre	3	Pre	3	Pre	3	Pre	4	Pre	2	19
	Post	3	Post	0	Post	3	Post	3	Post	3	Post	4	Post	2	18
	Diff	1 [a]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	--
7: My skills for supporting my preschooler at home are effective.	Pre	4	Pre	3	Pre	3	Pre	4	Pre	3	Pre	4	Pre	0	21
	Post	3	Post	0	Post	3	Post	4	Post	3	Post	4	Post	0	17
	Diff	1 [a]	Diff	3 [a]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	--
8: I know what my preschooler should be learning at this stage of development.	Pre	3	Pre	0	Pre	3	Pre	3	Pre	4	Pre	4	Pre	3	20
	Post	0	Post	3	Post	3	Post	3	Post	3	Post	4	Post	0	16
	Diff	3 [a]	Diff	-3 [b]	Diff	0 [c]	Diff	0 [c]	Diff	1 [a]	Diff	0 [c]	Diff	3 [a]	--

Note. Adapted from the work of Constantino (2021) and Hamilton et al. (2015). $n = 7$. Maximum summed total = 28 (i.e., maximum possible rating of 4 for a rating scale item times 7 participants). ST = summed total for the rating scale item; Pre = pre-intervention; Post = post-intervention; Diff = difference in rating from pre- to post-intervention. 4 = *strongly agree*, 3 = *agree*, 2 = *disagree*, 1 = *strongly disagree*, 0 = *neither agree nor disagree*.
[a] Decline in perception of self-efficacy. [b] Increase in perception of self-efficacy. [c] No change in perception of self-efficacy.

Pre-Intervention Rating Scale Items Related to Self-Efficacy. Prior to the intervention, participants self-reported mixed beliefs about their knowledge, skills, and abilities for engaging their preschooler at home. Table 14 indicates the mean range for the five rating scale items at pre-intervention spanned 2.7 (i.e., PreItem 5)–3.4 (i.e., PreItems 1 and 2) on a scale of 0–4. On average, participants were least confident in their belief in how well they supported their preschooler's learning at home. Ratings indicated participants were most confident in two areas, their role as a parent and their skills to support their preschooler at home.

Data analysis represented in Table 25 conveys findings about self-efficacy based on raw data collected directly from the participants prior to the intervention. At pre-intervention, 7 out of 7 participants agreed or strongly agreed with at least 3 of the 5 rating scale items related to self-efficacy thus communicating a greater confidence in abilities to support their preschooler's learning at home than a lack of confidence. In fact, one participant selected "strongly agree" for all five items, and one participant selected "strongly agree" for 4 of the 5 items. The rating scale items, "*I have confidence in myself in my role as a parent*" and "*I have all the skills necessary to support my preschooler's learning at home*" were rated as "agree" or "strongly agree" by 7 out of 7 participants. In sum, participants self-reported confident perceptions of self-efficacy prior to the intervention.

However, an indication of uncertain perceptions of self-efficacy by the rating of "neither agree nor disagree" or lack of confident perceptions of self-efficacy by the rating of "disagree" was also revealed in rating scale responses prior to the intervention. One participant selected "neither agree nor disagree" for two rating scale items, "*I know I am doing a good job supporting my preschooler's learning at home*" and "*I know what my preschooler should be learning at this stage of development.*" One participant selected "neither agree nor disagree" for the rating scale item, "*My skills for supporting my preschooler at home are effective.*" The same participant disagreed with the statement, "*I know I am doing a good job supporting my preschooler's* *learning at home*." Additionally, the range of the summed total per item as reported by participants prior to the intervention spanned 19–24 to provide additional evidence to support some participant perception of uncertainty or lack of confident perceptions of self-efficacy as represented by the low end of the range of summed total per rating scale item.

The findings from raw data and data analysis may be further quantified. For example, raw data derived from the responses to the five rating scale items by the seven participants equated to a total of 35 data points (i.e., 35 total responses to rating scale items). Three data points conveyed uncertainty in perceptions of self-efficacy by a rating of "neither agree nor disagree," and one data point conveyed a lack of confident perception of self-efficacy by a rating of "disagree" whereas 31 data points conveyed confident perceptions of self-efficacy. Raw data indicated 89%, or 31 out of 35, of the data points were rated as "agree" or "strongly agree" to communicate, in general, participants self-reported a perceived confidence in skills and abilities for engaging their preschooler in learning activities at home at the time of pre-intervention.

Post-Intervention Rating Scale Items Related to Self-Efficacy. According to the rating scale administered following the intervention, participants self-reported mixed beliefs about their knowledge, skills, and abilities for engaging their preschooler at home. Table 15 indicates the mean range for the five rating scale items at post-intervention spanned 2.3 (i.e., PostItem 8)–3.4 (i.e., PostItem 1) on a scale of 0–4, which represents a decrease in the low end of the range following the intervention. On average, participants were least confident in their knowledge about what their preschooler should be learning, and participants were most confident in their role as a parent.

Data analysis represented in Table 25 conveys findings about self-efficacy based on raw data collected directly from the participants following the intervention. At post-intervention, 6 out of 7 participants agreed or strongly agreed with at least 3 of the 5 rating scale items related to self-efficacy thus communicating a greater confidence in abilities to support their preschooler's learning at home than a lack of confidence. In fact, one participant selected "strongly agree" for all five items. The rating scale item, "*I have confidence in myself in my role as a parent*" was rated as "agree" or "strongly agree" by 7 out of 7 participants. Participants self-reported confident perceptions of self-efficacy following the family engagement activities.

Additionally, an indication of uncertain perceptions of self-efficacy or lack of confident perceptions of self-efficacy at the conclusion of the intervention was also revealed in the raw data. For example, 4 out of 5 rating scale items were rated as "neither agree nor disagree" or "disagree" by at least one participant. In addition, a decline in perception of self-efficacy was reported for at least one rating scale item by 4 out of 7 participants. For example, a rating of "strongly agree" at pre-intervention was rated as "agree" at post-intervention, or a rating of "agree" at pre-intervention was rated as "neither agree nor disagree" at post-intervention. The most frequently reported shift to uncertainty or decline in perception of self-efficacy was evident by the ratings of three participants for the rating scale item, "*I know what my preschooler should be learning at this stage of development*." Furthermore, one participant reported a decline in perceptions of self-efficacy for all five rating scale items. Additionally, the range of the summed total per rating scale item as reported by participants at post-intervention spanned 16–24 to provide additional evidence to support some participant perception of uncertainty or lack of confident perception of self-efficacy as represented by the low end of the range of summed total per rating scale item.

The findings from raw data and data analysis may be further quantified. For example, the raw data derived from the responses to the five rating scale items by the seven participants equated to a total of 35 data points (i.e., 35 total responses to rating scale items). Following the intervention, 23 out of 35 data points remained unchanged, 9 out of 35 data points shifted downward, and 3 out of 35 data points shifted positively. At post-intervention, five data points revealed an indication of uncertainty in perceptions of self-efficacy by the rating of "neither agree nor disagree", which indicated a net increase of two data points when compared to pre-intervention ratings. Two data points conveyed a lack of confident perceptions of self-efficacy by a rating of "disagree", which indicated a net increase of one data point when compared to pre-intervention ratings. Furthermore, 28 data points conveyed confident perceptions of self-efficacy, which indicated a net decrease of three data points when compared to pre-intervention ratings. Raw data indicated 80%, or 28 out of 35, of the data points were rated as "agree" or "strongly agree" to communicate, in general, participants self-reported a perceived confidence in skills and abilities for engaging their preschooler in learning activities at home at post-intervention; however, the calculation is nine percentage points lower than at pre-intervention. Table 26 captures a comparison of raw data related to self-efficacy collected prior to and following the intervention.

Table 26

Comparison of Raw Data Points Related to Self-Efficacy at Pre- and Post-Intervention

Rating	Degree of self-efficacy	Pre-intervention	Post-intervention	Net change
neither agree nor disagree	uncertainty	3	5	2 [a]
disagree	lack of confidence	1	2	1 [a]
agree or *strongly agree*	confidence	31	28	-3 [b]
Total		35	35	

Note. $N = 35$.
[a] Net increase in number of ratings. [b] Net decrease in number of ratings.

Summary of Findings From Rating Scale Items Related to Self-Efficacy. After participating in family engagement activities, perceptions of self-efficacy were mixed, and the majority of perceptions of self-efficacy were unchanged as evidenced by the rating scale. Participants' perception of confidence in their role as a parent was similarly rated "agree" or "strongly agree" from pre-intervention to post-intervention and garnered the highest summed total out of the five rating scale items related to perceptions of self-efficacy at both administrations of the rating scale. A slight decline in self-efficacy for certain participants from pre-intervention to post-intervention was revealed in a comparison of raw data; however, an aggregate of data indicated that, in general, participants self-reported an overall degree of confident perceptions of self-efficacy at both pre- and post-intervention. Nonetheless, analysis of raw data for individual participants and the mean ranges for the five rating scale items communicated a mix of both low, uncertain, and high perceptions of self-efficacy.

Focus Group Related to Self-Efficacy

Five of 15 questions included in a focus group protocol administered to participants at the beginning of the study were designed to assess participants' level of self-efficacy for engaging their preschooler in learning activities at home prior to the intervention. The five questions to inform Action Research Question 2 are 3, 5, 7, 14, and 15. Additionally, the open nature of a semi-structured focus group affords the opportunity for responses from other focus group questions to inform Action Research Question 2 (Mertler, 2020). The focus group protocol is in Appendix G.

Pre-Intervention Focus Group Related to Self-Efficacy. Coding of responses to focus group questions related to self-efficacy revealed similarity in beliefs about the following: (a) participant's level of self-efficacy, (b) beliefs about building self-efficacy, and (c) value ascribed to the classroom's social media group. As a result of the synthesis of the data codes, the researcher induced a presence of low self-efficacy at the pre-intervention time mark and a sense of familiarity and usefulness associated with the social media group and virtual learning environment that were introduced during the pre-intervention action research cycle.

***Perceptions of Self-Efficacy*.** When prompted to describe experiences in guiding a preschooler's learning at home, participants held similar beliefs of low self-efficacy for supporting their preschooler. For example, 6 out of 7 participants expressed a lack of confidence when engaging their preschooler in learning activities at home.

- "Zero confidence."
- "I guess compared to everybody else, I suck because when she comes home from school, so it's not a whole lot of learning."
- "I don't think I'm ever confident in everything that I do."

- “I’m not really ever confident in, in, you know, in really a lot because of how much it does change.”
- “I wing it. I don’t know what I am doing, but I think it’s working.”

Furthermore, 5 out of 7 participants described experiences when they found themselves lacking patience when engaging their preschooler in learning activities at home. A lack of skills and abilities might be a contributing factor to a display of low self-efficacy behaviors, such as decreasing patience, when interacting with preschoolers.

- “I don’t really have a lot of patience.”
- “I don’t have the patience for puzzles.”
- “I don’t know if I would have the patience, honestly, to even, like decide would I be able to figure out for her to know how to spell her name, for her to write her name, know her ABCs.”

When prompted to identify topics to help them prepare their preschooler for entering kindergarten, participants’ responses suggested a lack of knowledge about their child’s next grade level. For example, 4 out of 7 participants were unsure of how to respond.

- “I am loss for words. I’m really not sure on that one.”
- “Yeah, I’m not sure either.”
- “I really don’t know.”
- “I don’t know. Nothing I can think of.”

Building Self-Efficacy. When prompted to describe how participants would benefit from participating in the workshops offered by the preschool teacher, participants’ motives for participating were consistent with a desire to develop parental skills and abilities to promote their preschooler's success. For example, 6 out of 7 participants described scenarios of building self-efficacy for performing in their parental role.

- "To help grow as a parent, even for like, take on for kindergarten."
- "I want all the tips and tricks."
- "I'll take all the tips and tricks and advice that I can get."

Equally significant, the anticipation of benefitting from participation in the workshops communicated by the same six participants indicated a belief of projected increase in self-efficacy. In addition, 4 out of 7 participants described scenarios about learning from a model or other parents in ways that suggest participants perceived learning from others as positive experiences.

- "But then y'all also have like this reading thing [an activity from a pre-intervention action research cycle workshop] that y'all do with the kids sometimes too. And y'all had the kids going through it asking the kids, you know, what does this picture mean to you, and you know their responses, what they see, you know, you had the parents and the kids interacting together."
- "I'm open to hearing all of it. Like I'm a firm believer and steal with pride. If it works, and I can steal it, I'm going to steal it and use it.
- "I like knowing what other parents do."

Social Media Group. Participants' comments about the Facebook Group captured at the beginning of the study were influenced by family engagement experiences that occurred during the pre-intervention action research cycle. The most frequently described experiences associating value to the Facebook Group related to exchanging messages and information and building self-efficacy. Specifically, 5 out of 7 participants used the Facebook Group to communicate with the teacher and researcher.

- "For me, it's more like keeping me updated, keeping in the know."
- "There is also the, the Facebook.…There is many, many ways to contact the teachers."
- "To send out invitations, emails, you know, Facebook. [The teacher and researcher] make every attempt to keep the parents engaged."

In addition, 4 out of 7 participants described participation in the Facebook Group as a way of feeling supported by the preschool teacher for learning ways to help preschoolers learn at home. Posts to the Facebook Group provided suggestions for at-home learning activities.

- "But it's the sharing of posts on Facebook. I truly love that group."
- "That Facebook Group gives insight into the day. And I think, I'll be honest, I think that has been the biggest difference this year for me."

Data collected from the pre-intervention focus group revealed themes associated with participants' perceptions related to self-efficacy prior to the intervention. Qualitative data were quantified to substantiate the emergent categories that led to the development of themes and concepts (see Table 27).

Table 27

Pre-Intervention Data Supporting Themes Related to Self-Efficacy

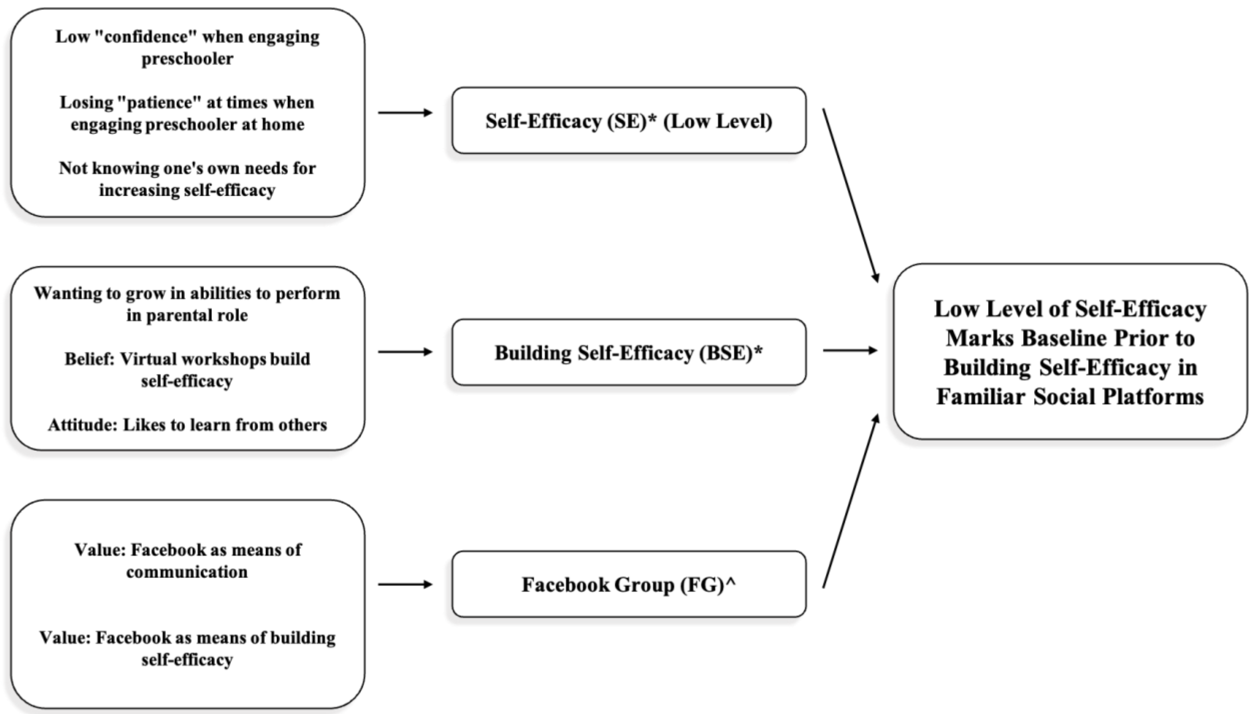
Participant beliefs	Participants	%
Low "confidence" when engaging with preschooler	6	86%
Losing "patience" at times when engaging preschooler at home	5	71%
Not knowing one's own needs for increasing self-efficacy	4	57%
Wanting to grow in ability to perform in parental role	6	86%
Belief: Virtual workshops build self-efficacy	6	86%
Attitude: Likes to learn from others	4	57%
Value: Facebook as means of communication	5	71%
Value: Facebook as means of building self-efficacy	4	57%

Note. *n* = 7.

Furthermore, the first and second cycle coding processes that developed the themes associated with participant's perceptions related to self-efficacy prior to the intervention are depicted in Figure 7. A theme of low perceptions of self-efficacy provided a baseline measure prior to participation in the intervention activities.

Figure 7

Analysis of Pre-Intervention Focus Group Data Related to Self-Efficacy (ARQ2)



Note. ARQ = action research question; * = a priori code; ^ = emergent code.

Post-Intervention Focus Group Related to Self-Efficacy. Coding of responses to focus group questions related to self-efficacy revealed commonality in two areas. First, participants projected both high and low perceptions of self-efficacy when engaging preschoolers in learning activities at home. Second, participants shared common views related to building self-efficacy through collaborative efforts between the home and the school (i.e., preschool teacher and researcher). As a result of the synthesis of the data codes, the researcher induced a positive shift in perceptions of self-efficacy might influence positive changes in adult behaviors when engaging preschoolers in learning activities and nurture participation in future family engagement activities for building self-efficacy.

Perceptions of Self-Efficacy. When prompted to describe experiences in guiding a preschooler's learning at home, participants held mixed perceptions of self-efficacy for supporting their preschooler. To illustrate, 6 out of 7 participants recounted instances of perceived high self-efficacy. Participants' perceptions of self-confidence and high self-efficacy were associated with comfortable moments of engaging interactions with their preschooler, self-assurance in preschool content knowledge, previous experiences when engaging with their older children, and guidance in what to do.

- "So, we just we just really flow with each other in terms of conversation, and she, you know, she's very bright and she points out things, and like I said, that just sparks conversation about other things. So, she, she learns a lot."
- "But thankfully, you know, I can help her with her numbers and her colors and her shapes."
- "Mine are like back-to-back, so, you know, I guess far as my confidence…I would say I'm confident only because of the other children."
- "I'm more confident in [engaging my preschooler at home] when I'm told what to do."

Concurrently, participants described scenarios of low confidence when engaging their preschooler at home. Experiences illustrative of low self-efficacy were narrated with words of doubt. Six out of 7 participants described times when perceptions of low self-efficacy were present.

- "I still say I'm winging it. After hmm, hmm, hmm numbers of years of doing this, I'm constantly just winging it."

- “When we're trying to do something when I'm trying to teach her something, it just kind of becomes a little stressful. I guess because I feel that I'm not getting through to her.”
- “Since I don’t know how to read well sometimes I feel like I’m not teaching him well what he should be learning. If I want to teach him I don’t know how, if I’m doing it well or not well enough.”

Building Self-Efficacy. The intervention for this study included activities for building self-efficacy to support the academic success of preschoolers. Four out of 7 participants described positive experiences associated with the intervention.

- “I enjoyed the experience. I wish this was something that was continued at least through 6th or 7th grade.”
- “I was actually happy to spend you know, this time with you guys, with her, and seeing her do all these little activities and, and just kind of see her face light up every time.”
- “With this program I learn more and so does my boy.”

The intervention for this study incorporated collaborative experiences, such as virtual workshops and a Facebook Group created exclusively for the preschool classroom. Four out of 7 participants described experiences attributing value to learning from others.

- “Just seeing what other people may do that could help.”
- “Because I wanted other people's opinions and input about what to do or what is the best thing or what has worked for them with their kids.”
- “And you guys like, like it gave insight to, to ways of teaching, like, for example, when we talked about Mrs. Woods reading the book or you know reading books or

and how she, you know, the title page, and you know, and so on, so forth, like I caught myself doing that when I was reading a book to them the other night."

Additionally, the Facebook Group was a means of sharing of information with families to keep families abreast of learning activities occurring at school that might be recreated at home. Five out of 7 participants liked the home-school connection provided via the Facebook Group.

- "I like to see the pictures and stuff of what they do in school."
- "I love the Facebook Group, I mean. I think I've said this before I love being able to see what my child is doing during her day because you know it's, just to be able to see what she comes home to tell me about."
- "I like seeing what my kid is doing. It's not often you get that insight."

When prompted to identify areas of interest to build self-efficacy in preparation for the transition from preschool to kindergarten, 5 out of 7 participants desired more information about expectations for children entering kindergarten.

- "I'm open to any topic. There's so much that they're going to be taking on."
- "There's a few questions. Maybe what is consider normal? And what is a little more than normal? As in her, her, for how long can she pay attention. Is that going to be a problem for her? Is she going to fall behind? Would she get along with other kids?"
- "What separates the two? You know and not just not just between like PreK and, you know, kindergarten. I mean that for every single, every single grade."

Data collected from the post-intervention focus group revealed themes associated with participants' perceptions related to self-efficacy after the intervention. Qualitative data were quantified to substantiate the emergent categories that led to the development of themes and concepts (see Table 28).

Table 28

Post-Intervention Data Supporting Themes Related to Self-Efficacy

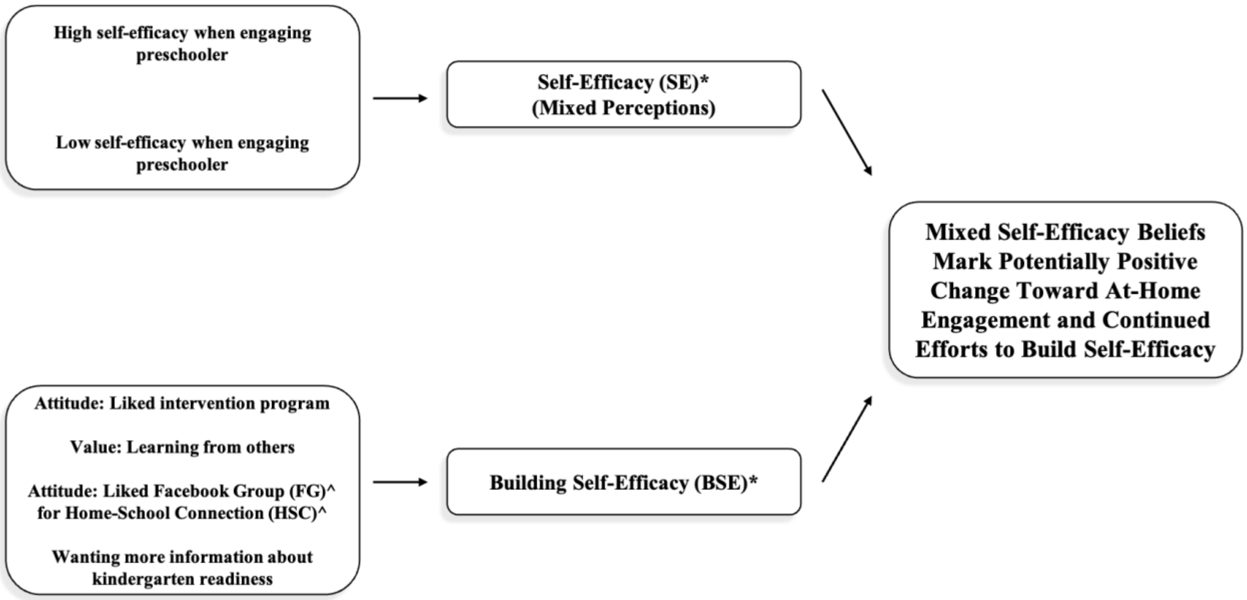
Participant beliefs	Participants	%
High self-efficacy when engaging preschooler	6	86%
Low self-efficacy when engaging preschooler	6	86%
Attitude: Liked intervention program	4	57%
Value: Learning from others	4	57%
Attitude: Liked Facebook group for home-school connection	5	71%
Wanting more information about kindergarten readiness	5	71%

Note. n = 7.

Furthermore, the first and second cycle coding processes that developed the themes associated with participants' perceptions related to self-efficacy after the intervention are depicted in Figure 8. A theme of mixed perceptions of self-efficacy, even if a minimal positive shift from perceptions at pre-intervention, provided optimism for continued practices to build self-efficacy.

Figure 8

Analysis of Post-Intervention Focus Group Data Related to Self-Efficacy (ARQ2)



Note. ARQ = action research question; * = a priori code; ^ = emergent code.

Summary of Findings From the Focus Groups Related to Self-Efficacy. Participants who participated in the study showed interest in building self-efficacy for performing in their parental role for supporting their child's academic success. At pre- and post-intervention, participants viewed the activities included in the intervention (i.e., virtual workshops, social media group) as potential avenues for building self-efficacy. Additionally, participants perceived value in learning from others.

After participating in family engagement activities, participants communicated a slight shift in perceptions of self-efficacy from beliefs held at the beginning of the study. Prior to the intervention, most participants projected low perceptions of self-efficacy. Reasons for low self-efficacy might be associated with lack of understanding about engaging preschoolers in learning activities, low level of patience for engaging preschoolers, and lack of knowledge about academic expectations for preschool-age children. Following the intervention, participants' views of skills and abilities for engaging their preschooler in learning activities at home included both low and high perceptions of self-efficacy. Reasons for higher perceptions of self-efficacy following the intervention might be associated with a positive attitude toward the benefits of participation in the intervention program and positive experiences associated with the classroom's social media group. Participants perceived a home-school connection for building self-efficacy through the sharing of information interwoven in the workshops and the Facebook Group.

Action Research Question 3: In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?

Focus groups provided a forum for parents to discuss ways to provide learning experiences for preschoolers during times when preschoolers are at home. Specifically, anecdotes of developmentally appropriate learning experiences that encourage problem solving, hands-on manipulation of materials, and active movement were noteworthy for this study (A. Epstein, 2007; Schweinhart, 2013). Pre- and post-intervention focus groups provided data to account for the learning activities preschoolers engaged in at home.

Pre-Intervention Focus Group Related to At-Home Learning

Six of 15 questions included in a focus group protocol administered to participants at the beginning of the study were designed to understand the learning experiences families engaged in at home prior to the intervention. The six questions to inform Action Research Question 3 are 2, 4, 6, 13, 14, and 15. Additionally, the open nature of a semi-structured focus group affords the opportunity for responses from other focus group questions to inform Action Research Question 3 (Mertler, 2020). The focus group protocol is in Appendix G.

Coding of responses revealed similarity in two areas. First, similarity was observed in participants' representation of home learning experiences portraying preschoolers as active participants in their learning with opportunities to learn through play. The home learning experiences were similar to learning experiences at school. Second, similar depictions of the home learning environment described by participants included scenarios for learning during typical daily activities and scenarios for engaging siblings in the preschoolers' learning experiences. As a result of the synthesis of the data codes, the researcher induced a home-school connection facilitated active learning experiences at home and promoted continuity for the preschooler.

Active Learning. When prompted to describe experiences related to engaging preschoolers in learning activities at home, participants recounted scenarios when their preschooler was actively engaged in enjoyable learning activities often similar to learning activities provided at school. The depiction of the preschooler's experiences resembled learning through play. When describing at-home learning experiences, 7 out of 7 participants linked at-home experiences to active learning experiences at school.

- "Pretty much I do what the school is doing, you know."
- "I think [the link between home activities and preschooler's progress] goes hand-in-hand."
- "Whatever [teachers] say is right. And we have to do it how Ms. Anderson and Mrs. Woods shows them."

Seven out of 7 participants described at least one home learning experience that actively engaged preschoolers in problem solving, using materials, or moving their bodies.

- “I tell him that he has to color the picture first before he and his sister can go outside and play on the bikes.”
- “She has a dry erase board and a chalkboard and just have her like try to work on spelling or writing her letters even adding, like, she uses her tablet.”
- “And he loves puzzles.”
- “I mean, sometimes we’ll sing. Sometimes we do the color thing.…I’ll give them candy or fruit and they’ll count it.”

Equally significant in environments promoting active learning through play, 4 out of 7 participants associated fun and enjoyment with learning.

- “We like board games.”
- “Trying to make it fun for her. Otherwise, she’ll lose interest quite quickly.”

Environment. Participants described characteristics of the learning environment that supported learning activities. For example, 5 out of 7 participants described how learning was incorporated into typical daily activities.

- “She’s standing outside the shower door and she’s using my steam from the shower door to write her numbers and to write her name.”
- “We’re in the car, this is a steering wheel. You know, you’re looking out the window, and she’ll count everything.…so we, we try to make something out of everything.”

Additionally, 4 out of 7 participants reported older siblings engaged in learning experiences with preschoolers at home.

- “So, when Alexis comes I get her to go over the book with him.”
- “Trying to teach her along with her siblings.”

Data collected from the pre-intervention focus group revealed themes associated with participants' perceptions related to the learning experiences for preschoolers when at home. Qualitative data were quantified to substantiate the emergent categories that led to the development of themes and concepts (see Table 29).

Table 29

Pre-Intervention Data Supporting Themes Related to At-Home Learning

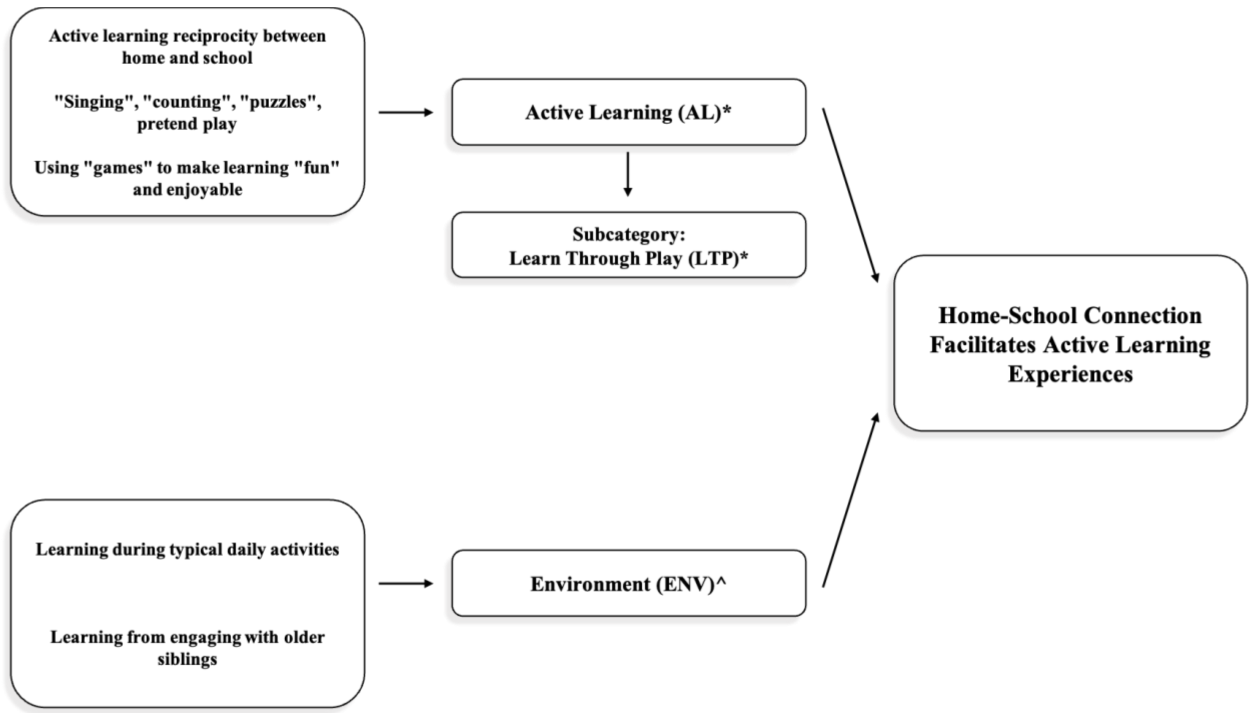
Participant beliefs	Participants	%
Active learning reciprocity between home and school	7	100%
"Singing," "counting," "puzzles," pretend play	7	100%
Using "games" to make learning "fun" and enjoyable	4	57%
Learning during typical daily activities	5	71%
Learning from engaging with older siblings	4	57%

Note. n = 7.

Furthermore, the first and second cycle coding processes that developed the themes associated with participants' perceptions related to the learning experiences for preschoolers when at home are depicted in Figure 9. A home-school connection was a common theme in the ways families actively engaged at home.

Figure 9

Analysis of Pre-Intervention Focus Group Data Related to At-Home Learning (ARQ3)



Note. ARQ = action research question; * = a priori code; ^ = emergent code.

Post-Intervention Focus Group Related to At-Home Learning

Six of 15 questions included in a focus group protocol administered to participants at the end of the study were designed to understand the learning experiences families engage in at home following the intervention. The six questions to inform Action Research Question 3 are 2, 4, 6, 13, 14, and 15. Additionally, the open nature of a semi-structured focus group affords the opportunity for responses from other focus group questions to inform Action Research Question 3 (Mertler, 2020). The focus group protocol is in Appendix G.

Coding of responses revealed similarity in two areas. First, similarity was observed in the representation of active learning experiences portraying preschoolers as active participants in their learning. The home learning experiences were similar to learning experiences at school.

Second, similar descriptions of the home learning environment described by participants included parent-preschooler engagement scenarios characterized as ineffective by participants and sibling-preschooler engagement scenarios portrayed as favorable, unfavorable, or neutral. As a result of the synthesis of the data codes, the researcher induced perceptions of self-efficacy might influence the degree a home-school connection facilitates home learning experiences.

Active Learning. When prompted to describe experiences related to engaging preschoolers in learning activities at home, participants recounted scenarios reflective of a home-school connection. Preschoolers were characterized as active participants in activities of interest to them. Frequently, the activities were similar to activities provided at school. For example, 6 out of 7 participants described active learning experiences at home that were related to active learning experiences at school.

- "Where they end at the end of the day, you know, we really pick up at home as well, you know, helping, you know, with like, 'What did you learn?', you know, 'What, what did you learn today?' and so just kind of recapping."
- "She comes home, and I can see that she's, you know, learning something in particular I'm able to, okay, focus on that."
- "He tells me he already does it at school with Ms. Anderson but I tell him he needs to also do it here so he can practice and learn how to do it right."

Furthermore, 7 out of 7 participants described at least one home learning experience that actively engaged preschoolers in problem solving, using materials, or moving their bodies.

- So, I try to do like, like international nights here and there.…That's what led us to making chalupa.…It was really neat sitting around, the kids were like you know rolling out the dough and making the balls and stuff, just, just talking, just talking. Like it was so conversational."

- "Between me and him we paint, we count."
- "What he finds the most enjoyable is the eggs with the playdoh. He continues to put them together here at home."
- "So, we can do any type, anything that requires singing and dancing and you know laughing, she, yeah, her and my sister are really good with that."

Participants acknowledged being attentive to their preschooler's interests when engaging at home. For example, 4 out of 7 participants explained how some home learning experiences developed from following the lead of the child.

- "I let Andy show interest first and then we go from there."
- "I let Andy lead when I probably wouldn't have before."
- "If she started saying something or doing something, I just start and follow her."
- "She points out things, and like I said, that just sparks conversation about other things. So, she, she learns a lot."

Environment. Participants' perceptions of the quality of interactions when engaging preschoolers assisted in conceptualizing the family's home learning environment. Participants' level of self-efficacy might have influenced their methodology for engaging their child. Thus, parent-child dynamics might have influenced the effectiveness of interactions. To illustrate, 5 out of 7 participants described experiences of low self-efficacy when engaging their preschooler.

- "Yeah, it's hard to kind of keep her, you know, her attention span."
- "Just trying to get her to sit still just for even 5 minutes is, is a job itself."
- "They don't listen to me…at all."

- “When we're trying to do something when I'm trying to teach her something, it just kind of becomes a little stressful. I guess because I feel that I'm not getting through to her.”

In addition, 5 out of 7 participants described learning experiences involving preschoolers and siblings that might be interpreted as positive, negative, or neutral. Environmental factors such as participants’ level of self-efficacy and parent-child dynamics might influence sibling engagement since behaviors projected by the participants when engaging at home serve as a model for sibling engagement.

- “His sister will write the letters so he can copy them.”
- “Because her and her sisters are, they're all very different ages, so it's kind of like a, like a game always, and she probably feels that it's the same at school. Yeah. Which is not a good thing. Like for example here she's, there's a lot of playing. There's a lot of chasing. And yeah, and very little like focusing on something. It's always playing and stuff.”
- “Andy’s hit or miss depending on what's going on with the people in the house around him. His siblings tend to be a distraction here and there.”
- “And the thing is, is for me it’s easy to forget because of the other kids in the house. And he’s always wanted to do what they're doing, be into what they're into so it's really easy to forget he's just five.”

Data collected from the post-intervention focus group revealed themes associated with participants’ perceptions related to at-home learning experiences. Qualitative data were quantified to substantiate the emergent categories that led to the development of themes and concepts (see Table 30).

Table 30

Post-Intervention Data Supporting Themes Related to At-Home Learning

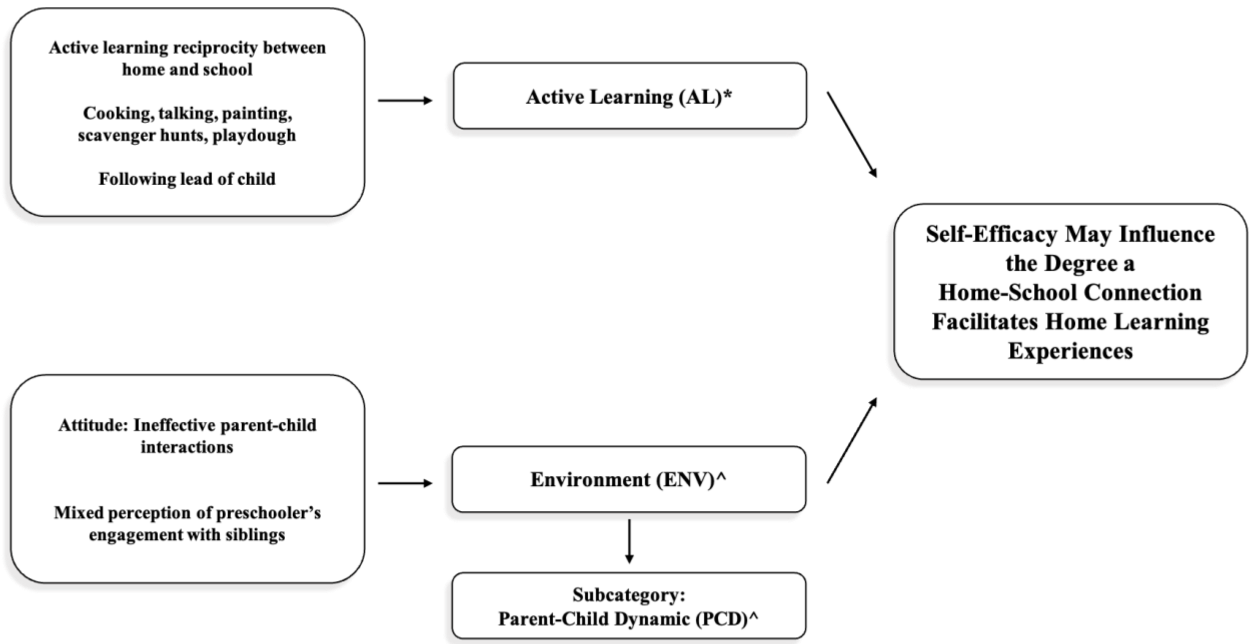
Participant beliefs	Participants	%
Active learning reciprocity between home and school	6	86%
"Cooking," "talking," "painting," "scavenger hunts," "playdough"	7	100%
Following lead of child	4	57%
Attitude: Ineffective parent-child interactions	5	71%
Mixed perception of preschooler's engagement with siblings	5	71%

Note. *n* = 7.

Furthermore, the first and second cycle coding processes that developed the themes associated with participants' perceptions related to the learning experiences provided for preschoolers at home are depicted in Figure 10. A potential link between perceptions of self-efficacy and the degree the school influences home learning activities emerged as a theme.

Figure 10

Analysis of Post-Intervention Focus Group Data Related to At-Home Learning (ARQ3)



Note. ARQ = action research question; * = a priori code; ^ = emergent code.

Social Media Posts Related to At-Home Learning. Posts to the Facebook Group provided additional evidence of developmentally appropriate learning activities occurring when preschoolers were with their families outside of school. After the first workshop, 5 out of 7 participants posted pictures of their preschooler and the artwork their preschooler produced for the at-home learning activity linked to the workshop. In addition, two non-study participants posted a picture of their preschooler and their preschooler's artwork. Similarly, after the fourth workshop, 3 out of 7 participants posted pictures of their preschooler and the structure their preschooler constructed for the at-home learning activity linked to the workshop. No posts by participants were related to the at-home learning activities linked to the second and third family engagement workshops. Other examples of at-home learning posted by participants and non-study participants during the 6-week period of the intervention included the following: making cookies with supplies provided by the school, building with connector blocks, riding a bike, playing a game with family members, and creating with sand in a sandbox.

Summary of Findings From the Focus Groups and Social Media Related to At-Home Learning. When describing examples of home learning activities prior to and following the intervention, participants' responses provided evidence of a home-school connection. The examples of activities described by participants suggested preschoolers were engaged in active learning experiences at home that were similar to learning experiences at school. Most noteworthy is the idea of following the lead of the child that was described as a practice by the end of the intervention. Participants' representation of the home learning environment prior to the intervention included learning opportunities in daily routines and positive experiences when siblings engaged preschoolers. By the end of the intervention, participants' representation of the home learning environment included ineffective parent-child interactions that might have been drawn from perceptions of low self-efficacy, and participants described mixed perceptions of the effectiveness of engagement behaviors when siblings interacted with preschoolers.

Action Research Question 4: How do families describe the role of the family and the role of the school in their preschooler's academic success?

Participants' perception of the role of the family and the role of the school in their preschooler's academic life might be influenced by family engagement activities. Data collection prior to the intervention for this study and at the conclusion of the intervention captured participants' beliefs about the two roles. A pre- and post-intervention rating scale and pre- and post-intervention focus groups provided data to substantiate any change in participants' beliefs ascribed to the role of the family and the role of the school in their preschooler's academic life.

Rating Scale Items Related to Perceptions of the Roles of Family and School

Five of 10 items included in a rating scale administered to participants were designed to assess participants' beliefs about the role of the family and the role of the school in their preschooler's academic success. For this study, perceptions of the role of the school were considered to be associated with the relationships and interactions between the classroom teachers and families of the preschool classroom; however, participants provided some anecdotes indicating perceptions of the school extended to the office support staff, other teachers in the building, and the school administrator that might have influenced the scores on the rating scale. The five items to inform Action Research Question 4 are Items 3, 4, 6, 9, and 10. The rating scale is in Appendix E.

Descriptive statistics regarding participants' responses to the pre- and post-intervention rating scale were utilized to inform Action Research Question 4 (see Table 14 and Table 15). In addition, raw data collected directly from the participants of the study were used to inform Action Research Question 4. Raw data collected from the five rating scale items related to participants' beliefs about the role of the family and the role of the school in their preschooler's academic success are reported in Table 31.

Table 31

Analysis of Pre- and Post-Intervention Rating Scale Items Related to Perceptions of the Roles of Family and School

Scale item	Participant														
	8		66		74		102		122		136		176		ST
3: My role as a parent is valued by the school.	Pre	4	Pre	4	Pre	3	Pre	3	Pre	3	Pre	4	Pre	3	24
	Post	3	Post	4	Post	3	Post	3	Post	3	Post	4	Post	3	23
	Diff	1 [a]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	--
4: I feel welcome at my preschooler's school.	Pre	4	Pre	4	Pre	3	Pre	4	Pre	4	Pre	4	Pre	3	26
	Post	4	Post	4	Post	3	Post	4	Post	3	Post	4	Post	3	25
	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	1 [a]	Diff	0 [c]	Diff	0 [c]	--
6: My preschooler's school encourages me to support my child's learning at home.	Pre	4	Pre	4	Pre	3	Pre	4	Pre	3	Pre	4	Pre	3	25
	Post	4	Post	4	Post	3	Post	4	Post	3	Post	4	Post	3	25
	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	--
9: My preschooler's school regularly provides materials for me to support my preschooler's learning at home.	Pre	4	Pre	3	Pre	3	Pre	4	Pre	4	Pre	4	Pre	4	26
	Post	4	Post	4	Post	3	Post	3	Post	3	Post	4	Post	3	24
	Diff	0 [c]	Diff	-1 [b]	Diff	0 [c]	Diff	1 [a]	Diff	1 [a]	Diff	0 [c]	Diff	1 [a]	--
10: My preschooler's school values working with my family to help my preschooler be successful.	Pre	4	Pre	4	Pre	3	Pre	3	Pre	3	Pre	4	Pre	3	24
	Post	4	Post	4	Post	3	Post	3	Post	3	Post	4	Post	3	24
	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	Diff	0 [c]	--

Note. Adapted from the work of Constantino (2021) and Hamilton et al. (2015). n = 7. Maximum summed total = 28 (i.e., maximum possible rating of 4 for a rating scale item times seven participants). ST = summed total for the rating scale item; Pre = pre-intervention; Post = post-intervention; Diff = difference in rating from pre- to post-intervention. 4 = *strongly agree*, 3 = *agree*, 2 = *disagree*, 1 = *strongly disagree*.
[a] Decline in self-efficacy belief. [b] Increase in self-efficacy belief. [c] No change in self-efficacy belief.

Pre-Intervention Rating Scale Items Related to Perceptions of the Roles of Family and School. Prior to the intervention, participants self-reported positive beliefs about the role of the school in supporting the role of the family regarding engaging preschoolers at home. Table

14 indicates the mean range for the five rating scale items at pre-intervention spanned 3.4 (i.e., PreItems 3 and 10)–3.7 (i.e., PreItems 4 and 9). On average, participants assigned the highest ratings to the rating scale item about how the school made them feel, specifically feeling welcome and supported, and to the item about providing materials for learning at home. Participants assigned the lowest ratings to the two rating scale items probing their perceived value communicated by the school. However, even the lowest ratings by participants were all affirmative. The difference was the degree of affirmation (i.e., *agree* or *strongly agree*).

Data analysis represented in Table 31 conveys findings about participants' beliefs related to family and school based on raw data collected directly from the participants prior to the intervention. At pre-intervention, 7 out of 7 participants agreed or strongly agreed with 5 out of the 5 rating scale items affirming positive relations with the school. In fact, two participants selected "strongly agree" for all five items, and one participant selected "strongly agree" for 4 out of the 5 items. The remaining four participants selected a mix of "strongly agree" and "agree" for the five items.

The findings from raw data and data analysis may be further quantified. For example, raw data derived from the responses of the seven participants to the five rating scale items equated to a total of 35 data points (i.e., 35 total responses to rating scale items). Twenty out of 35 data points were rated "strongly agree" and 15 out of 35 data points were rated "agree." Therefore, 100% of the 35 data points were affirmative at pre-intervention to communicate participants self-reported positive perceptions of a reciprocally supportive relationship for fulfilling roles of the family and the school to facilitate preschoolers' academic success. Additionally, the range of the summed total per rating scale item as reported by participants prior to the intervention spanned

24–26 to provide additional evidence to support a collectively perceived notion of positive experiences with the school.

Post-Intervention Rating Scale Items Related to Perceptions of the Roles of Family and School. According to the rating scale administered following the intervention, participants self-reported positive beliefs about the role of the family and the role of the school in their preschooler's academic life. Table 15 indicates the mean range for the five items at post-intervention spanned 3.3 (PostItem 3)–3.6 (PostItems 4 and 6) on a scale of 0–4, which represents a decrease in both the low and high ends of the mean range following the intervention. On average, participants believed the school valued their parental role at a slightly lower degree and felt slightly less welcome following the intervention than at pre-intervention. Additionally, on average, participants perceived the level of support by the school for providing materials to use at home at a slightly lower degree following the intervention than at pre-intervention. Nonetheless, the lowest ratings by participants remained affirmative. The difference was the degree of affirmation (i.e., *agree* or *strongly agree*).

Data analysis represented in Table 31 conveys findings about participants' beliefs related to family and school based on data collected directly from the participants following the intervention. At post-intervention, 7 out of 7 participants agreed or strongly agreed with 5 out of the 5 rating scale items thus affirming positive relations with the school. Three out of 7 participants reported a downward shift from "strongly agree" to "agree" for the rating scale item, "*My preschooler's school regularly provides materials for me to support my preschooler's learning at home*"; however, one participant indicated a positive shift from "agree" to "strongly agree" for the same rating scale item. Perception of being a valued parent and feeling welcome at the school were two other areas where a decline in rating by a participant was noted; however, the perceptual shift was minimal.

The findings from raw data and data analysis may be further quantified. For example, raw data derived from the responses to the five rating scale items by the seven participants equated to a total of 35 data points (i.e., 35 total responses to rating scale items). After the intervention, 29 out of 35 data points remained unchanged, five data points shifted downward, and one data point shifted positively. At post-intervention, 16 data points were rated “strongly agree,” which indicated a net decrease of four data points denoting strong confidence when compared to pre-intervention ratings. In turn, 19 data points were rated “agree,” which indicated a net increase of four data points denoting the lesser degree of confidence when compared to pre-intervention rating. Nevertheless, 100% of the 35 data points remained affirmative at post-intervention to communicate participants were in agreement when self-reporting perceptions of supportive home-school relationships for fulfilling the roles of the family and the school to facilitate preschoolers’ academic success. Additionally, the range of the summed total per rating scale item as reported by participants at post-intervention spanned 23–26 to provide additional evidence that participants perceived positive experiences with the school. Table 32 captures a comparison of raw data related to perceptions of the roles of family and school collected prior to and following the intervention.

Table 32

Comparison of Raw Data Points Related to Perceptions of the Roles of Family and School at Pre- and Post-Intervention

Rating	Degree of self-efficacy	Pre-intervention	Post-intervention	Net change
agree	confidence	15	19	+4 [a]
strongly agree	strong confidence	20	16	-4 [b]
Total		35	35	

Note. Total possible responses for pre-intervention = 35. Total possible responses for post-intervention = 35.
[a] Net increase in number of ratings. [b] Net decrease in number of ratings.

Summary of Findings From Rating Scale Related to Perceptions of the Roles of Family and School. After participating in family engagement activities, the beliefs related to the roles of the family and school in a preschooler's academic life were positive as reported by the rating scale, and the majority of beliefs were unchanged when compared to beliefs prior to the intervention. Participants' perception of the school's efforts to encourage families to engage in learning at home (i.e., Item 6) and participants' perceptions of the school's efforts to work with families as a partner in their preschooler's success (i.e., Item 10) remained unchanged from pre-intervention to post-intervention. A slight change in the degree of affirmation of beliefs related to feeling valued by the school (i.e., Item 3), feeling welcome at the school (i.e., Item 4), and receiving materials from the school for home learning (i.e., Item 9) was observed following the intervention; however, an aggregate of raw data indicated an overall perception of positive family-school experiences at pre- and post-intervention.

Focus Group Related to Perceptions of the Roles of Family and School

Eight of 15 questions included in a focus group protocol administered to participants at the beginning of the study were designed to assess participants' beliefs about the role of the family and the role of the school in their preschooler's academic success prior to the intervention. For this study, perceptions of the role of the school were considered to be associated with the relationships and interactions between the classroom teachers and families of the preschool classroom; however, participants provided some anecdotes indicating perceptions of the school extended to the office support staff, other teachers in the building, and the school administrator that might have influenced the responses to the focus group questions. The eight questions to inform research Action Research Question 4 are 1, 8, 9, 10, 11, 12, 13, and 15. Additionally, the open nature of a semi-structured focus group affords the opportunity for responses from other focus group questions to inform Action Research Question 4 (Mertler, 2020). The focus group protocol is in Appendix G.

Pre-Intervention Focus Group Related to Perceptions of the Roles of Family and School. Coding of responses to focus group questions related to the roles of family and school revealed similarity in beliefs about the following: (a) dynamics of a family-school partnership; (b) order of importance ascribed to the role of the home (i.e., family) and the role of the school; and (c) facilitation of a positive relationship between home and school. As a result of the synthesis of the data codes, the researcher induced participants associated a greater influence on their preschooler's learning with the school.

Partnership. When prompted to describe their beliefs about the roles of home and school in their preschooler's academic success, participants shared similar views that suggested families and the school were partners in their preschooler's academic development. For example, 5 out of 7 participants believed they have a level responsibility for their preschooler's learning.

- "I don't want to be like putting too much on the teachers."
- "I feel so responsible."
- "I also feel a type of responsibility in being more involved."
- "My role is just making sure that I don't just leave it up to her."

Additionally, 4 out of 7 participants expressed interest in supporting their preschooler's preparation for transition to kindergarten.

- "Just to take on and help them out, so, as a parent, for kindergarten."
- "Some assurance to know that she is ready, that my daughter is ready to go to kindergarten."

School as Primary/Home as Secondary. When describing the roles of the school and family in their child's academic success, participants' perceptions of the role of the school exceeded their perceptions of the influence of their preschooler's home experiences. For example, 7 out of 7 participants valued the important roles of teachers and educators.

- "We are so thankful for Ms. Anderson and Mrs. Woods. Just know, Ms. Anderson, you mean the world to our kids."
- "I will be the first to tell you I gained a whole new respect for what my teachers do on a daily basis because of the pandemic."
- "Absolutely amazing, amazing angels. We love you guys so much. You guys do amazing things."
- "Thanks to my God and to the teachers that are teaching my boy because it's them, they are more prepared and know what they are doing."

- "They are good teachers."

Additionally, 7 out of 7 participants depicted the teachers and the school as the primary source for teaching and learning.

- "The school is about 100%."
- "It's like you guys know what you're doing and have a more structured way on how to teach it in a strategic way versus us as parents, just kind of winging it."
- "I thank God and the teachers because they are the ones teaching my boy."

Furthermore, 6 out of 7 participants perceived a stance of operating in a supportive role to the teachers.

- "So, it's basically just being backup to Ms. Anderson and Mrs. Woods."
- "I don't feel like I am my child's teacher per se. I'm the backup dancer to Ms. Anderson and Mrs. Woods."
- "[The teachers] are more prepared and know what they are doing because even though I try to teach him, I can't and don't know as much as them."

Relationship. When provided an opportunity to freely respond to an open-ended question, participants described scenarios that were consistent with supportive home-school relationships. For example, 7 out of 7 participants described the importance of communication when engaging with the school.

- "I think open communication is very important between the teachers and the parents and the children."
- "Communication is key."
- "There is always a way for communication. It's, it's very reassuring to know that if I can, if I need to get in touch with someone, I can."

- “There is many, many ways to contact the teachers.”
- “It’s more like keeping me updated, keeping me in the know.”

In addition, 4 out of 7 participants acknowledged materials were provided by the school for engaging at home.

- “The materials get sent here a lot for the parents to engage with the kids.”
- “The school’s able to supply [an iPad] … and that way they have other ways to learn.”

Data collected from the pre-intervention focus group revealed themes associated with participants’ beliefs about the role of the family and the role of the school in their preschooler’s academic success. Qualitative data were quantified to substantiate the emergent categories that led to the development of themes and concepts (see Table 33).

Table 33

Pre-Intervention Data Supporting Themes Related to Perceptions of the Roles of Family and School

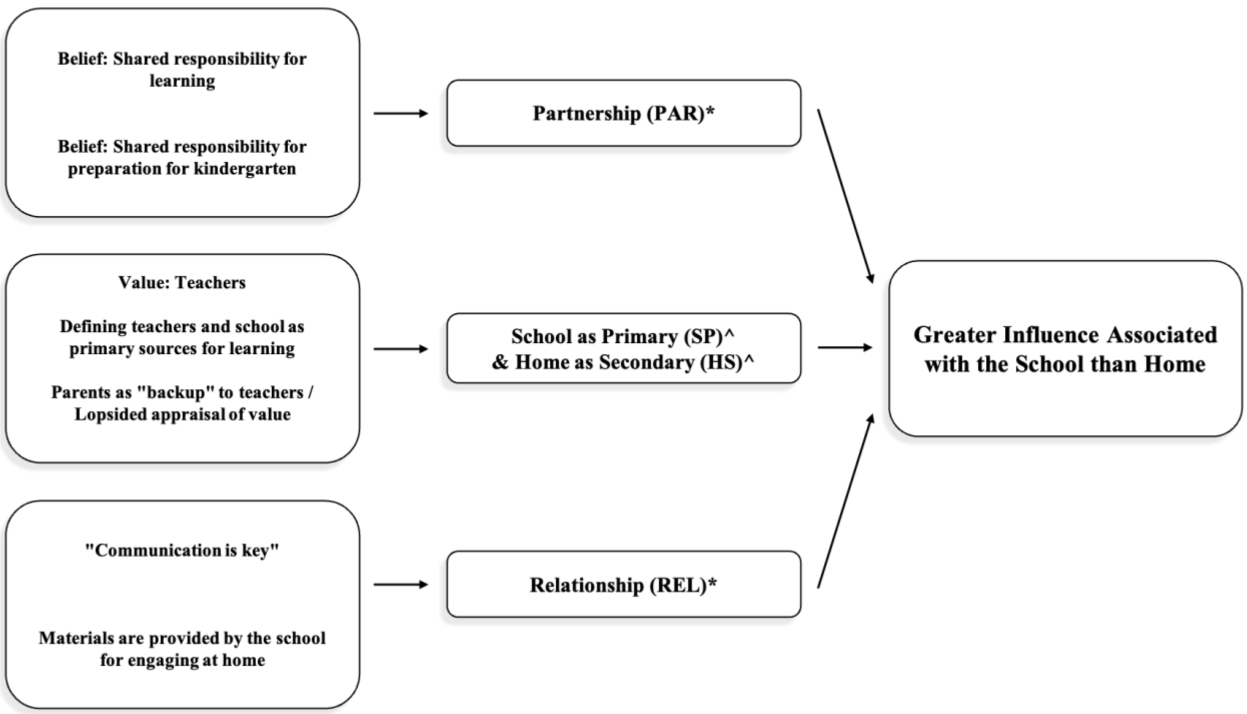
Participant beliefs	Participants	%
Belief: Shared responsibility for learning	5	71%
Belief: Shared responsibility for preparation for kindergarten	4	57%
Defining teachers and school as primary sources for learning	7	100%
Value: Teachers	7	100%
Parents as “backup” to teachers	6	86%
“Communication is key”	7	100%
Materials are provided by school for engaging at home	4	57%

Note. n = 7.

Furthermore, the first and second cycle coding processes that developed the themes associated with participants' beliefs about the role of the family and the role of the school in their preschooler's academic success are depicted in Figure 11. Participants shared a common belief of associating a greater influence on their child's academic success with the school than home.

Figure 11

Analysis of Pre-Intervention Focus Group Data Related to Perceptions of the Roles of Family and School (ARQ4)



Note. ARQ = action research question; * = a priori code; ^ = emergent code.

Post-Intervention Focus Group Related to Perceptions of the Roles of Family and School. Coding of responses to focus group questions related to perceptions of the roles of family and school revealed similarity in beliefs in two areas. First, similarity was observed in perceptions of family-school experiences that lead to partnerships for supporting children's success. Second, participants held similar beliefs regarding the order of importance ascribed to the role of the home (i.e., family) and the role of the school. As a result of the synthesis of the data codes, the researcher induced a positive setting was established for engaging families to build family efficacy and increase confidence for performing in a parental role to promote academic learning.

***Perception of Family-School Experiences*.** When prompted to describe the role of the school in their preschooler's academic success, participants identified four influential elements of family-school experiences for building relationships and forming partnerships for learning. For example, 5 out of 7 participants valued communication as a way to share information and to be connected with the school.

- "I like the fact that the teacher communicates with me."
- "You guys are just so communicative with us, like the communication is just outstanding."
- "If you communicate, [school staff are] going to communicate right back with you."

Similarly, 5 out of 7 participants attributed positive experiences for connecting with the school to the Facebook Group managed by the preschool teacher and the researcher.

- "The Facebook Group is amazing. I love it. I love to see the pictures and all the activities."
- "The Facebook was a genius idea. Because I can see everything that you guys post, and I'm like it, you know, it makes me feel like I'm a part of that, and you know, with Tatiana, that's awesome.
- "I'll be honest, I like [Facebook] better than emails."

In addition, 7 out of 7 participants described personal interactions with the school in ways that nurtured participants' perceptions of being appreciated by the school.

- "I mean, every time we go to the school for an event or even a phone call from you, I can just tell, just even on the phone, like your smile and you're just happy to talk to us."
- "When I go, they greet me. [School staff are] very kind. They're very open about communication…and there's no dumb question pretty much."
- "I feel great that the teachers see [the children] and welcome them and look happy to see them before they take them inside."

Furthermore, 4 out of 7 participants perceived multiple school personnel are involved in their child's education similar to the sentiments conveyed by the African proverb, *It takes a village to raise a child*.

- "It just, it takes that whole village to educate our kids."
- "It's not just, you know, it's a teacher-child relationship. It's a relationship within the whole, with the students and the staff."

School as Primary/Home as Secondary. When describing the role of the school in their child's academic success, participants' perceptions of the role of the school exceeded their perceptions of the influence of their preschooler's home experiences. For example, 5 out of 7 participants valued the important roles of teachers and educators.

- "[My preschooler] listens to the teacher and I guess she values the teacher's opinion."
- "I thought it was very lovely of how, how dedicated the staff…so dedicated."
- "I can't express how like you guys as like teachers and educators are so underestimated in every way whatsoever and in every way possible."

Furthermore, 4 out of 7 participants held the belief that academic learning primarily occurred at school.

- “I would have to say the school is all of it. Well, I mean, has more involvement as far as her academic success and stuff.”
- “I'm the second person to helping her because, you know, the first is Ms. Anderson and Mrs. Woods.”
- “Y'all are the captain. That's it, right there.”

Data collected from the post-intervention focus group revealed themes associated with participants’ beliefs about the role of the family and the role of the school in their preschooler’s academic success. Qualitative data were quantified to substantiate the emergent categories that led to the development of themes and concepts (see Table 34).

Table 34

Post-Intervention Data Supporting Themes Related to Perceptions of the Roles of Family and School

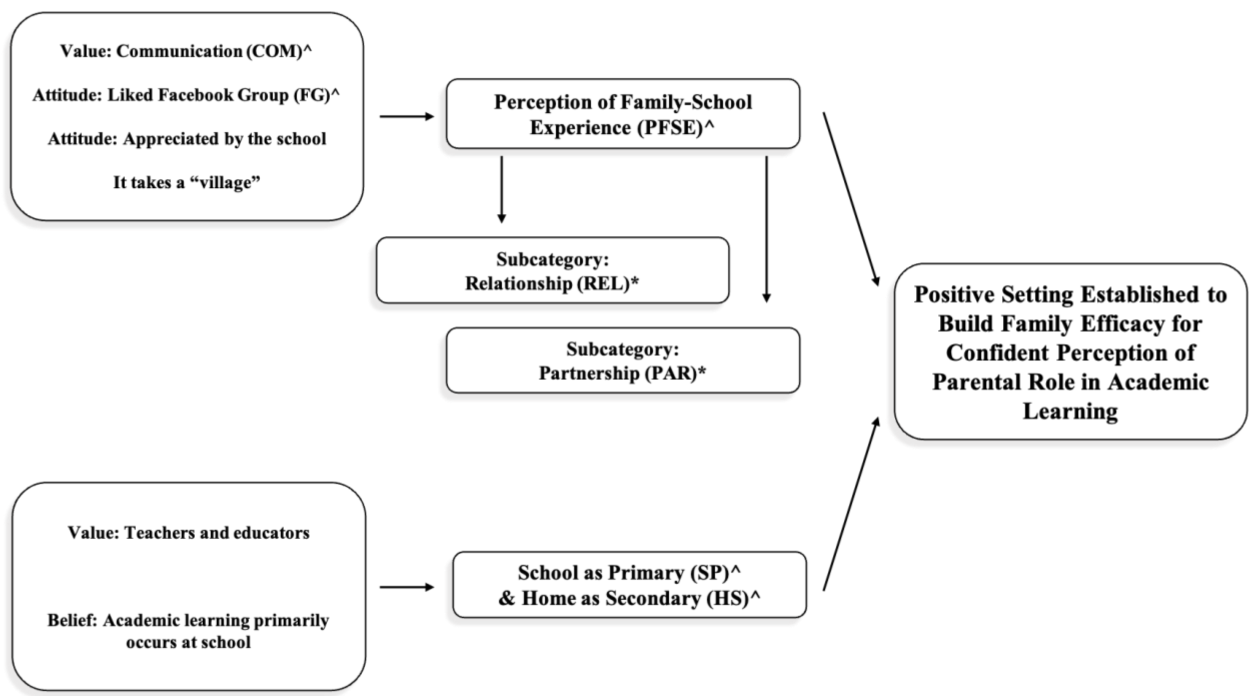
Participant beliefs	Participants	%
Value: Communication	5	71%
Attitude: Liked Facebook group	5	71%
Attitude: Appreciated by the school	7	100%
It takes a “village”	4	57%
Value: Teachers and educators	5	71%
Belief: Academic learning primarily occurs at school	4	57%

Note. n = 7.

Furthermore, the first and second cycle coding processes that developed the themes associated with participants' beliefs about the role of the family and the role of the school in their preschooler's academic success are depicted in Figure 12. A theme emerged for continued family-school engagement to build family efficacy for confident perception of the parental role in academic learning.

Figure 12

Analysis of Post-Intervention Focus Group Data Related to Perceptions of the Roles of Family and School (ARQ4)



Note. ARQ = action research question; * = a priori code; ^ = emergent code.

Summary of Findings From the Focus Groups Related to Perceptions of the Roles of Family and School. When describing beliefs about the role of the home and the role of the school prior to and following the intervention, participants perceived positive relationships existed between families and the school. The preschool teacher projected an open invitation to families to engage as partners in their preschooler’s academic life. Participants perceived two-way communication between home and school (e.g., preschool teacher, researcher) to be consistent and constant throughout the study for keeping families informed of events and aware of the preschoolers’ activities throughout the day while simultaneously providing an avenue for participants to connect with the teacher. Prior to and following the intervention, participants owned a shared responsibility in their preschooler’s academic life; however, greater influence on academic success was associated with the school. By the end of the study, positive relationships between home and school were established and a setting was in place for continued efforts to build family efficacy.

CHAPTER 5

RECOMMENDATIONS

The practice of family engagement requires desire, patience, and commitment to engage one family at a time (Constantino, 2021). The efforts to engage every family are likely to exceed the outcomes; however, by embracing family engagement, students may attain higher academic achievement (Constantino, 2021). In such cases, the efforts to engage every family would be rewarding and worthwhile. A hierarchical order of logical, sequential actions is essential for family engagement practices to be effective. The ordered steps of the *Engage Every Family: Five Simple Principles* model guided the conclusions drawn from the findings that led to the recommendations developed in response to the key findings (see Figure 1; Constantino, 2021).

The ultimate goal of this study was to identify and improve engagement practices that lead to child success. Findings from the study led to conclusions related to patterns of participation, perceptions of self-efficacy, experiences of learning at home, and perceptions of roles played by family and school all in the context of the academic lives of preschoolers. A brief summary of major findings is provided in this chapter. A discussion of the findings is linked to relevant literature. Recommendations for policy and practice are substantiated by the findings. Recommendations for future research are provided for consideration.

Summary of Major Findings

The summary of major findings of this study are aligned to the action research questions. Thus, findings are reported according to concepts and themes related to participation in family engagement activities, perceptions of self-efficacy, home learning experiences for preschoolers, and family and school role construction, respectively.

Action Research Question 1: To what extent do families participate in the activities of a family engagement program?

Record of participation in the four workshops and the social media group documented the extent participants engaged in the activities of the family engagement intervention. The seven study participants participated in 25% or more of the workshops; however, if consideration is given to the related family member who participated in place of a study participant on two occasions, the rate of participation was 50% or more. The seven study participants were all biological mothers of a preschooler in the classroom invited to participate in the study. Similarly, more maternal non-study participants participated in family engagement activities than paternal non-study participants. In addition, the majority of study participants were representative of self-reported Hispanic ethnicity.

Study participants and non-study participants participated most frequently in workshops at the beginning and the end of the intervention, whereas participation dwindled in the middle of the intervention. The social media platform, Facebook, was popular for sharing information; however, activity was most often passive for families. For example, families viewed the posts of others more often than narrated an original post or reply post. Accordingly, the school emerged in a leading role in the Facebook Group as evidenced by findings indicating the teacher created original posts most frequently. Use of supplemental intervention program supports (i.e., recordings of workshops, short videos of classroom activities) was negligible.

Action Research Question 2: After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?

Participants' responses to the rating scale items and the focus group questions related to self-efficacy communicated mixed perceptions of beliefs for providing developmentally appropriate learning activities at home. For most participants, responses to the rating scale items communicated high perceived self-efficacy for engaging preschoolers at home whereas responses to the focus group questions communicated a mix of low and high perceptions of self-efficacy for at-home engagement.

Participation in the activities for building self-efficacy varied thus potentially affecting any shift in perceptions of self-efficacy in varied degrees. Perceptions of self-efficacy slightly declined for the majority of participants following the intervention as evidenced in responses to the rating scale items; however, perceived capabilities for performing in the role of a parent were consistently the highest rated rating scale item. Participants' responses to the focus group questions included some evidence of positive perceptions of self-efficacy for engaging their preschoolers at home; yet the study lacked evidence to indicate a significant shift in participants' beliefs. However, participants expressed interest in a continuation of opportunities for increasing knowledge and skills for supporting their preschooler's academic success in kindergarten. In essence, an inference could be made that at the end of the intervention participants were operating at the readiness level for Principle 3, *Build Family Efficacy*, of the hierarchical *Engage Every Family: Five Simple Principles* framework (Constantino, 2021).

Action Research Question 3: In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?

Participants' examples of home learning experiences linked to school learning experiences suggest a home-school connection existed to facilitate continuity and consistency of developmentally appropriate active learning experiences for the preschoolers (A. Epstein, 2007). Perceptions of self-efficacy might have influenced the degree the home-school connection guided home learning experiences (Bandura, 1994, 1997; Hoover-Dempsey & Sandler, 2005). Regardless of the level of self-efficacy, participants described at least one example of a developmentally appropriate home experience verbally, in text, or as an image.

Prior to the intervention, participants described positive learning experiences for their preschooler in daily family routines and with a sibling(s). By the end of the intervention, participants noted a conscious practice of following the lead of the preschooler when engaging at home. Additionally, by the end of the intervention, participants communicated a shift to mixed perceptions (e.g., positive, obstructive, neutral) of interactions between the preschooler and a sibling(s).

Action Research Question 4: How do families describe the role of the family and the role of the school in their preschooler's academic success?

Participants' responses to the rating scale items and the focus group questions related to the roles of the family and school communicated similar beliefs prior to and following the intervention. For this study, perceptions of the role of the school were considered to be associated with the relationships and interactions between the classroom teachers and families of the preschool classroom; however, participants provided some anecdotes indicating perceptions of the school extended to the office support staff, other teachers in the building, and the school administrator that might have influenced beliefs. Participants valued the efforts of the school and conveyed beliefs associated with positive, supportive interactions, which suggests both the school and participants operated effectively to some degree in the role of team member for the preschooler's benefit. A slight decrease in the degree of positive perceptions of interactions with the school was observed from pre-intervention to post-intervention as evidenced in the rating scale. However, participants' beliefs of feeling valued and supported by the school remained consistently positive as reported by participants' responses to rating scale items and focus group questions.

Participants' view of the school as the primary source for learning was similar prior to and following the intervention. Likewise, from pre-intervention to post-intervention, participants held similar beliefs associated with performing in the role of a backup to the preschool teachers. Participants communicated beliefs in shared responsibility with the school for their preschooler's academic success; however, participants perceived their role as subordinate to the role of the school.

Discussion of Findings

The discussion of major findings of this study is supported by the literature review presented in Chapter 2. Discussion representative of participants' behaviors in the form of *engagement* depicts participants as active partners in a leading role sharing in their preschooler's education, whereas discussion depicting participants as showing interest in activities decided by the school represents a form of *involvement* in their preschooler's education (Constantino, 2021; Ferlazzo, 2011). Engagement implies a deeper role for the family that is the desired outcome of this study; however, involvement should not be perceived as a negative connation for family-school interactions.

Interpretations of the findings in relation to each research question are captured in the discussion. Thus, the discussion of major findings develops the following topics: participation, self-efficacy, home learning experiences, and roles of family and school, respectively.

Participation

Constantino (2021) identified five simple principles for engaging families in the academic lives of children (see Figure 1). Specifically, Principle 1 and Principle 2 had implications for the degree of participation in this study. The inference being family perceptions of the relationship between home and school influenced the ways families decided to participate in the family engagement intervention program (Constantino, 2021; Hoover-Dempsey & Sandler, 2005). In addition, findings revealed certain motivators and barriers were potentially linked to decisions about participation (Hoover-Dempsey & Sandler, 2005; Mapp, 2003).

Principle 1: *A Culture that Engages Every Family*. Principle 1 communicates the significance of establishing a culture for engaging every family. How well a culture for engaging every family in the preschool class was projected by the teacher and researcher had implications for how families made decisions to participate in the family engagement opportunities presented to them. The concerted efforts by the teacher and researcher to connect with every family and to accommodate the busy schedules of families communicated families were valued and family commitments were respected (Constantino, 2021). Families were likely to act in a reciprocally committed way if they perceived they were valued and respected.

For example, one study participant acknowledged infrequent participation in family-school activities with her older children and wanted to “make it up” with her preschooler. The participant exhibited committed efforts to participate in the family engagement intervention activities. For instance, the same participant willingly participated in the pre-intervention focus group when part of the time necessitated participation while driving in her car. The actions of the participant communicated a desire to be a part of the intervention program. The actions of the teacher and researcher to communicate and connect with every family nurtured the participant's decision to participate. While all families did not consent to participate in the study, all families, whether study participant or non-study participant, participated in at least one intervention program activity (i.e., virtual workshop, social media group, focus group, rating scale) during the 6-week intervention or pre-intervention action research cycle.

Principle 2: *Communicate Effectively and Develop Relationships*. Principle 2 builds upon the fundamental of engagement relayed by Principle 1. That is, Principle 2 communicates the necessity of effective communication and trusting relationships to strengthen a culture for engaging every family (Constantino, 2021). Successful application of Principle 2 may vary in time and process for every family.

The importance of sufficient time dedicated to building relationships was highlighted by initial efforts to engage families during the pre-intervention cycle that proved to be mismatched to the hierarchical order of the *Engage Every Family: Five Simple Principles* model. To illustrate, attempts to plan the intervention by surveying families about interests, concerns, and preferred meeting times were met with some unresponsiveness possibly due to a lack of established relationships between families and the preschool teacher and the researcher. Family decisions to participate in the study might have been adversely influenced, which necessitated more time and effort to build the relationships essential for shared planning of the intervention program in the pre-intervention cycle. The pre-intervention cycle spanned four months to establish a culture among the participants conducive to building family efficacy. Consequently, initial steps of the pre-intervention cycle were revised to reflect the act of building relationships prior to surveying families for planning the program when conducting similar action research in the future (see Figures 2 and 3).

Two-way communication between the participants and the teacher was important to the participants, which accounts for observations of a higher quality of interactions between the families and the teacher than between the families and the researcher. For example, participants were observed in back-and-forth conversational exchanges with the teacher during the virtual workshops, and participants responded more frequently to posts on social media by the teacher than the researcher. An inference can be drawn that stronger relationships existed between the teacher and participants than between the researcher and participants. In future action research cycles of a similar family engagement intervention, the role of the researcher as a participant-as-observer must include substantial and frequent interactions with families to build relationships with the families. Or, the researcher might consider the role of full participant to become a part of the classroom culture. Otherwise, the researcher might consider assuming the role of observer and have little or no interaction with the study participants (Constantino, 2021; Mertler, 2020).

The application of Principle 1 and Principle 2 of the theory of engagement proposed by Constantino (2021) was an effective means for countering conditions (e.g., top-down model, insufficient communication, insufficient family-school connection) revealed from previous family engagement programs for families of preschoolers in the JCSD that potentially resulted in involvement out of compliance or conversely, simply disengagement. The percentage of families who participated in this study was a little over 7 times the percentage of participation in the model for engaging families presented by the JCSD in 2019-2020. Seven out of 16, or 44%, of families participated in the 6-week family engagement intervention program for this study. In addition, when considering study participants and non-study participants, 15 out of 16 of the preschool families in the classroom invited to participate in the study engaged in at least one intervention activity (i.e., virtual workshop, social media group) during the 6 weeks of the study. In contrast, family participation in each of the five in-person workshops during the 2019-2020 school year ranged from 2%–6% of the 267 families invited to participate.

Contributors to higher participation in this study than in the past included frequent and varied methods of communication and relationships built on genuine interest as communicated in anecdotes by the teacher and participants, which aligns to Principle 1 and Principle 2 of the engagement model developed by Constantino (2021). The flexibility associated with virtual workshops provided an option for families to decide where to participate, and the virtual platform permitted multiple family members to participate in the program activities. In some cases, multiple family members participated in the workshops and social media group. Even though higher participation in family-school activities was observed in this study than in the past, more work is required to *engage every family* at a level for making a positive shift in student achievement for *all* children, which is fundamental to the *Engage Every Family: Five Simple Principles* framework that guided this study (Constantino, 2021).

Family Engagement Intervention Activities. Fifteen of the 16 families in the preschool classroom (i.e., study and non-study participants) participated in intervention activities (i.e., virtual workshops, social media group) during the 6-week intervention, and in some instances, multiple family members participated. The family not represented in the intervention cycle participated during the pre-intervention cycle. Evidence exists to conclude families were interested in being involved with the school; however, the study lacked sufficient evidence to conclude that most study or non-study participants were engaged. The most activity was observed in the social media group. Families viewed the posts of others more often than created original posts. The passive involvement might indicate trust and comfort level for engaging were in a developing stage. Furthermore, skills and abilities may be exposed on a public website thus creating potential vulnerability that might have discouraged active participation, which circles back to potential insufficient trust to perceive a safe environment for engaging (Constantino, 2021; Hoover-Dempsey & Sandler, 2005).

Of the 16 families in the preschool classroom, 14 participated in one or more workshops. The flexibility of the virtual option for participating from home might have raised interest in workshops for some families; however, other families might have been disengaged on account of disinterest or preference for in-person experiences. A future comparison of the level of participation for this study and the level of participation for in-person workshops might reveal elements for sustained, enduring participation. Providing both a virtual and in-person option would increase opportunities to meet the needs of every family (i.e., Principle 1; Constantino, 2021). Additional program supports (e.g., recordings of workshops, short videos of classroom activities) might be more effective if the type of support is decided by families.

Engage Family Unit. Demographic data indicated 100% of participants in this study were maternal family members, and the majority of non-study participants were maternal family members. Similarly, maternal family members most commonly represented the participants in the 15 research studies of group-based family engagement interventions for preschool families evaluated by Wittkowski et al. (2016). The prevalence of a low presence of fathers as participants in family-school engagement programs communicates an area of opportunity for targeting efforts toward the underrepresented demographic group. Additionally, the scenario in this study of a related family member participating in two workshops when the parent was not present communicates the importance of engaging the family unit (Bandura et al., 2011;

Constantino, 2021). Similarly, a scenario described during the post-intervention focus group of one non-study family participating in a virtual workshop when the preschooler was on vacation with her great-grandparents who lived in another state further supports the importance of engaging the extended family. In addition to targeting engagement efforts toward fathers, strategic efforts should extend to any family member or adult assisting in a child's well-being and upbringing.

Motivation. The varied level of participation in the family engagement activities that were part of the intervention indicates families might be motivated or unmotivated to participate for various reasons as influenced by individual perceptions. Possible motivators for participating in family engagement activities were revealed in findings. For example, two parents from different families reported their preschooler reminded them to join the weekly virtual workshops. Perceptions of invitations from children are a strong predictor of involvement (e.g., home- and school-based combined; Hoover-Dempsey & Sandler, 2005).

Furthermore, participants viewed personal invitations from the teacher and the researcher as motivators for participating in the workshops. Studies conducted by Hoover-Dempsey and Sandler (2005) concluded perceptions of invitations from the teacher was the strongest predictor of school-based involvement. Likewise, participants shared positive comments during the post-intervention focus group related to the multiple reminders from the teacher and researcher that were delivered in multiple formats to alert families of an upcoming workshop and other events. Inductive reasoning concluded participants viewed personal communications from the teacher and researcher as sincere, and participants perceived being valued by the school, which are descriptors associated with Principle 1 and Principle 2 of the *Engage Every Family: Five Simple*

Principles framework and theories of parent involvement derived from the studies of Hoover-Dempsey and Sandler (2005; see Constantino, 2021).

Barriers to Participation. Examination of factors that prevented families from participating in activities is necessary to guide decisions for designing future family engagement intervention programs. When engaged in phone calls with study participants and when engaged with participants during the focus groups, participants communicated conflicts that were associated with work, church activities, and classes. In addition, participants reported being too tired to participate and lacking technology skills. The examples of barriers to family engagement activities revealed in this study were consistent with extant literature (Mapp, 2003; Mendez, 2010; Olson & Hyson, 2005).

Self-Efficacy

The hierarchical order of the five simple principles for engaging families identified by Constantino (2021) indicates a culture for engaging families begins the process of engagement followed by the establishment of trusting relationships *before* families may be receptive to opportunities to build self-efficacy (see Figure 1). Once evidence of trusting relationships was visible, efforts by the teacher and researcher advanced to making provisions (i.e., intervention activities) for participants to draw on the sources of self-efficacy identified by Bandura (1994, 1997). Any shifts in perceptions of self-efficacy might have been influenced by the social experiences created by the intervention.

Social Experiences. Bandura (1989) proclaimed social experiences influence efficacy beliefs. The social environment created by the virtual workshops and the social media group supported opportunities for positive learning experiences for the participants (Constantino, 2021; Pavlov & Džinović-Kojić, 2018). Indeed, participants attached positive sentiments to the social media group, and social media emerged as a popular avenue for building self-efficacy. However, findings provided minimal evidence of increased beliefs in participants' capabilities for engaging their child at home. Participants communicated a sense of enjoyment from the experiences derived from the engagement activities, but few verbal or written comments by participants related to improved confidence in practices of engaging with children.

Participants demonstrated a sense of self-efficacy when successfully using materials provided by the teacher to engage with their child at home during the virtual workshops. Bandura (1994, 1997) contended successful experiences, or *mastery experiences*, develop efficacy beliefs. Participants posted pictures of their preschooler engaged in learning activities at home for other participants to experience *vicarious learning* by observing a peer model (Bandura, 1994, 1997). During the pre-intervention focus group, participants encouraged other participants who projected low self-efficacy for engaging their preschooler at home. Encouragement might be characterized as *verbal persuasion* (Bandura, 1994, 1997). The enjoyment participants experienced when participating in the workshops and social media group as evidenced by anecdotal data may be interpreted as *emotional states* Bandura (1994, 1997) described as a source of self-efficacy. The four sources of self-efficacy as defined by Bandura (1994, 1997) were present in this study. However, a noticeable shift in self-efficacy might have been hindered by insufficient time for participants to recognize and use the four types of social experiences for building self-efficacy. Furthermore, additional evaluation of the family engagement intervention activities might provide guidance for revisions to content and procedures to more effectively cultivate the four sources of self-efficacy (Bandura 1994, 1997).

Shifts in Self-Efficacy. As significant contributors to a child's learning outcomes, parents' internal sense of capabilities influences their child's success (Coleman & Karraker, 1998; Constantino, 2021). Hence, high self-efficacy may mediate high child outcomes (Hoover-Dempsey & Sandler, 2005). Any self-reported perceptions of high self-efficacy following the intervention might have been gleaned from confirmation of the effectiveness of participants' practices for engaging their preschooler in place prior to the intervention or the acquisition of new information from the intervention. Perceptions of low self-efficacy sustained from pre-intervention to post-intervention might indicate additional family engagement intervention activities or different engagement methodology might be necessary to build family efficacy.

Differences in rating scale results from pre-intervention to post-intervention might be the result of a shift in participants' beliefs or the influence of the teacher's approach to engaging families. The slight decline in self-reported perceptions of self-efficacy as evidenced by the post-intervention rating scale might be the result of a change in the interpretation of the rating scale items on account of knowledge gained by participation in the program.

A shift from low self-efficacy to mixed self-efficacy (i.e., both low and high beliefs) after the intervention suggests a continuous approach to family engagement may lead to higher self-efficacy and even greater strides toward Principle 3, *Build Family Efficacy*, of the *Engage Every Family: Five Simple Principles* framework (Bronfenbrenner, 1975; Constantino, 2021). Mixed perceptions of self-efficacy might be due to participants more closely examining their skills and abilities. Participants might have become attentive to times when experiences activated confidence and when experiences triggered doubt. A longer family engagement program over 8–10 weeks might provide evidence of a greater change in perceptions of self-efficacy. The notion of providing additional family engagement intervention activities over a longer period of time affirms "the [family engagement] process is often a slow one" (Constantino, 2021, p. 7).

Participants' responses to post-intervention focus group questions communicated interest in a continuation of opportunities to build self-efficacy for supporting their preschooler's academic success in kindergarten. Furthermore, families continued to engage in social virtual meetings and the social media group after the conclusion of the family engagement intervention program to maintain established relationships and to share information relevant to their school-age children, which supports the idea of continuous family engagement for optimal academic outcomes (Bronfenbrenner, 1974; Constantino, 2021). One participant offered a supporting anecdote by suggesting a form of a family engagement program should be continued at least through sixth or seventh grade. The participant might have experienced positive emotions Bandura (1994, 1997) identified as a source of self-efficacy or perceived value in engaging in her child's education.

Inconsistencies in the reporting of perceptions of self-efficacy were revealed in comparisons of data collected from the rating scale and data collected from focus group questions. Five scale points on the rating scale (i.e., *strongly disagree*, *disagree*, *neither agree nor disagree*, *agree*, *strongly agree*) might have been insufficient for participants to accurately communicate perceptions of self-efficacy thus resulting in inconsistent data when compared to responses to focus group questions (Mattingly et al., 2002; White et al., 1992). Data collected from the rating scale might reflect inflated perceived self-efficacy.

Social Media. Participants perceived value in the social media group for communicating with the teacher and researcher and for staying abreast of relevant events. Effective communication is a component of Principle 2, *Communicate Effectively and Develop Relationships*, of the *Engage Every Family: Five Simple Principles* framework (Constantino, 2021). Study participants and non-study participants participated in the social media group however in passive mode. Participants' behaviors were characteristic of i*nvolvement* rather than *engagement*. That is, participants exhibited more interest in the social media group as a receiver of information than in the role of contributor of information as evidenced by information most often provided in original posts created by the teacher.

A shift from involvement behaviors to engagement behaviors may occur when family engagement activities suppress the emergence of unidirectional interactions and increase reciprocal, multi-directional active engagement between the teacher and every family in the preschool classroom. If perceived value in family engagement is nurtured, families might be more likely to participate as a contributor in their learning and willingly adopt learned behaviors that shape high self-efficacy (Bandura, 1971; Constantino, 2021).

Home Learning Experiences

A child begins to make meaning from surroundings from the very first days of life (Vygotsky, 1978). Therefore, the quality and quantity of family-child interactions influence academic and social development (Anders et al., 2012; Grindal et al., 2016; Joo et al., 2020; Schweinhart, 2013). The beliefs and capabilities of individuals who interact with children influence the type and effect of home learning activities provided to support a child's success. Hence, a relationship can be derived between Principle 3, *Build Family Efficacy*, of the *Engage Every Family: Five Simple Principles* framework and the ways families engage in learning activities at home (Bandura, 1989; Constantino, 2021). Findings from the study were linked to the preschoolers' home learning experiences in the following four areas: home-school connection, self-efficacy, family unit, and frequency of home learning experiences.

Home-School Connection. Participants described home learning experiences that were similar to learning experiences provided at school, and in some instances, scenarios linked home learning experiences to specific school activities. Participants' examples of home learning experiences such as counting objects, building with materials, painting original artwork, and riding a bike indicated alignment to the HighScope curriculum implemented in the preschool classroom (A. Epstein, 2007; Piaget 1972/1973; Schweinhart, 2004; Vygotsky, 1978). Similar experiences provided at home and at school reinforced efforts by both entities toward achieving academic goals and fostering academic success for the preschoolers (Constantino, 2021; A. Epstein, 2007).

To increase self-efficacy for decision making at home, open-ended, parent-child engagement activities were planned for the workshops to allow families the freedom to be creative in similar ways the preschooler engaged in open-ended activities at school (A. Epstein, 2007; Gainsley, 2014). Just as the teacher followed the lead of the child when implementing the HighScope curriculum in the classroom, families experienced the same approach during parent-child activities facilitated during the workshops. At the end of the intervention program, participants commented on a shift to following the lead of the child, which signifies a developmentally appropriate way to engage a preschooler in learning (Schweinhart, 2013). Therefore, if family engagement activities included modeling, perhaps in the form of short videos of teacher-child interactions occurring during activities in the classroom, and time to practice modeled behavior, changes in perceptions of self-efficacy might occur via vicarious and mastery experiences, sources of self-efficacy identified by Bandura (1994, 1997).

Self-Efficacy. By instinct, experiences with previous children, or knowledge gained from the intervention for this study, participants possessed a degree of understanding about ways to engage preschoolers in developmentally appropriate activities at home prior to and following the intervention yet communicated low self-efficacy by claims of "winging it" at home. Low self-efficacy might have contributed to participants' reporting of low levels of patience for engaging preschoolers, which might have perpetuated infrequent at-home engagement experiences. Research conducted by Hoover-Dempsey and Sandler (2005) concluded perceptions of self-efficacy influence parental involvement behaviors, which in turn influence the home learning environment.

Additionally, increased awareness of characteristics of developmentally appropriate interactions derived from participation in the intervention might have resulted in low self-efficacy as participants evaluated their skills and abilities in comparison to knowledge gained or in comparison to the perceived skill level of other participants (Bandura, 1994, 1997; Hoover-Dempsey & Sandler, 2005). However, increased awareness that results in low self-efficacy might be deemed a positive outcome for prompting increased interest in improving skills and building self-efficacy for creating a learning environment characterized by effective parent-child interactions. For example, by the end of the intervention, participants reported a new practice of following the lead of the child. In addition, participants showed interest and readiness for continuing activities for building self-efficacy.

Family Unit. As members of the family unit, siblings may interact with preschoolers at home and influence academic success. By the end of the intervention, participants' perceptions of ineffective behaviors when siblings interacted with preschoolers might have been prompted by increased awareness of characteristics of developmentally appropriate interactions derived from participation in the intervention. As another example concerning the family unit, on more than one occasion, multiple family members (e.g., sibling, grandparent, aunt) engaged in the workshop activities with a preschooler. In addition, a preschooler's aunt served in the parental role during an event at the local community library. Engaging siblings, parents, and extended family members in family engagement activities may result in more effective interactions with preschoolers that occur more frequently across the family unit thus potentially creating an environment for consistent practices for learning at home (Bandura et al., 2011; Costa et al., 2016).

Frequency of Home Learning Experiences. Data analysis was inconclusive about the frequency and duration of home learning experiences for preschoolers. Posts to the social media group provided evidence of some developmentally appropriate home learning experiences however only minimal evidence due to general content and the infrequency of narrated original and reply posts contributed by participants. In future cycles, specific measures and evidence of home engagement activities (e.g., preschoolers sharing products from learning activities at home with peers at school) might better gauge the translation of family engagement activities into practices in the home learning environment. Understanding the ways learning occurs at home is significant for guiding practices to support home learning by reason of a claim by Bronfenbrenner (1974) who postulated the theory that what goes on out of the school setting is more attributable to child success than what goes on in the school setting.

Roles of Family and School

The plethora of research on family-school engagement signifies the importance of recognizing and valuing the role of the family and the role of the school for student success (Constantino, 2021; J. Epstein, 1995; Hoover-Dempsey & Sandler, 1995, 1997, 2005; Mapp & Bergman, 2019; USDHHS et al., 2018). To assign hierarchical value to each role may be difficult, or even impossible, and unnecessary as both a child’s family and a child’s school are transformative influencers in a child’s academic life. Creating a culture that communicates the significance of the dual factors of home and school in a child’s academic life is a challenge in the dynamic learning environments surrounding school-age children (Constantino, 2021; Mapp & Kuttner, 2013). Participants' responses to focus group questions communicated a belief in a collective effort by a community of people (i.e., school staff and families) to shape experiences for preschoolers to develop. Although perceptions of a partnership were evident in anecdotes, participants' beliefs and perceptions assigned higher value to the influence of the school.

It Takes a Village. Participants' perceptions of positive interactions with the classroom teachers and other school personnel communicated by the rating scale and focus groups provided evidence of a welcoming school environment and positive home-school relationships. Furthermore, during the post-intervention focus group, participants communicated similar beliefs aligned to the African proverb, *"It takes a village to raise a child,"* when describing scenarios involving the classroom teachers, other teachers in the school, office staff, and the administrator. Participants communicated beliefs that many people play a role in their preschooler's success. However, participants' beliefs and sense of low confidence in their individual abilities might have hindered their perception of the important role they play in their child's education.

Perception of School as Primary Source of Learning. By deciding to participant in a family engagement program, participants implicitly acknowledged a degree of responsibility in their preschoolers' academic life. However, all study participants perceived the school as the primary influence driving their preschooler's school success and perceived their role as secondary, or as backup, to the teachers. Participants perceived the efforts of the teachers were more operative than their own.

Contrary to participants' perceptions of a subordinate role to the teachers, participants' responses to focus group questions prior to and following the intervention included experiences and scenarios reflective of shared efforts for supporting their preschooler's success. For example, participants valued two-way communication with the teacher. Participants perceived they were appreciated by the school. Participants liked the opportunity to participate in activities to build self-efficacy. Participants acknowledged materials were provided by the teachers to support learning at home. In general, participants' responses to pre- and post-intervention rating scale items and focus group questions portrayed the family, teachers, and other school personnel as team members in a positive relationship conducive to a child's academic success (Constantino, 2021; A. Epstein, 2007; Mapp & Bergman, 2019; USDHHS et al., 2018).

Low self-efficacy might have contributed to participants' perceived subordinate role (Constantino, 2021; Hoover-Dempsey & Sandler, 1995, 1997, 2005). A goal of the family engagement intervention program was to communicate to parents the significant role they play as their child's first and perhaps most influential teacher (Berger, 1991; Constantino, 2021; A. Epstein, 2007). However, throughout the study, participants held consistent beliefs in the school as the primary influence on academic success and families as a secondary influence behind the school.

Participants' own experiences in school might have contributed to their perceptions of lesser importance in their child's academic life. For example, the degree families were invited to engage in a child's academic life when the participants were in school might have influenced participants' beliefs in the appropriate degree of engagement in their child's academic life.

Furthermore, the seven participants in this study perceived family-school engagement through the lens of experiences associated with their older school-age children, many of whom participated in the school district's preschool program. Previous ineffective practices of family engagement with preschool families which led to this study precipitated missed opportunities for cultivating a culture within the school district's preschool program for elevating families to a prominent role in their child's education (Constantino, 2021). Indeed, participants' comments indicated the type of family-school engagement provided by the intervention in this study was a novel experience. Therefore, parents' beliefs about their role in their child's academic life was dependent upon their life experiences and any individual efforts to understand how to define their role (Meunier & Roskam, 2009; Pavlov & Džinović-Kojić, 2018). Consequently, the participants conceptualized the role of the parent in the academic life of a preschooler differently; however, a similarity emerged. Participants viewed the school as the main influence in their child's academic success.

The school district is positioned for dual capacity-building to shape confident parents with strong parental self-efficacy as a primary contributor in a child's academic life (Coleman & Karraker, 2000; Mapp & Kuttner, 2013). Since children spend 2.5 times more of their waking hours with their family than with the school staff, families naturally perform in a principle role (Cordry & Wilson, 2004). Findings from this study suggest a logical course of action by the teacher is to refine and implement practices of engagement to first raise and then maintain family beliefs of a leading role in their child's education, which is analogous to Principle 3, *Build Family Efficacy*, of the *Engage Every Family: Five Simple Principles* framework (Constantino, 2021).

Partnership. Efforts to shape a culture for families and the school to work together as partners may improve perceptions of the family's role as equally important as or perhaps more important than the role of the school (Constantino, 2021). Participants' responses to the rating scale and focus groups provided evidence that a classroom culture was present for engaging participants as partners in dual capacity-building (Constantino, 2021; Mapp & Kuttner, 2013). The social media platform served as a popular means for connecting with families as evidenced by 15 out of the 16 preschool families representing study and non-study participants joining and participating in the classroom's social media group in some way (e.g., active or engaged, passive or involved). With a classroom culture in place for engagement and trusting relationships, the setting existed for building self-efficacy to increase participants' confidence in their skills and abilities to perform effectively in their parental role for engaging in their preschooler's academic life (Constantino, 2021). Thus, future cycles of action research might be planned with a continued focus on elevating beliefs and empowering families to confidently engage in practices to promote their child's academic success. Families with strong efficacy beliefs may be more inclined to *engage* with the school in shared decision making versus relying on the school to plan activities for families to simply be *involved* (Constantino, 2021; Ferlazzo, 2011).

Implications for Policy and Practice

Practical implications of study findings led to recommendations for improving the practice of family engagement. Four recommendations for practice and one recommendation for policy were derived from the findings of this study. Table 35 summarizes the study findings, related recommendations, and relevant literature. Furthermore, evidence supporting each recommendation is provided.

Table 35

Recommendations Supported by the Study

Finding	Related Recommendation	Relevant Literature
Maternal family members represented the study participants who participated in workshops and the social media group. An opportunity exists to build on the program to engage additional family members.	Implement specific efforts to engage every family by building relationships with maternal, paternal, and extended family members.	Bandura et al., 2011; Bronfenbrenner, 1974; Constantino, 2021; Wittkowski et al., 2016
Families were *involved* in the workshops and the social media group. An opportunity exists to raise involvement to an active level of *engagement*.	Design engagement activities to encourage active participation for building self-efficacy by drawing on the four sources of self-efficacy.	Bandura et al., 2011; Constantino, 2021
Participants communicated mixed perceptions of self-efficacy associated with uncertainty, lack of confidence, and confidence.	Continue partnering with families to shape parent and family perceptions of abilities to positively influence their child's achievement outcomes.	Bandura, 1989; Bandura et al., 2011; Bronfenbrenner, 1975; Constantino, 2021
Families engaged in learning activities at home similar to learning activities at school.	Design family engagement activities to promote consistent and constant learning experiences for preschoolers.	Constantino, 2021; A. Epstein, 2007; J. Epstein & Salinas, 2004; Gainsley, 2014; Mapp & Bergman, 2019; Schweinhart, 2004; USDHHS et al., 2018
Participants perceived their role was secondary to the role of the school.	Create and maintain a culture that values a partnership between each family and the school and projects the same belief in practices.	Constantino, 2021; A. Epstein, 2007; Mapp & Bergman, 2019; USDHHS et al., 2018

Recommendation 1 Related to Practices to Increase Participation of the Family Unit

Research study findings support a recommendation to implement specific efforts to engage every family by building relationships with maternal, paternal, and extended family members. The principles of the *Engage Every Family: Five Simple Principles* framework may elevate effective engagement motivators observed in this study and counter self-reported barriers to participation to produce a desired outcome of highly engaged families (Constantino, 2021).

Connecting with *all* family members intimately involved in a child's development (i.e., Principle 1) and building trusting relationships with the individuals (i.e., Principle 2) may improve the frequency and quality of engagement (Constantino, 2021). Extant literature supports the notion maternal family members are primary participants in group engagement programs designed to increase parental self-efficacy (Wittkowski et al., 2016). Similar findings for this study support the implementation of specific efforts to build relationships with paternal and extended family members to increase the likelihood and frequency of efficacious interactions experienced by preschoolers outside of school.

Engaging with families to build home-school relationships within the intimate setting of the classroom may lead to increased participation in schoolwide and districtwide family engagement activities. Events such as Muffins with Moms, Donuts with Dads, and Lemonade with Loved Ones may be coordinated at the classroom or schoolwide level to develop relationships, learn about families, and build trust, which are essential elements for establishing family-school partnerships to nurture a child's academic success (Constantino, 2021).

An increase in the number of engagement opportunities may improve the degree of engagement. For example, multiple sessions of the same workshop and an opportunity for participation scheduled for the weekend provide flexibility for families. Options for in-person and virtual workshops may counter barriers to participation. Incorporation of home visits may be an appropriate outreach for some families.

For success, families, specifically fathers and extended family members, and teachers must perceive the value of the time commitment required for effective engagement and the beneficial outcomes associated with student achievement (Bronfenbrenner, 1974; Constantino, 2021). Along with the intrinsic satisfaction that comes with improving the lives of families, teachers may be more inclined to build relationships with every family to potentially increase family engagement if a system is established for visible recognition to teachers who employ family engagement practices that meet defined criteria and are constant and consistently accessible to every family. For example, implementation of a system of symbolic badges (e.g., social media symbol, newsletter symbol, etc.) that can be displayed by the classroom door depicting a type of family engagement adopted by the classroom may promote an increase in family engagement practices.

The teacher and the school may draw on the strengths of the families to maintain an effective family engagement program that is characterized by multiple components working in tandem (Constantino, 2021). For example, a family member may coordinate a communications tree to invite and remind families of engagement opportunities via text, email, social media, and personal phone call. Students may routinely extend invitations and reminders to participate to their families. A family member may create informational communications that can be distributed to families. Encouraging parents in a greater role in their child's academic life for a more balanced partnership between home and school may improve family perception and understanding of the significant role a family plays in their child's academic learning.

When using social media to engage families, establishing specific expectations for families may build confidence for initiating engagement in social media. For example, the absence of minimum expectancies for participation in the Facebook Group for this study might have contributed to passive involvement. Measures to engage individuals to increase responses from families on social media may translate to higher self-efficacy, which aligns to Principle 3 of the *Engage Every Family: Five Simple Principles* framework (Constantino, 2021). Principle 4 of the *Engage Every Family: Five Simple Principles* framework encourages opportunities for families to offer ideas and suggestions (Constantino, 2021). Hence, collaborating with families to establish agreed upon criteria and frequency of engaging in social media may improve the perception of ease in engaging in the platform. Offering a weekly prompt for family engagement on social media may increase activity. Additionally, families may be encouraged to choose a minimum of one particular day a week for posting an original post(s) to foster weekly activity for each family. Utilizing multiple social media outlets designated specifically for the classroom may increase the extent of engagement and increase opportunities for family members to potentially embrace a leading role within a social media outlet.

In sum, increasing the degree of family engagement may increase parental self-efficacy for engaging in learning experiences with preschoolers. Focused engagement efforts toward paternal and extended family members may increase the quality and frequency of developmentally appropriate experiences for preschoolers during their time with their family since research indicates maternal family members are more inclined to participate in school activities than other family members (Wittkowski et al., 2016). However, focus on engaging maternal family members should not be dismissed. In addition, increasing practices to engage families as partners communicates a message of the significant role families play in a child's academic success (Constantino, 2021).

Recommendation 2 Related to Practices to Increase Active Engagement to Build Self-Efficacy

Research study findings support a recommendation to design engagement activities to encourage active participation for building self-efficacy by drawing on four sources of self-efficacy. Bandura (1994, 1997) identified four influential sources for gaining information about one's capabilities that may be applicable to potentially increase active engagement or shift passive involvement to active engagement. Consideration of the four sources of self-efficacy identified by Bandura (1994, 1997) guided this study; however, more intentional planning to capitalize on the influences of the four sources may increase self-efficacy at a higher level than observed and improve child outcomes (Bronfenbrenner, 1974; Hoover-Dempsey & Sandler, 2005). That is, "practices that promote parental [and family] efficacy…are action oriented, meaning parents learn by doing, then transfer the knowledge to their children" (Constantino, 2021, p. 157).

Strategic cultivation of the four sources of self-efficacy identified by Bandura (1994, 1997) are illustrated in the following scenarios. If expectations for participating in family engagement activities are open-ended yet purposeful and meaningful with reasonable expectations, participants may experience success and perceive *mastery experiences* (Bandura, 1994, 1997; Constantino, 2021). Likewise, engagement activities aligned to an individual's skill level may result in mastery experiences. For example, if a parent struggles with reading, engagement activities may be planned to build skills for using a picture walk (i.e., using the pictures to understand the story) when sharing a book with a child at home. As relations with the parent strengthens, connecting the parent with community resources for individualized literacy development may be advantageous for the family.

Participants communicated favorable perceptions of learning from others. If family members are positioned on social media or positioned during workshops to model effective learning activities appropriate for preschoolers, observers may perceive increased confidence through *vicarious experiences* (Bandura 1994, 1997; Stilwell & Ferguson, 2005). For example, weekly prompts for families to post depictions of home experiences on social media and opportunities for family members to lead workshops place families in a position to be social models.

As family members are encouraged by other families, an enjoyable environment may develop for families to experience social influence from *verbal persuasion*. Thus, as a classroom culture of observable positive relationships between families develops, families could be paired for reciprocal affirmation and mentoring to promote activity for potentially building self-efficacy. When pairs are rotated, activity for building self-efficacy may be strengthened.

A positive classroom culture may stimulate positive *emotional states* for motivating individuals to participate in activities to build self-efficacy (Bandura, 1994, 1997). For example, a participant in this study expressed low self-efficacy for engaging her children at home. Other participants offered encouraging comments that noticeably eased the participant's frustration and most likely influenced her decisions for participation in other intervention activities. Furthermore, including elements such as music, food, and familiar children's books and manipulatives (e.g., bottle tops for counting, scissors, crayons, glue) in engagement activities may activate positive physiological reactions that motivate individuals to participate.

Effective activities to prompt *mastery experiences*, *vicarious experiences*, *verbal persuasion*, and *positive emotional states* may increase levels of family engagement and lead to increased self-efficacy. Furthermore, engagement may be associated with the comfort level generated by the perception of the environment for engagement. To shift family *involvement* to family *engagement*, increased efforts to build trusting relationships between the school and families in the preschool program are recommended (Constantino, 2021). Accordingly, families may readily benefit from the sources of self-efficacy identified by Bandura (1994, 1997) when provided within a classroom, and eventual school culture, that engages every family (Constantino, 2021).

Recommendation 3 Related to Practices to Promote Self-Efficacy for Engagement at Home

Research study findings support a recommendation for the school to continue partnering with families to shape parent and family perceptions of abilities to positively influence their child's academic outcomes. The family engagement intervention program for this study centered on *Build Family Efficacy*, Principle 3 of the *Engage Every Family: Five Simple Principles* framework. Since participants in this study communicated a mix of low and high self-efficacy for supporting their preschooler's academic success, continued efforts by the school to build family efficacy is a logical recommendation. Incorporating respect for time, effective communication, goal setting, and the rating scale into engagement practices may prove to be effective.

Indeed, building family efficacy is a continuous process that takes time (Constantino, 2021). Stakeholders (e.g., families, teachers, school staff) must recognize a precursor to Principle 3 and Recommendation 3 is established, trusting relationships between families and the school (Constantino, 2021). Relationships built on trust take time to develop. Once relationships are established, efforts to build family efficacy may need to be extended for a longer period of time than the 4 weeks provided in this study. Therefore, family engagement activities into the kindergarten year and subsequent school years will promote continuity for building family efficacy (Grindal et al., 2016).

Regular conversations with parents and families about their beliefs for engaging in their preschooler's academic life may increase self-efficacy and ultimately increase levels of engagement such that families are active partners in a leading role for shared decision-making in their preschooler's journey to academic success (Constantino, 2021; Hoover-Dempsey & Sandler, 1995, 1997, 2005). A practice of bi-weekly phone calls to families to build and maintain relationships may be an effective plan. Effective conversations with families may include a comparison of the level of participation in activities for building self-efficacy and the level of their preschooler's academic achievement as an illustration of the relationship between parent and family engagement and child outcomes (Hoover-Dempsey & Sandler, 2005).

Additionally, the school may assist families in identifying specific engagement practices that are simple, meaningful, and relevant for each parent or family (Constantino, 2021). Perceptions of abilities may improve by creating opportunities for families to monitor changes in their efficacy beliefs (Bandura, 1989; Bandura et al., 2011; Bronfenbrenner, 1975; Constantino, 2021). Self-monitoring promotes ownership in building self-efficacy (Constantino, 2021). Informal goal setting may motivate parents and families to engage in self-identified practices and, consequently, may result in increased self-efficacy (Hoover-Dempsey & Sandler, 2005). For example, families may set similar goals as follows: (a) reading daily with their preschooler for at least 10 minutes; (b) using everyday materials for learning (e.g., coins for counting, buttons for sorting, magazines for cutting letters); and (c) establishing a home routine for daily engagement in academic activities. Regular review of progress toward achieving goals may lead to better outcomes.

Administration of the rating scale that is a component of the family engagement intervention program at the midpoint of the intervention may lead to increased awareness of self-efficacy levels to prompt increased family engagement practices or affirm family practices in place. The data collected from the rating scale at the midpoint may facilitate conversations with families about changes in their efficacy beliefs. For administration of the rating scale at the midpoint to be worthwhile, the length of the intervention must be considered.

Recommendation 4 Related to Practices to Promote Continuity in Learning Experiences at School with Learning Experiences at Home

Research study findings support a recommendation for the school to design family engagement activities to promote consistent and constant learning experiences for preschoolers. Continuity between school and home can be established by providing family engagement activities to build family efficacy for using children's homes as "extensions of the [preschool] classroom and natural learning environments" (Gainsley, 2014, p. 5). Three strategies are suggested to promote home learning experiences that are similar to learning activities occurring at school to foster high achievement.

The teacher may post video clips of classroom activities to social media to model effective learning experiences for families. In turn, a parent or family member may volunteer to post media to social media on a self-selected day(s) or week(s) of the month of ways their family engages in learning at home as opposed to the freewill system in place for this study that yielded minimal evidence of home engagement practices. The security of a routine to guide participant's activity on social media may increase family engagement. Additionally, encouraging a parent or family member to engage as a decision maker in designing a social media activity plan aligns to Principle 4 of the *Engage Every Family: Five Simple Principles* framework (Constantino, 2021).

To foster family engagement at home, any materials for at-home engagement can be provided by the school or readily available at home and of little or no expense to the family. For instance, the school may provide learning materials (e.g., picture books, crayons, glue, scissors, playdough) at the beginning of the school year for families to use at home and replenish materials throughout the year. When materials for learning at home are readily accessible, families have the means to create their own experiences for building family efficacy that can be shared on social media or discussed during workshops to promote vicarious experiences for other families (Bandura, 1994, 1997; Stilwell & Ferguson, 2005). Plastic utensils could be used for shaping playdough to create original structures, egg cartons could be used for sorting, and a sheet pan could be used for manipulating magnetic letters. Furthermore, planning school activities that include family engagement at home (e.g., planting seeds at school and at home for comparison) connects home and school learning. Supporting home learning the school may not see (i.e., invisible engagement) may result in child achievement that *can be* observed by the school (Constantino, 2021).

Preschoolers can be enlisted as motivators to invite, encourage, or remind their parent(s) and family member(s) to regularly engage in home learning activities (Hoover-Dempsey & Sandler, 2005). At least two study participants commented how their preschooler looked forward to the virtual workshops and reminded parents of the time to join. Similarly, preschoolers can help establish home routines for daily learning experiences.

Recommendation 5 Related to Policy to Promote a Family-School Partnership

Research study findings support a recommendation to create and maintain a culture that values a partnership between each family and the school and projects the same belief in practices. Within the setting of the preschool classroom, the teachers and families may develop a family engagement policy to communicate a message that families are valued and play a significant role in their child's academic success (Constantino, 2021; A. Epstein, 2007; J. Epstein & Salinas, 2004; Hoover-Dempsey & Sandler, 2005; Mapp & Bergman, 2019; USDHHS et al., 2018). The policy should be simple and reflective of agreed upon expectations of family-school engagement necessary for attaining desired achievement outcomes for preschoolers. Prior to developing the engagement policy, prerequisites such as trusting relationships supported by two-way communication and family efficacy at a level for informed policy development decision making must be in place (Constantino, 2021).

Participants in the study consistently viewed their role in their preschooler's academic life as subordinate to the role of the school. A family engagement policy may help shape parental role construction and perceptions of the role of the school in a more balanced light. Examples of potential elements of a classroom family engagement policy depicting shared responsibilities for both the teacher and family include: (a) understanding academic expectations, (b) providing materials for connecting school and home learning, (c) sharing information about a child's progress, and (d) engaging in two-way communication. As family interactions with the school are increasingly viewed as a shared partnership in their child's development, families may begin to characterize their role as increasingly significant. Hence, the decisions families make may lead to higher goals for engagement as their perception of the important role they play increases

(Constantino, 2021; J. Epstein & Salinas, 2004; Hoover-Dempsey & Sandler, 2005; Mapp & Bergman, 2019; USDHHS et al., 2018).

In sum, three key messages related to a preschooler's academic life may be communicated in a family engagement policy for a preschool classroom. First, the role of the family and the role of the school are equally important and influential. Second, family and school operate in a partnership that is characterized by shared responsibility to signify the value of both units for successful child outcomes (Constantino, 2021; Mapp & Kuttner, 2013). Third, engagement practices are goal-oriented to achieve positive outcomes for the preschooler, the families, and the school (Constantino, 2021; J. Epstein & Salinas, 2004; Hoover-Dempsey & Sandler, 2005; Mapp & Kuttner, 2013; USDHHS et al., 2018).

Recommended Revisions to Instrumentation

Valid and credible instrumentation is essential for collecting accurate data for informing findings. Reliable and dependable instrumentation is important for consistent results (Creswell & Creswell, 2018; Mertler, 2022). To increase the trustworthiness of the rating scale and the semi-structured focus groups used for this study, revisions to the instrumentation may be warranted.

Rating Scale

Revisions to the rating scale to include a continuum of data points ranging from 0–10 may capture more accurate beliefs. Five scale points on the rating scale (i.e., *strongly disagree*, *disagree*, *neither agree nor disagree*, *agree*, *strongly agree*) may be insufficient for participants to accurately communicate beliefs. The degree of beliefs may represent a wider range than five scale points. For example, inconsistencies in perceptions of self-efficacy were evident when comparing participants' responses to the rating scale to participants' responses to the focus group questions. A broader scale to quantify a wide range of degrees of personal beliefs might be justified. Perceptions of self-efficacy may not simply be quantifiable in the form of agree or disagree but may be more suitably quantified along a continuum of numbered degrees.

A review of findings provided evidence the five rating scale items related to perceptions of the roles of family and school were most closely linked to the perceived efforts of the school, perhaps more so to the classroom teacher. While data informing perceptions of the role of school are desired, the addition of scale items specific to the role of the parent or family member, including task specific items, may more accurately measure parental role construction (Hoover-Dempsey & Sandler, 1995, 1997, 2005; Wittkowski et al., 2016). Potential scale item additions may include: (a) *My role includes being a partner with the school to help my preschooler be successful*, (b) *I engage my preschooler in learning activities at home every day*, (c) *I share responsibility with the school for my preschooler's success*, and (d) *I attend school meetings to help improve my preschooler's school* (Constantino, 2021; A. Epstein, 2007; Mapp & Bergman, 2019).

Utilizing SPSS, the computation of Cronbach's alpha for the set of five scale items intended to measure the concept of the roles of family and school resulted in a coefficient of .81 to indicate acceptable consistency in measuring the concept (Bhattacherjee, 2012; Creswell & Creswell, 2018; Goforth, 2015). However, the extent the scale items fully represent the construct to be measured is questionable. Similarly, the alpha coefficient for the five scale items related to self-efficacy was .70, which is an acceptable measure of reliability (Creswell & Creswell, 2018; Goforth, 2015). However, assessment of the validity of the scale items may be warranted to ensure the desired construct is measured. Consistent with action research, regular analysis of data collected from the rating scale is essential to develop a valid and reliable measure (Mertler, 2020). Revision of the rating scale is an appropriate step toward increased validity and reliability of the instrument (Creswell & Creswell, 2018; Mertler, 2020).

Focus Group Protocol

Revisions to the focus group protocol may be necessary for collecting accurate and consistent data. Inferences drawn by the researcher from observations of the participants during the focus group suggest participants experienced difficulty distinguishing Question 3 from Question 4 and Question 5 from Question 6 during the pre- and post-intervention focus groups even with ad lib prompting (see Appendix G). A possible revision to the protocol may include the addition of statements to communicate a conceptual understanding of the terms *confident* and *enjoyable*. For example, an appropriate action may be the inclusion of the following sentences: "*Confident means you believe you do a good job. Describe the ways you believe you do a good job supporting your preschooler's learning at home,"* and "*Enjoyable means you experience joy. What learning activities do you like to do with your preschooler?*"

To elicit additional information to understand participants' beliefs following the intervention, the focus group protocol was revised for the post-intervention focus group to include prompts related to specific intervention experiences encountered during the 6-week study. The prompts were intended to provide an opportunity for participants to elaborate on any particular experience(s) that might have influenced decisions and behaviors. The original protocol may be more appropriate for the pre-intervention focus group, and the revised protocol may be more appropriate for the post-intervention focus group. The original focus group protocol and the revised protocol for the post-intervention focus group are in Appendix G.

Recommendations for Future Research

Future research may build upon the findings of this study. Three recommendations for future studies are provided to guide and potentially improve family engagement practices. A study to examine a subsequent cycle of action research (i.e., Cycle 3 of Figure 2) inclusive of the recommendations supported by this study may improve the family engagement program provided for families of preschoolers in the JCSD. Furthermore, an action research study to examine a family engagement program reflective of the recommendations supported by this study conducted with the families during the child's kindergartener experience may provide evidence of the influence of continuity in family engagement practices. Additionally, a correlational analysis between family engagement practices and child performance on yearly state assessments may be a justifiable study to provide evidence to influence school culture defined by the "attitudes and beliefs … [of those] both inside (e.g., teachers, staff) and outside the school (e.g., parents, family members, community partners)" (Boyd, 1992, p. 11).

Subsequent Action Research in the Preschool Classroom

By nature, "action research has a clear beginning…[yet not] a clearly defined endpoint" (Mertler, 2020, p. 36). Similarly, family engagement is an ongoing process that does not have a clearly defined end. The findings and recommendations from this study serve as a guide for future cycles of action research in the preschool classroom to monitor and evaluate the effectiveness of the recommended improvements to the family engagement intervention program (Mertler, 2020). Whereas this study consisted of one intervention cycle during the second half of the school year, future research in the preschool classroom inclusive of multiple intervention cycles may prove beneficial for effective family engagement. Hence, timing the pre-intervention cycle(s) close to the beginning of the school year may provide opportunities for more than one intervention cycle throughout the year.

Multiple subsequent cycles of action research implemented within the school year may improve engagement practices. By implementing subsequent cycles of action research, the preschool teacher has the opportunity to continuously refine engagement practices essentially via dual capacity-building by simultaneously strengthening the role of the family and the role of the teacher and school to establish a classroom culture that engages every family (Constantino, 2021; Mapp & Kuttner, 2013; Mertler, 2020). Furthermore, replication of the family engagement intervention program in additional VPI classrooms in the JCSD will grow family engagement for families served by the school district's preschool program.

Extension of Action Research into the Kindergarten Experience and Beyond

A research study to monitor and evaluate the effectiveness of a family engagement program for the families of kindergarteners in the JCSD may foster enduring family-school engagement practices that promote higher learning (Constantino, 2021; Mertler, 2020). To illustrate, implementing similar action research that was conducted with the families of preschoolers in this study in addition to the recommended revisions when the same families experience the kindergarten school year may enhance family efficacy developed during the family's preschool experience. Onboarding the kindergarten teacher(s) promotes a culture of unified family engagement practices, which aligns to Principle 1, *A Culture that Engages Every Family*, of the *Engage Every Family: Five Simple Principles* framework that guided this study (Constantino, 2021).

In addition, research conducted by Bronfenbrenner (1974) revealed strong family engagement programs following the preschool years into the primary grades may counter regression children experience when family-school engagement is less prevalent. Accordingly, similar engagement practices implemented in subsequent years beyond preschool and kindergarten may warrant a future longitudinal study to examine any link between the frequency of engagement, degree of efficacious families, and child achievement when family engagement program options are consistent and continuous.

Family Engagement Practices and Child Achievement Correlation Study

The goals of family engagement practices are rooted in the promotion of high academic achievement. A study to understand the influence or potential correlation between a family-school engagement program and student outcomes may be beneficial to guide decisions for family engagement (Constantino, 2021; Hoover-Dempsey & Sandler, 2005). A correlational analysis between quantifiably defined family engagement practices and performance on yearly state assessments may influence decisions by both those inside and outside the school to promote a culture that engages every family (Boyd, 1992; Constantino, 2021). If study findings communicate high family-school engagement resulted in high student achievement, efforts may be extended to nurture and maintain visible family-school engagement practices that were identified as effective and substantial. If study findings are less favorable, an examination of current practices may be warranted to determine more effective practices for promoting child achievement.

Application of Learned Lessons in Practice

The purpose of action research is to gather information to apply what is learned in practice (Mertler, 2020). The action research conducted for this study confirmed theories embodied in the principles of the *Engage Every Family: Five Simple Principles* framework that guided the study. Understandings gleaned from this study about the first three principles in particular are applicable for revising engagement efforts for enduring, efficacious family-school partnerships (Constantino, 2021).

Establish a Culture to Build Relationships With Every Family

The preschool teacher who helped facilitate this study and I intended to secure 100% participation of families in the family engagement intervention program. While such a goal might be unrealistic, operating with the high expectation drove our zealous actions for connecting with the families. Eventually, in some cases, frequent phone calls to families went unanswered and unreturned. My zeal for trying to connect with the disengaged weakened. Upon reflection on the findings of this study, I realized my attempts to build relationships with families might have been perceived as only surface-level and not deeply rooted since my interactions with families were inconsistent. I concluded trusting relationships with families were underdeveloped and accommodations to meet the needs of families were unfulfilled. To operate as a participant and facilitator in a family engagement program, genuine relationships with families must be established to create an inviting environment for parents and extended family members to willingly engage.

The element of time emerged as a significant factor creating challenges to building relationships. The preschool teacher and I found that limited time to connect with the disengaged was the reality; however, perhaps an unjustifiable defense as every child and their family are important and worth efforts to engage them. Dedicated and protected time in the classroom schedule to connect with families may lead to stronger relationships and increased participation in family engagement activities.

Build Family Efficacy

Participants communicated the virtual workshops and the social media group were enjoyable and beneficial. I infer both types of experiences influenced skills and knowledge for operating in a parental role with regard to a preschooler's academic success and potentially other areas of the child's development (e.g., social, emotional, physical).

Since participants possessed different background knowledge for parenting, I question how participants conceptualized the role of the family in a preschooler's academic life when participating in the workshops and social media group. Participants were free to assimilate information from the intervention activities; however, the open-endedness of activities might have created a missed opportunity to hone beliefs and perceptions about specific ways to effectively engage as a parent to increase student achievement. Providing time for families as a group to conceptualize the role of the family and the role of the school prior to the family engagement intervention program (i.e., pre-intervention cycle) will focus the learning from family engagement activities, and secondly, operationalizing the two defined roles by utilizing a rating scale and focus groups in the intervention cycle will provide reliable data when measuring any change in beliefs upon completion of the intervention program.

Furthermore, using instrumentation to query participants about their perceptions of the benefits of intervention activities at the midpoint of the intervention program, or perhaps more frequently, will guide any revisions to engagement practices during the intervention cycle and in future research. In addition, simply posing the questions, *Have you found the workshops [or social media] to be helpful? Why or why not?* at predetermined and random times throughout the intervention timeframe might be another useful source of data.

Set Goals

As relationships between the classroom teacher(s) and families become more secure and trusted and as families build capacity for performing in a role to nurture their child's academic success, families become better positioned to participate in shared decision making with the classroom teacher(s) for establishing an amicable family engagement policy (Constantino, 2021). Families may willingly define at least one agreeable goal to engage as a family unit in conjunction with a classroom family engagement policy if the policy is developed collaboratively by the immediate stakeholders (e.g., parents, extended family members, teachers). Goal setting, a component that was absent from this study, may lead to more consistent and constant experiences at home that parallel the implementation of the preschool curriculum at school. The addition of simplistic, informal goal setting into the family engagement intervention may increase intentional and effective practices at home.

Intended Outcomes

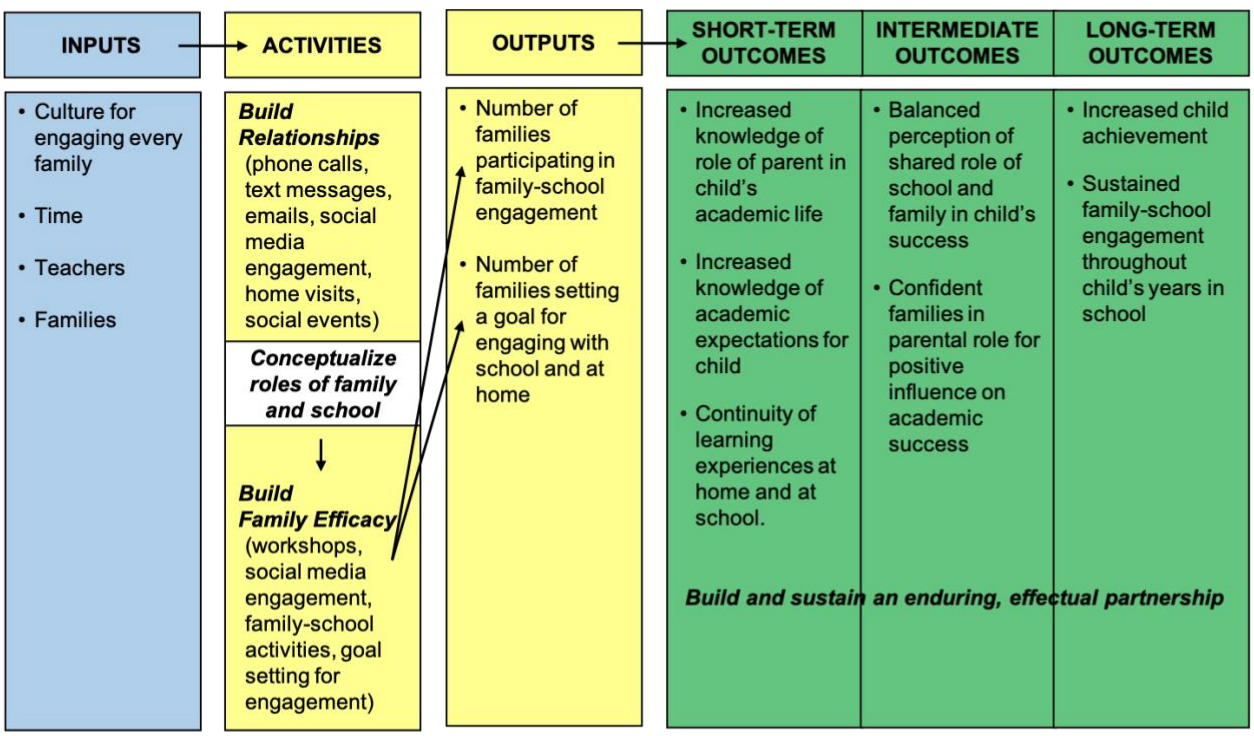
The ultimate goal of practices of engagement is to build an enduring, effectual partnership with families throughout a child's academic years. Families in this study continued to participate in the classroom's social media group after the intervention, which indicates relationships between the families in the preschool program and relationships between the families and the classroom teacher had been established. Choosing to capitalize on established relationships between the families and the school by extending the development of family efficacy when children enter grades following the preschool year epitomizes vertical engagement for nurturing school culture that engages every family.

Logic Model

The logic model presented in Figure 13 represents the application of learned lessons in practice. The model was created to guide the work toward achieving desired engagement outcomes for the families of preschoolers in the JCSD. The development of the logic model was derived from Principles 1, 2, and 3 of the *Engage Every Family: Five Simple Principles* framework and substantiated by the findings of this study (Constantino, 2021).

Figure 13

Family Engagement Program Logic Model for Engaging Families in the Academic Lives of Preschoolers

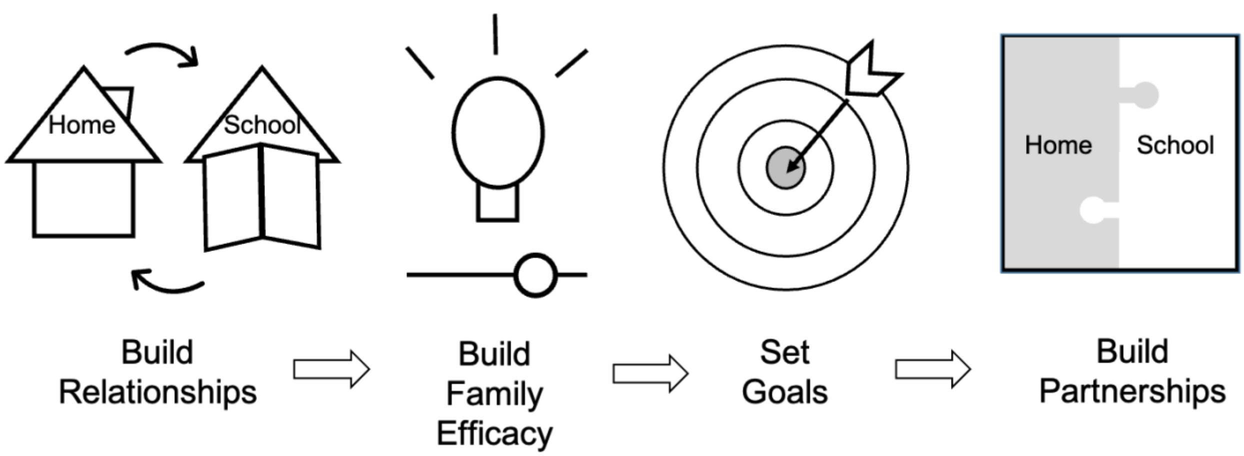


Note. The logic model reflects the first three principles of the *Engage Every Family: Five Simple Principles* model as based on a synthesis of the findings of this study. Adapted from *Engage Every Family: Five Simple Principles* (2nd ed., p. 61), by S. M. Constantino, 2021, Corwin. Copyright 2021 by Corwin Press, Inc.

As the school cultivates self-beliefs of efficacy, families will possess a degree of empowerment to select, influence, and construct their own circumstances to impact their preschooler's academic performance (Bandura, 1989). To support families in understanding the process of family engagement for achieving desired outcomes for families and the school as depicted in Figure 13, a pictorial representation of the overarching ideas of the logic model is presented in Figure 14 as a simplistic representation for easy cognitive retrieval and user-friendly application. Although the small sample size of the study hinders generalization of the findings, the conceptualized ideas for family engagement depicted in Figure 13 and Figure 14 may potentially be applied in similar settings as in this study.

Figure 14

Model for Engaging Families in the Academic Lives of Preschoolers



Note. The model captures the overarching ideas in the logic model found in Figure 13.

Establishing a school culture that engages every family may take years (Constantino, 2021). Ultimately, an engagement system will emerge that permeates all grade levels for continuity and consistency. The process may be gradual, but observable child, family, and school successes will be worth the time and investment.

Researcher Reflexivity

Throughout this study, a researcher reflexivity journal was used to capture my thought processes to stay alert to any biases I potentially introduced into the study (Constantino, 2021; Mertler, 2020). I found certain behaviors and assumptions arose simply due to human nature. Two personal instances are worth reporting to signify the importance of maintaining neutrality when engaging with families.

During the pre-intervention cycle, two families joined a virtual workshop several minutes after the agreed upon start time. My attitude was more understanding toward the family who joined 20 minutes after the start time but had been actively engaged for several months than my attitude toward the family who joined 10 minutes after the start time and had participated less frequently. My assumptions about the reasons why a family joined a workshop after the agreed upon time overshadowed the fact that both families made the decision to join the meeting, which was the ultimate goal of the engagement program. I lost sight of the desired goal due to a momentary lapse in neutrality, an essential element in research. Reflexivity led to increased awareness of my interactions with both families involved in the scenario and other families and countered thoughts and behaviors that might have hindered positive engagement.

Similarly, the practice of reflexivity revealed unconscious behaviors when I extended personal invitations or reminders to families about family engagement opportunities. A pattern emerged in the order of outreach to families. Families most in need of personal contact to feel valued and appreciated for the significant role they play in their preschooler’s academic life tended to be the families on the latter end of the order of contact. Perhaps my experiences with families in previous years or undeveloped relationships with current families led to misinterpretations and beliefs that I might have allowed to threaten the level of engagement for certain families.

Neutrality when interacting with families is critical for engaging at a level that yields trusting relationships for building family efficacy that produces a partnership in a child's learning (Constantino, 2021). Frequent reflexive practices may reduce biased beliefs and actions that jeopardize success in engaging every family.

Limitations

Time emerged as a limiting factor for multiple reasons. First, an insufficient window of time to build trusting relationships essential for creating an inviting and comfortable environment for families to willingly engage in the family engagement program might have impeded decisions to participate in certain instances. Second, the 6-week window of time for the engagement program limited the time for observable influence on behaviors, beliefs, and child achievement. Third, individual needs potentially best served by one-on-one family engagement were addressed in group family-school engagement due to limited time for engagement. Last, the short, 30-minute window of time for each virtual workshop limited the number and type of activities to include in the workshop.

Furthermore, opportunities for families to be heard during virtual workshops were limited due to the nature of the virtual platform. Oftentimes families were muted and their comments were unheard to adhere to one speaker at a time. Breakout rooms were avoided due to the short time allotted for each workshop. Consequently, family sharing time for building self-efficacy was limited.

Conclusion

Families play a critical role in the academic lives of their children. Schools are positioned to partner with families to help children excel. When families perceive the important role they play in their child's education and engage in family-school engagement activities to build self-efficacy for engaging their child at home, their child benefits.

The *Engage Every Family: Five Simple Principles* framework guiding this study highlighted key principles for family engagement (Constantino, 2021). For instance, effective family engagement hinges on trusting relationships between the family and school. Once mutual trust has been established, families are more inclined to accept invitations for engagement extended to them. Hence, I attribute the higher degree of participation in family engagement activities observed in this study than in previous years in part to the relationships developed between the classroom teacher and the participants. I conclude any degree of participation resulting from invitations for engagement extended from the school district level in previous years was most likely acts of compliance to a parent agreement linked to acceptance into the preschool program and more resemblant of involvement than engagement.

Engaging in capacity building with the preschool teacher and preschool families in this study was an enjoyable experience. I formed relationships with families of preschoolers at a deeper level than when acting in my role as the facilitator of the school district's preschool program during past preschool enrollment periods. Consequently, my interactions when assisting families in the enrollment process in future academic school years will be influenced by this study. I will be reminded of the ultimate benefits to the preschoolers when genuine relationships with families are nurtured beyond the surface level beginning with initial interactions with the school district.

I count the practices to engage the seven mothers in this study as a success; however, I also acknowledge more work is to be done to engage *every* family in the preschool classroom. I would like to see virtual workshops and social media family engagement opportunities as part of the practices of preschool teachers across the school district. After a recent sharing of a portion of information related to the findings of this study, two preschool teachers expressed interest in learning more about a social media platform that simulates a similar experience as the one provided in this study. I am optimistic additional teachers will seek support for implementing a social media option to engage with families. I am encouraged by the continued interactions in the social media Facebook Group created for this study even after the children moved into kindergarten. The principal of the school housing the preschool classroom for this study expressed interest in sharing findings and engagement practices with other grade levels in the building. Growing interest in virtual workshops might require patience due to the commitment of time associated with delivering family engagement workshops. Providing an in-person workshop option may be more appealing to teachers and families.

Since creating a culture that engages every family is dependent upon the attitudes, beliefs, and perceptions of teachers and families, I recognize patience and perseverance will be essential for developing a common understanding of *what* engagement exemplifies, *how* families and the school operate within an engagement model, and *why* a child benefits from the practice of family engagement. Establishing a family engagement program guided by the principles of the *Engage Every Family: Five Simple Principles* framework across the fourteen preschool programs in the JCSD will not occur quickly; however, I believe an adequate investment of time and energy may produce desired outcomes over time (Constantino, 2021).

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APPENDIX A

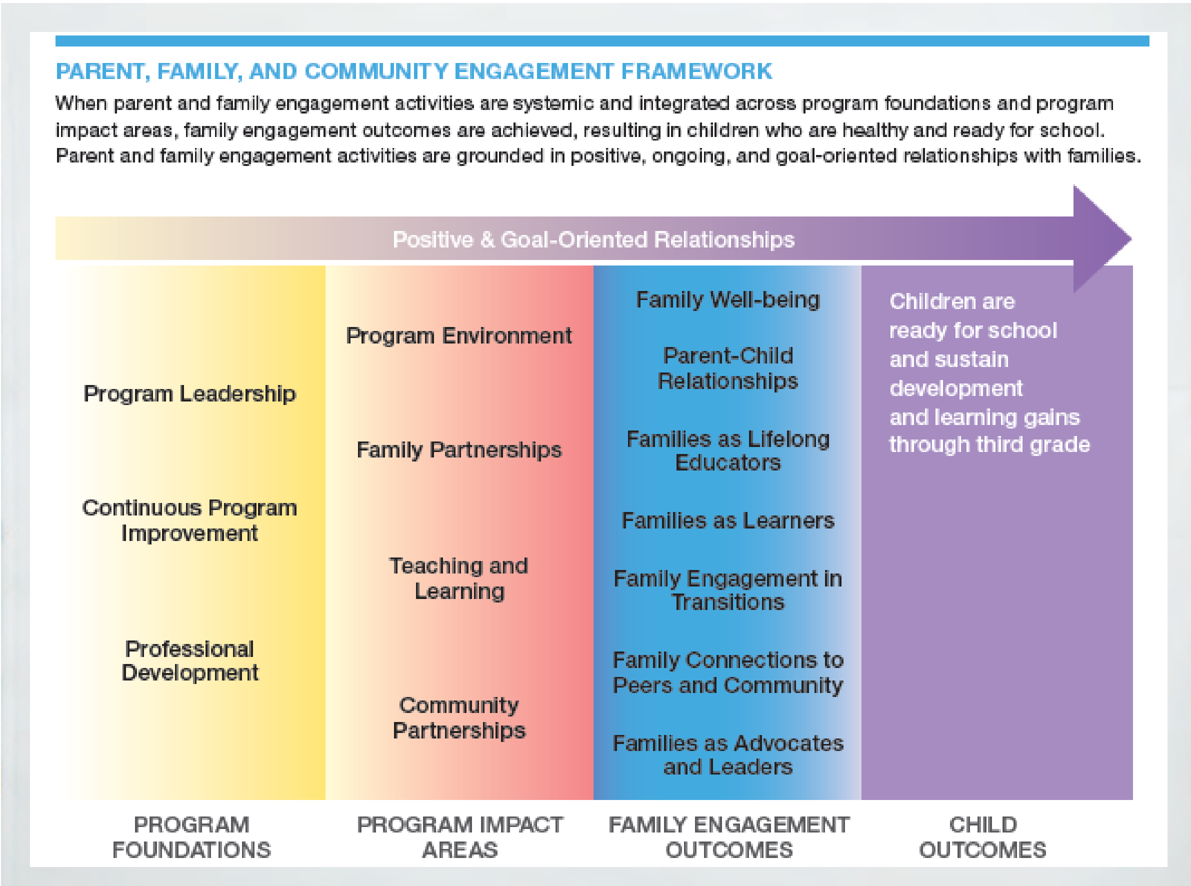
OUTLINE OF FAMILY ENGAGEMENT WORKSHOP 1

Workshop title	Learning targets	Methods
Making art: Process vs. product	Obj: Develop practices for engaging with art materials to create original artwork representing individual thoughts and feelings KDI 40. Art CLLD1.2. Using vocabulary and nonverbal cues to communicate HPD3.2. Developing small muscle control CD4.4. Using visual arts media to express thoughts and feelings	Opening discussion: Facilitator will engage families in discussions about environmental print. Description of in-classroom video: Families will view and discuss observations of preschoolers doing a teacher-directed art activity. Discussion will focus on teacher-directed vs child-centered artwork. Family practice: Utilizing art materials provided by the school and at home (bottle tops, shredded paper, Q-tips, straws, felt/fabric, glue, crayons, etc.), families will engage in creating original artwork. Possible workshop reflection questions: What was easiest for you? What was more challenging for you? What else would you like to share about the workshop? Application at home: Families will engage in making original artwork with materials provided by the school and found around the house.

Note. Obj = objective. KDI = Key Developmental Indicator (KDI) from HighScope Preschool Curriculum (J. Epstein & Hohmann, 2012). CLLD = Communication, Language and Literacy Development, HPD = Health and Physical Development, CD = Cognitive Development, all from Virginia’s Early Learning and Development Standards (ELDS, Virginia Board of Education, 2021).

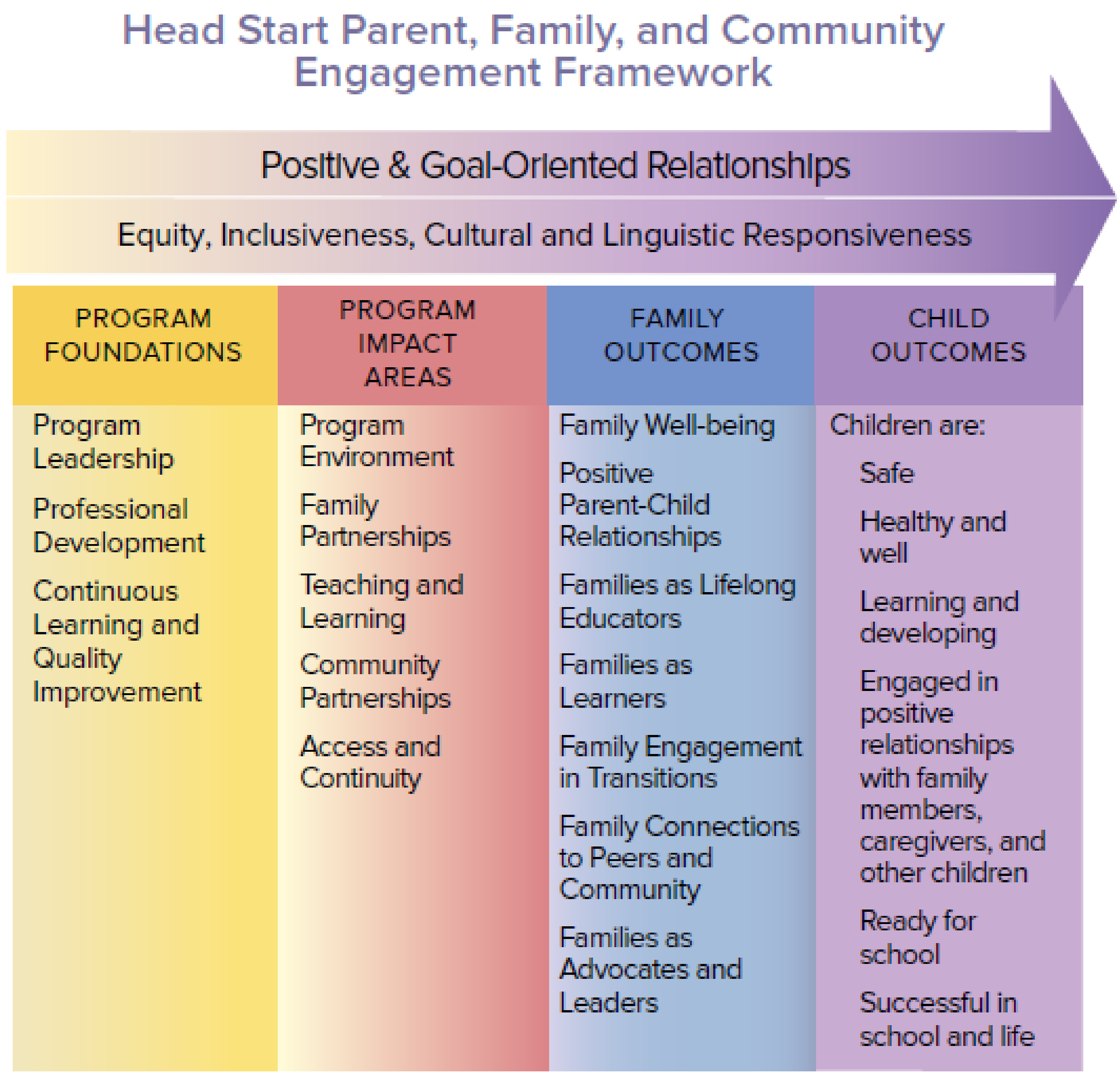
APPENDIX B

HEAD START PARENT, FAMILY, AND COMMUNITY ENGAGEMENT FRAMEWORK
(Version 1)



From *The Head Start Parent, Family, and Community Engagement Framework: Promoting Family Engagement and School Readiness, From Prenatal to Age 8*, by U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start, and National Center on Parent, Family, and Community Engagement, 2011 (https://archive.globalfrp.org/early-childhood-education/publications-resources/parent-family-and-community-engagement-framework-promoting-family-engagemen-and-school-readiness-from-prenatal-to-age-8). In the public domain.

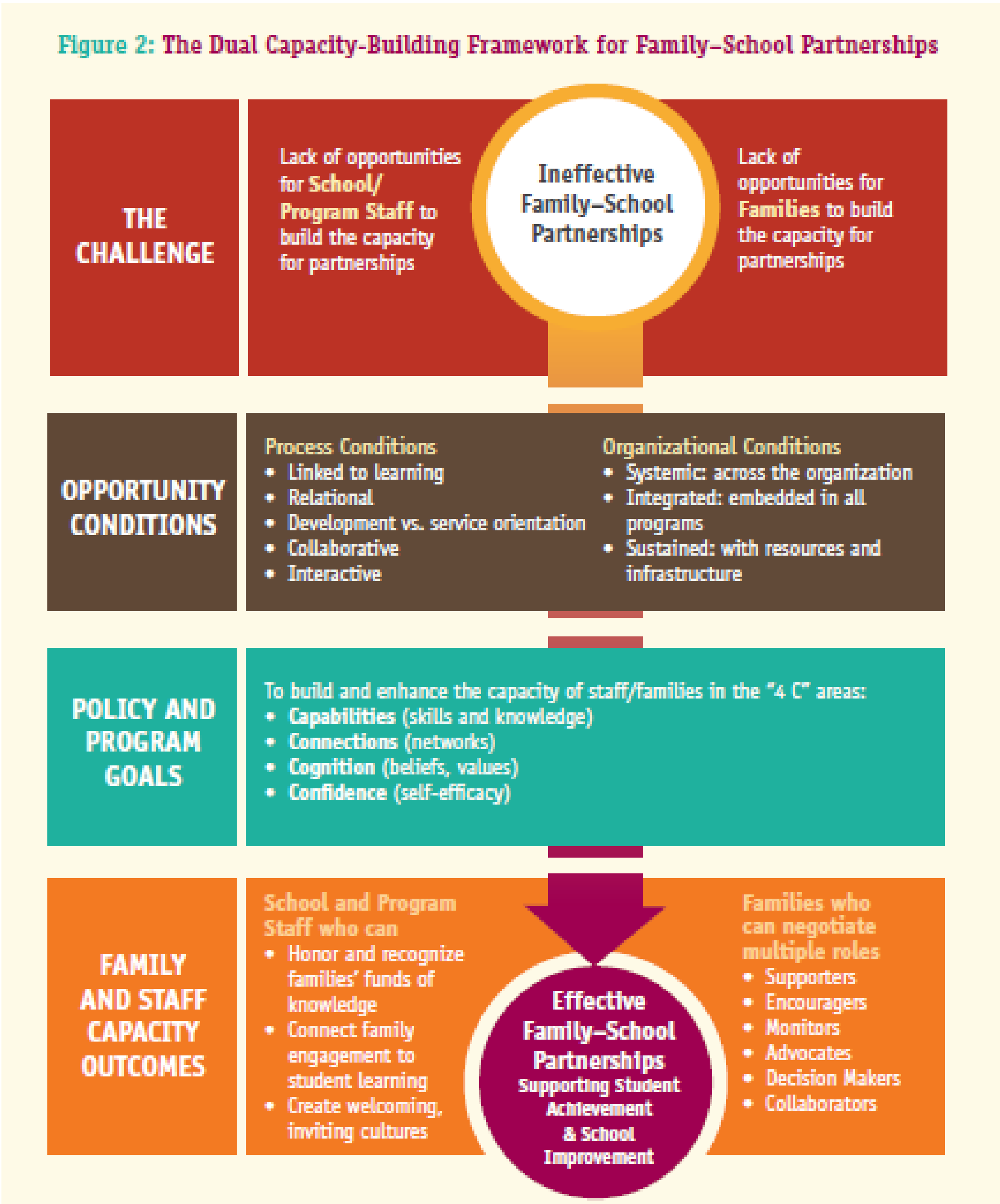
HEAD START PARENT, FAMILY, AND COMMUNITY ENGAGEMENT FRAMEWORK
(Version 2)



From *Head Start Parent, Family, and Community Engagement Framework* (2nd ed.), by U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start, and the National Center on Parent, Family, and Community Engagement, 2018 (http://www.ohcac.org/HeadStart/PFCE-Framework.pdf). In the public domain.

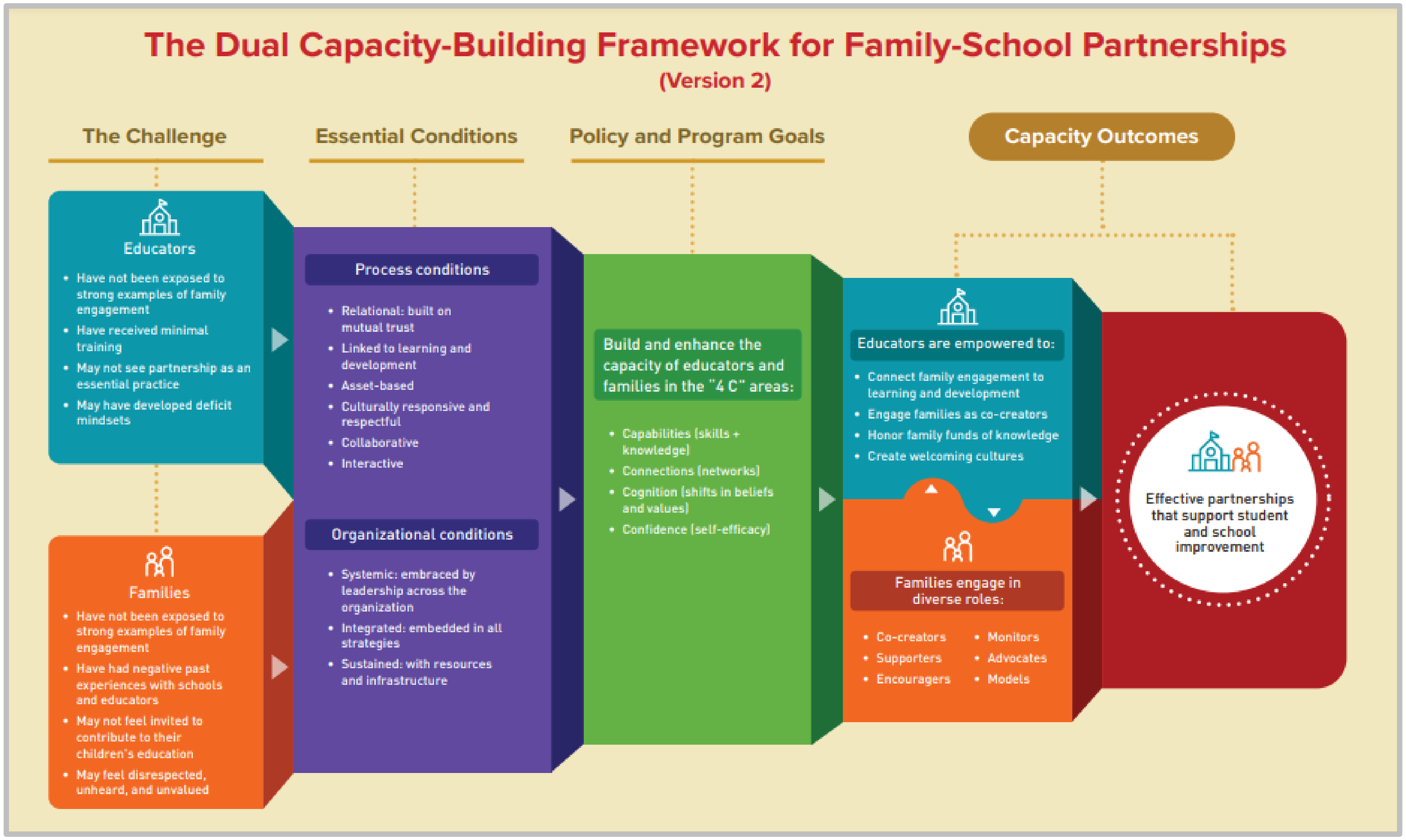
APPENDIX C

THE DUAL CAPACITY-BUILDING FRAMEWORK FOR FAMILY-SCHOOL PARTNERSHIPS
(Version 1)



From *Partners in Education: A Dual Capacity-Building Framework for Family–School Partnerships*, by K. Mapp and P. Kuttner, 2013 (https://sedl.org/pubs/framework/). CC-BY-SA 3.0.

THE DUAL CAPACITY-BUILDING FRAMEWORK FOR FAMILY-SCHOOL PARTNERSHIPS
(Version 2)



From *Dual Capacity-Building Framework for Family-School Partnerships: Version 2* [Infographic], by K. Mapp and E. Bergman, 2019 (https://www.dualcapacity.org).

APPENDIX D

PARTICIPANT CONSENT FORM

The purpose of this form is to provide information about a research study on families' views on engaging in the academic lives of their preschoolers. The study will take place over a period of approximately six weeks.

You are asked to take part in the research study because you are a parent or caregiver of a preschooler in the Virginia Preschool Initiative (VPI) program at your child's elementary school and because you volunteered to be considered as a participant in the study. Please read this form carefully and ask any questions before agreeing to take part in the study.

Purpose of the study: The purpose of this study is to engage families in a home-school partnership to learn about participants' views on engaging in the academic lives of their preschooler.

What will participants be asked to do: If you agree to participate in this study, you will be actively involved in the following activities:

- **Two 60-minute virtual focus groups** – Focus groups are when 6-10 people get together to share their views and opinions about a topic. In this study, the group will talk about views on practices for helping preschoolers be successful in school. One focus group will be conducted at the beginning of the study, and one focus group will be conducted at the end of the study. The focus groups will be recorded for creating a transcript only and will be destroyed thereafter. No identifying information will be connected to participant's comments when reporting the findings.
- **Four 30-minute virtual workshops** – The topics for the workshops will be determined by the participants. The workshops will be recorded for data collection only and will be destroyed thereafter. No identifying information will be connected to participant's comments when reporting the findings.
- **Social media group** – Social media is a way to interact with others. In this study, families will share ideas and build relationships in a social media group designed just for the families participating in this study.
- **Two rating scales** – Participants will complete a brief rating scale consisting of 10 items at the beginning of the study, and participants will complete the same rating scale at the end of the study. Participants will respond on a scale ranging from strongly disagree to strongly agree.

Risk and benefits: No risk is anticipated for any participant other than typical risk in day-to-day life. Participants may benefit from learning new practices to support their child's academic success and develop networks of support by engaging with other families.

Compensation: There is no compensation for participating in this study.

Other requirements: To participate in the study, families must have a device that has access to the internet and be able to join virtual Zoom workshops. The County Schools provides an iPad for each family of preschoolers that can be used to participate in this study. To assist with internet access, the County Schools will provide a device for connecting to internet services at home upon request.

Confidentiality: Any information collected in this study in any form, including digital or hard copy, will be secured and safeguarded for your privacy. Your name will not be associated with any results reported publicly. All records will be destroyed after the completion of the research study.

Voluntary participation: Your participation in this study is completely voluntary. You may freely withdraw from the study at any time without affecting your preschooler's participation in the VPI program or your relationship with your preschooler's school. Please communicate your decision to withdraw by submitting in writing to Denise Fultz, researcher for this study.

Contact information: If you have any questions or concerns, you may contact Denise Fultz, researcher for this study, at dfultz@henry.k12.va.us or 276-340-1660. You may also contact my committee chair, Dr. Margaret Constantino at meconstantino@wm.edu or Dr. Tom Ward of the William & Mary School of Education IRB Review Committee at tjward@wm.edu. THIS PROJECT WAS APPROVED BY the W&M PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2022-03-17 AND EXPIRES ON 2023-03-17.

A copy of this form will be provided for your records.

Statement of Consent: I have read and understand all the information above, received answers to any questions I asked, and received a copy of this consent form. I consent to participate in this research study and to the publication of any results.

Printed Name: ______________________ Signature: ______________________ Date: __________

APPENDIX E

PRE- and POST-INTERVENTION RATING SCALE

The following items are about supporting your preschooler's academic success.

How strongly do you agree or disagree with these statements?

Item	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. I have confidence in myself in my role as a parent. (ARQ2)	☐	☐	☐	☐	☐
2. I have all the skills necessary to support my preschooler's learning at home. (ARQ2)	☐	☐	☐	☐	☐
3. My role as a parent is valued by the school. (ARQ4)	☐	☐	☐	☐	☐
4. I feel welcome at my preschooler's school. (ARQ4)	☐	☐	☐	☐	☐
5. I know I am doing a good job supporting my preschooler's learning at home. (ARQ2)	☐	☐	☐	☐	☐
6. My preschooler's school encourages me to support my child's learning at home. (ARQ4)	☐	☐	☐	☐	☐
7. My skills for supporting my preschooler's learning at home are effective. (ARQ2)	☐	☐	☐	☐	☐
8. I know what my preschooler should be learning at this stage of development. (ARQ2)	☐	☐	☐	☐	☐
9. My preschooler's school regularly provides materials for me to support my preschooler's learning at home. (ARQ4)	☐	☐	☐	☐	☐
10. My preschooler's school values working with my family to help my preschooler be successful. (ARQ4)	☐	☐	☐	☐	☐

ADDITIONAL INFORMATION

What gender do you identify as?

☐ Male ☐ Female ☐ _________ ☐ Prefer not to answer

Please specify your ethnicity. (Check all that apply.):

☐ Asian ☐ Black/African American ☐ Hispanic ☐ Native American/Alaskan Native

☐ Native Hawaiian ☐ Pacific Islander ☐ White ☐ Prefer not to answer

What is your relationship to the preschooler? __________________________

APPENDIX F

RECORD OF PARTICIPATION IN ACTIVITIES FOR BUILDING SELF-EFFICACY

Participant	**Tally of Facebook Posts**				
	Week of				
	Date Joined	OPost1	View1	RPost1	Emoji1
8					
66					
74					
102					
122					
136					
176					

Note. Participants were randomly assigned a number for data analysis as a measure to control bias.
OPost1 = original post(s) during week 1; View1 = views of original post(s) during week 1; RPost1 = reply post(s) during week 1; Emoji1 = emojio(s) posted during week 1.

RECORD OF PARTICIPATION IN ACTIVITIES FOR BUILDING SELF-EFFICACY

Participant	**Virtual Workshop Attendance**							
	WS Week1 [a]	WS Week1 [b]	WS Week2 [a]	WS Week2 [b]	WS Week3 [a]	WS Week3 [b]	WS Week4 [a]	WS Week4 [b]
8								
66								
74								
102								
122								
136								
176								

Note. Participants were randomly assigned a number as a measure to control bias.
WS = workshop.
[a] = first workshop of the week
[b] = repeat of first workshop of the week

APPENDIX G

FOCUS GROUP PROTOCOLS

PRE- and POST-INTERVENTION FOCUS GROUP PROTOCOL

Introduction: *As a parent or caregiver of a preschooler, you have a unique point of view on practices for guiding young learners. This research project focuses on understanding family perceptions or points of view about engaging preschoolers in learning activities at home and families' beliefs in how well they engage their preschooler in learning activities. Learning activities are activities designed to require children think and problem solve to develop skills to be successful. This study does not intend to evaluate you as a child's parent or caregiver. The objective is to learn more about practices that guide children to becoming successful students when they enter school.*

Introductory Protocol: *To help with note-taking, our conversations will be recorded today. Only the researcher on the project, who is Denise Fultz, Mrs. Rosenberg, and Mrs. Mayhew will have access to the recording, which will eventually be destroyed after the conversations are put into written form. All information will be held confidential. Your participation is voluntary. You may stop at any time if you feel uncomfortable. No harm is intended to be inflicted upon you. Thank you for your participation.*

The interview consists of 15 questions. The interview is intended to last no longer than one hour. Each person will have an opportunity to respond to each question. If time begins to run short, it may be necessary to limit the time you are allowed to speak in order to complete all of the questioning. Any questions before we begin?

Probes: *Tell me more.* *What do you mean when you say...?* *What does 'sometimes' mean to you?*

Name of Interviewer: ________________________ File Name of Audio: __________________

Date: _____________ Time: __________________ Location: _____________________________

Participants: ____

PreI = Pre-Intervention Question **PostI** = Post-Intervention Question

(Otherwise both PreI and PostI)

1. **PreI**: Why did you decide to participate in the parent and family engagement program for this study? (ARQ4)
   PostI: Why did you decide to complete the parent and family engagement program for this study? (ARQ4)
2. Describe how you engage your preschooler in learning activities at home. As a reminder, learning activities are activities that require children to think and problem solve. (ARQ3)
3. In what ways are you most confident in guiding your preschooler's learning activities at home? (ARQ2)
4. Describe the learning activities you find to be most enjoyable when engaging with your

preschooler at home. (ARQ3)

5. In what ways are you least confident in guiding your preschooler's learning activities at home? (ARQ2)
6. Describe the learning activities you find to be most challenging when engaging with your preschooler at home. (ARQ3)
7. **PreI**: In what ways do you hope that participating in this workshop will help you engage your preschooler in learning activities at home? (ARQ2)
   PostI: In what ways has participating in this workshop helped you to engage your preschooler in learning activities at home? (ARQ2)
8. **PreI**: How often have you participated in activities designed to engage families in the academic lives of children? How do you make the decision to participate? (ARQ4)
   PostI: How likely are you to participate in future activities designed to engage families in the academic lives of children? How do you make the decision to participate? (ARQ4)
9. How would you describe your role in your preschooler's academic success? (ARQ4)
10. How would you describe the role of the school in your preschooler's academic success? (ARQ4)
11. In what ways does the school make you feel welcome? (ARQ1, ARQ4)
12. How does the school support your preschooler's learning at home? (ARQ4)
13. What connections do you see between at home activities and your preschooler's progress in school? Why do you say so? (ARQ3, ARQ4)
14. As your preschooler prepares to enter school, what other topics might be of interest to you? (ARQ2, ARQ3)
15. What else would you like to share? (ARQ1, ARQ2, ARQ3, ARQ4)

Thank you for participating in the focus group. You can be assured all information will remain confidential. Are there any final questions?

ARQ1: To what extent do families participate in the program activities?
ARQ2: After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?
ARQ3: In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?
ARQ4: How do families describe the role of the family and the role of the school in their preschooler's academic success?

ARQ=Action Research Question

REVISED POST-INTERVENTION FOCUS GROUP PROTOCOL

Introduction: *As a parent or caregiver of a preschooler, you have a unique point of view on practices for guiding young learners. This research project focuses on understanding family perceptions or points of view about engaging preschoolers in learning activities at home and families' beliefs in how well they engage their preschooler in learning activities. Learning activities are activities designed to require children think and problem solve to develop skills to be successful. This study does not intend to evaluate you as a child's parent or caregiver. The objective is to learn more about practices that guide children to becoming successful students when they enter school.*

Introductory Protocol: *To help with note-taking, our conversations will be recorded today. Only the researcher on the project, who is Denise Fultz, Mrs. Rosenberg, and Mrs. Mayhew will have access to the recording, which will eventually be destroyed after the conversations are put into written form. All information will be held confidential. Your participation is voluntary. You may stop at any time if you feel uncomfortable. No harm is intended to be inflicted upon you. Thank you for your participation.*

The interview consists of 15 questions. The interview is intended to last no longer than one hour. Each person will have an opportunity to respond to each question. If time begins to run short, it may be necessary to limit the time you are allowed to speak in order to complete all of the questioning. Any questions before we begin?

Probes:
Tell me more. *What do you mean when you say...?* *What does 'sometimes' mean to you?*

Name of Interviewer: ________________________ File Name of Audio: __________________

Date: _____________ Time: __________________ Location: ____________________________

Participants: ____

PreI = Pre-Intervention Question **PostI** = Post-Intervention Question

(Otherwise both PreI and PostI)

1. **PreI**: Why did you decide to participate in the parent and family engagement program for this study? (ARQ4)
   PostI: Why did you decide to complete the parent and family engagement program for this study? (ARQ4)
2. Describe how you engage your preschooler in learning activities at home. As a reminder, learning activities are activities that require children to think and problem solve. (ARQ3)
3. In what ways are you most confident in guiding your preschooler's learning activities at home? (ARQ2)
4. Describe the learning activities you find to be most enjoyable when engaging with your preschooler at home. (ARQ3)
5. In what ways are you least confident in guiding your preschooler's learning activities at home? (ARQ2)

6. Describe the learning activities you find to be most challenging when engaging with your preschooler at home. (ARQ3)
7. **PreI**: In what ways do you hope that participating in this workshop will help you engage your preschooler in learning activities at home? (ARQ2)
   PostI: In what ways has participating in this workshop helped you to engage your preschooler in learning activities at home? (ARQ2)
8. **PreI**: How often have you participated in activities designed to engage families in the academic lives of children? How do you make the decision to participate? (ARQ4)
   PostI: How likely are you to participate in future activities designed to engage families in the academic lives of children? How do you make the decision to participate? (ARQ4)

   Think about the different ways you were invited to participate. Describe how the invitations influenced your decision to participate?

   Examples if needed: (flyers, Facebook messenger, Facebook event, phone calls, text messages, the teacher, your preschooler).

9. How would you describe your role in your preschooler's academic success? (ARQ4)
10. How would you describe the role of the school in your preschooler's academic success? (ARQ4)
11. In what ways does the school make you feel welcome? (ARQ1, ARQ4)
12. How does the school support your preschooler's learning at home? (ARQ4)
13. What connections do you see between at home activities and your preschooler's progress in school? Why do you say so? (ARQ3, ARQ4)
14. As your preschooler prepares to enter school, what other topics might be of interest to you? (ARQ2, ARQ3)
15. What else would you like to share? (ARQ1, ARQ2, ARQ3, ARQ4)

    Prompt: Describe your experience with the family engagement activities.
    Examples if needed:

    - *Workshops*
    - *Facebook Group*
    - *Recordings (Workshops, 60-Second Videos)*
    - *Families and Partners Handbook*
    - *Length of the family engagement program*
    - *Focus Groups*
    - *Rating Scale*

Thank you for participating in the focus group. You can be assured all information will remain confidential. Are there any final questions?

ARQ1: To what extent do families participate in the program activities?
ARQ2: After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?
ARQ3: In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?
ARQ4: How do families describe the role of the family and the role of the school in their preschooler's academic success?

ARQ=Action Research Question

APPENDIX H

RESEARCHER CODEBOOK

ARQ1	A Priori Code	Emergent Code
To what extent do families participate in the program activities?	**Engagement (ENG)** *Definition*: Families participate in family engagement activities provided by the school. Constantino (2021) **Examples**: engaged, home-school collaboration, involved	**Invitation to Participate (IP)** *Definition*: Families describe ways they were invited to participate in family engagement activities that influenced their decision to participate. **Examples**: invited, call, text message, email, Facebook messenger
		Time Factor (TF) *Definition*: Families describe events that are obstacles to having time to participate. **Examples**: time, "busy", time management
		Perseverance (PER) *Definition*: Families participate in engagement activities despite obstacles. **Examples**: overwhelming, "super hard", challenging situations
		First-Timer (FT) *Definition*: Families are first-time participants in family engagement activities that promote academic success **Examples**: first time, "never"

ARQ2	A Priori Code	Emergent Code
After participating in activities related to family engagement, is there a change in family perception of their efficacy to aptly provide developmentally appropriate learning activities for their preschooler at home?	**Building Self-Efficacy (BSE)** *Definition*: Families describe scenarios that build their skills and abilities for providing learning activities at home. Bandura (1997) **Examples**: self-improvement, understand, learning from others, wanting to learn	**Facebook Group (FG)** *Definition*: Families describe their experience as a participant in the Facebook Group. **Examples**: Facebook, posts
	Self-Efficacy (SE) *Definition*: Families describe their level of belief for possessing the skills, abilities, capabilities, and/or knowledge for providing at-home learning activities. Bandura (1997) **Examples**: confidence, "I don't know", "winging it", struggle, "I am doing good"	**Background Knowledge (BK)** *Definition*: An action or response indicates a level of background knowledge about early childhood development associated with engagement activity at home. **Examples**: characterizing child's skill level, "bright kid", teaching strategies

ARQ3	A Priori Code	Emergent Code
In what ways do families engage in developmentally appropriate learning activities with their preschooler at home?	**Active Learning (AL)** *Definition*: Families describe at-home learning activities requiring children to be active participants, such as active thinking, problem solving, using materials, or moving their bodies. Piaget (1964) **Examples**: singing, counting, dancing, writing, reading	**Games (GAM)** *Definition*: Families describe at-home learning activities delivered in a game-like format. **Examples**: games, puzzles, cards
	Learn through Play (LTP) *Definition*: Families describe how their child learns through play. Piaget (1964); Vygotsky (1978) **Examples**: play, pretend play	**Parent-Child Dynamic (PCD)** *Definition*: Families describe examples of how the child and parent interact at home. **Examples**: parent-child interactions, at-home teaching practices
		Environment (ENV) *Definition*: Families describe a child's learning environment **Examples**: family interactions, learning tools at home, routines
		Home-School Connection (HSC) *Definition*: Families describe a connection between their child's behaviors observed at home and what their child learns at school **Examples**: similar learning activities at home and school, "do what the school is doing"
		Patience (PAT) *Definition*: Families describe a level of patience when engaging with their preschooler **Example**: lack of patience

ARQ4	A Priori Code	Emergent Code
How do families describe the role of the family and the role of the school in their preschooler's academic success?	**Partnership (PAR)** *Definition*: Families describe scenarios that indicate the family and school work together for the child's success. Constantino (2021) **Examples**: "hand-in-hand", shared responsibility	**School as Primary (SP)** *Definition*: Families describe the school as the primary means of their child's learning success. **Examples**: 100%, leading role, principal teacher
	Relationship (REL) *Definition*: Families describe scenarios that indicate the family and school have positive dealings conducive to the child's success. Constantino (2021) **Examples**: appreciated, respected, accepted	**Home as Secondary (HS)** *Definition*: Families describe the home as the secondary means of their child's learning success. **Examples**: backup to the school, reinforce, pick up what school begins
	Role of Parent or Family (RPF) *Definition*: Families describe how the parent or family supports a child's learning. Constantino (2021) **Examples**: encourager, teacher, helper	**Communication (COM)** *Definition*: Families describe communication between teachers and parents that keep families informed. **Examples**: two-way communication, open, in the know, connected
	Role of School (RS) *Definition*: Families describe how the school supports a child's learning. Constantino (2021) **Examples**: provider of materials, provider of child's instruction, provider of engagement activities	**Communication Barrier (CB)** *Definition*: Families describe obstacles to home-school communication. **Examples**: language barrier, lack of skills
		Perception of Family-School Experiences (PFSE) *Definition*: Families describe characteristics of the dynamics of the family-school setting.
		Trust Issues (TI) *Definition*: Families indicate a lack of trust in the school.

ARQ4	A Priori Code	Emergent Code
		Times Have Changed (THC) *Definition*: Families communicate a belief that the dynamics of education have changed from families' previous experiences.
		Older Siblings (OS) *Definition*: Families describe scenarios of how family members influence learning.
		Kindergarten Readiness (KR) *Definition*: Families describe preparation for their child's success in kindergarten. **Examples**: kindergarten, assurance of readiness, prepared

Code Name	Code	A Priori Code	Emergent Code	Research Question
Engagement	ENG	x		1
First-Timer	FT		x	1
Invitation to Participate	IP		x	1
Perseverance	PER		x	1
Time Factor	TF		x	1
Background Knowledge	BK		x	2
Building Self-Efficacy	BSE	x		2
Facebook Group	FG		x	2
Self-Efficacy	SE	x		2
Active Learning	AL	x		3
Environment	ENV		x	3
Games	GAM		x	3
Home-School Connection	HSC		x	3
Learn through Play	LTP	x		3
Older Siblings	OS		x	3
Patience	PAT		x	3
Parent-Child Dynamic	PCD		x	3
Communication Barrier	CB		x	4
Communication	COM		x	4
Home as Secondary	HS		x	4
Kindergarten Readiness	KR		x	4
Partnership	PAR	x		4
Relationship	REL	x		4
Role of Parent or Family	RPF	x		4
Role of School	RS	x		4
Perception of Family-School Experiences	PFSE		x	4
School as Primary	SP		x	4
Times Have Changed	THC		x	4
Trust Issues	TI		x	4

APPENDIX I

RESEARCHER REFLEXIVE JOURNAL

- Be open to the views of others.
- Consciously speak/act without bias.
- Actively listen to participant responses. Listen for convergent and divergent beliefs.

<table>
<tr><td colspan="3">Date/Time/Activity
Participants:
Notes:</td></tr>
<tr><th>Observation / General Comments</th><th>Observer's Comment Related to Research Questions</th><th>Observer's Comment Related to Engage Every Family: Five Simple Principles Framework</th></tr>
<tr><td></td><td></td><td></td></tr>
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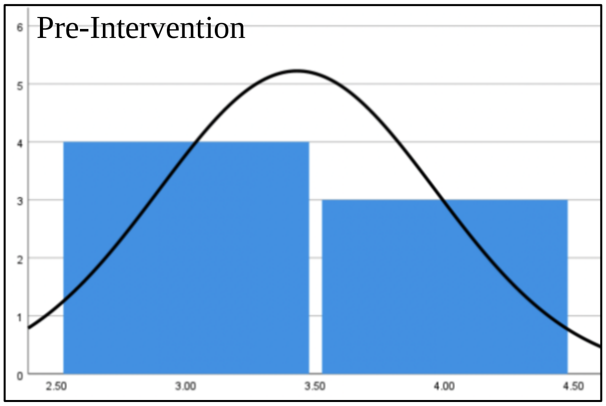
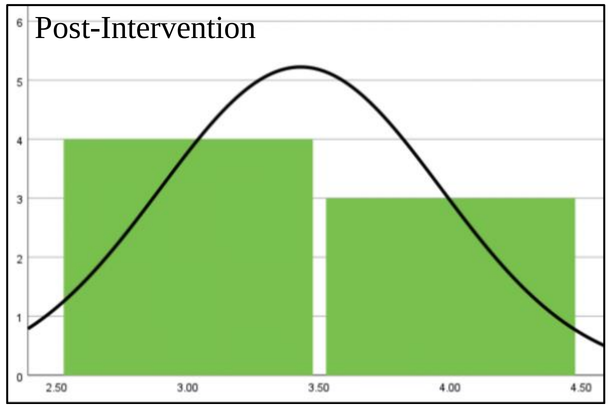
APPENDIX J

PRE- AND POST-INTERVENTION RATING SCALE DATA DISTRIBUTION HISTOGRAMS

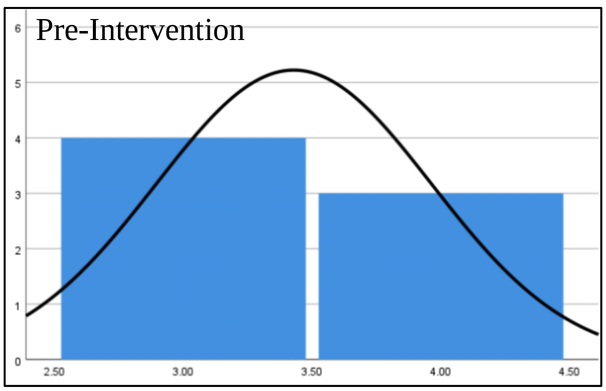
Blue = pre-intervention; **Green** = post-intervention; **Black line** = normal distribution

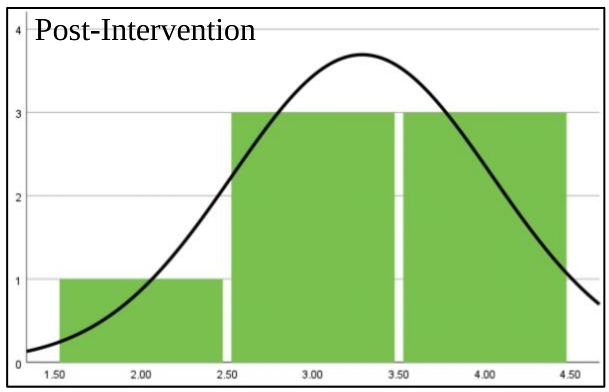
1. I have confidence in myself in my role as a parent.



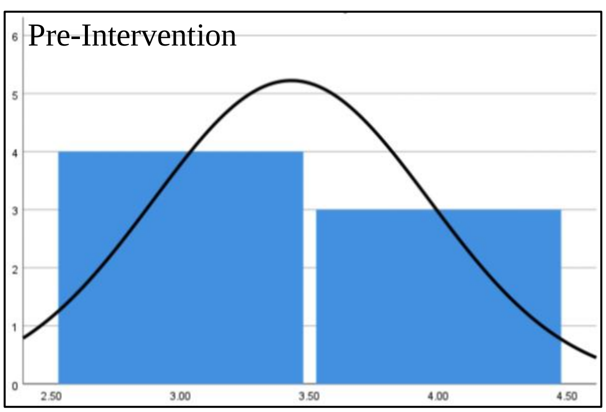


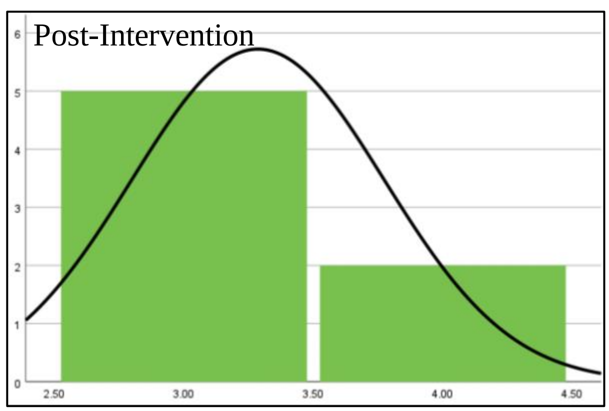
2. I have all the skills necessary to support my preschooler's learning at home.



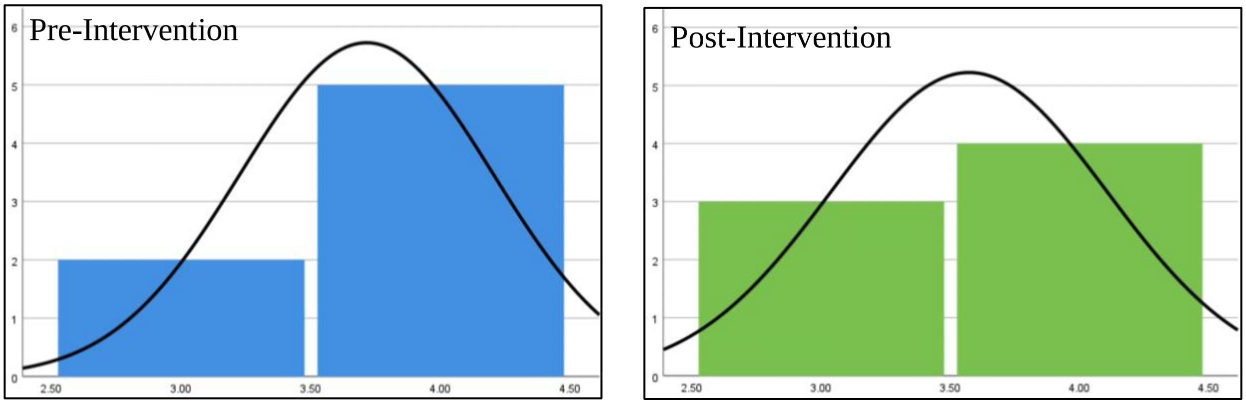


3. My role as a parent is valued by the school.

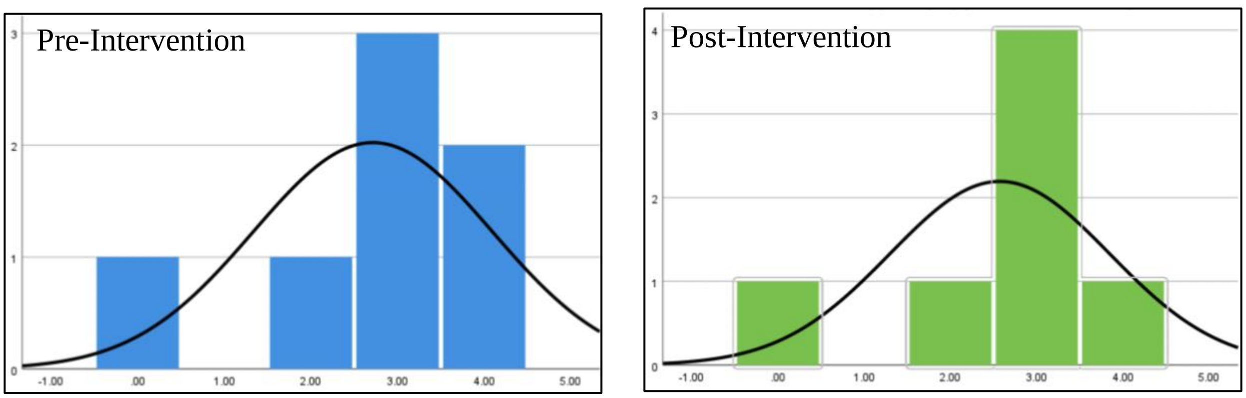




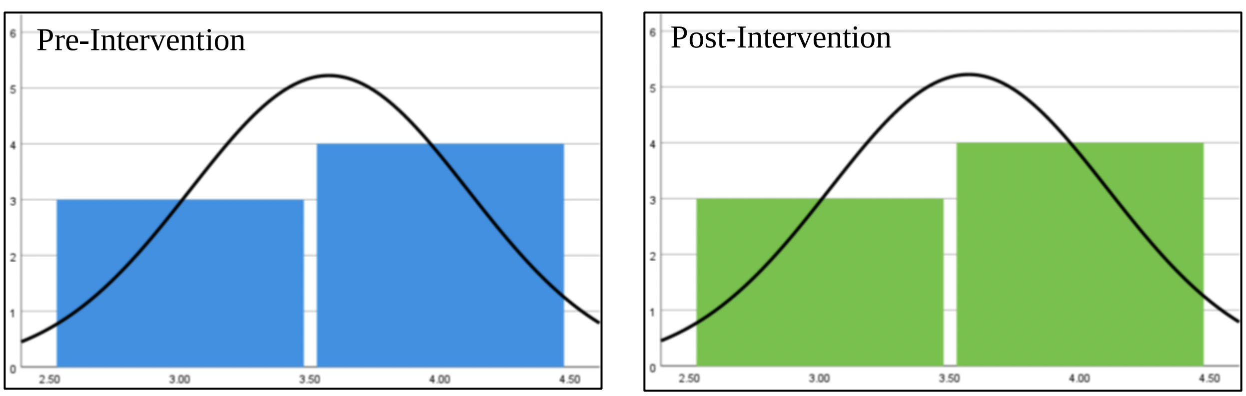
4. I feel welcome at my preschooler's school.



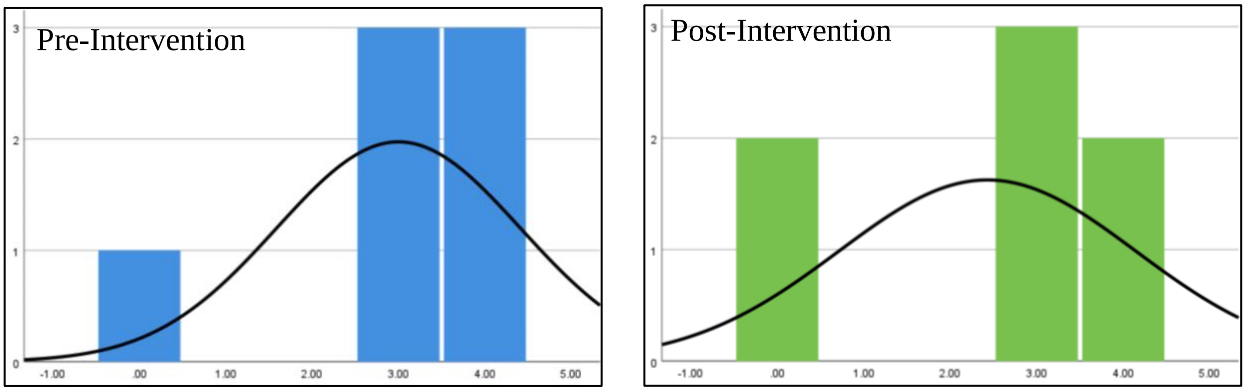
5. I know I am doing a good job supporting my preschooler's learning at home.



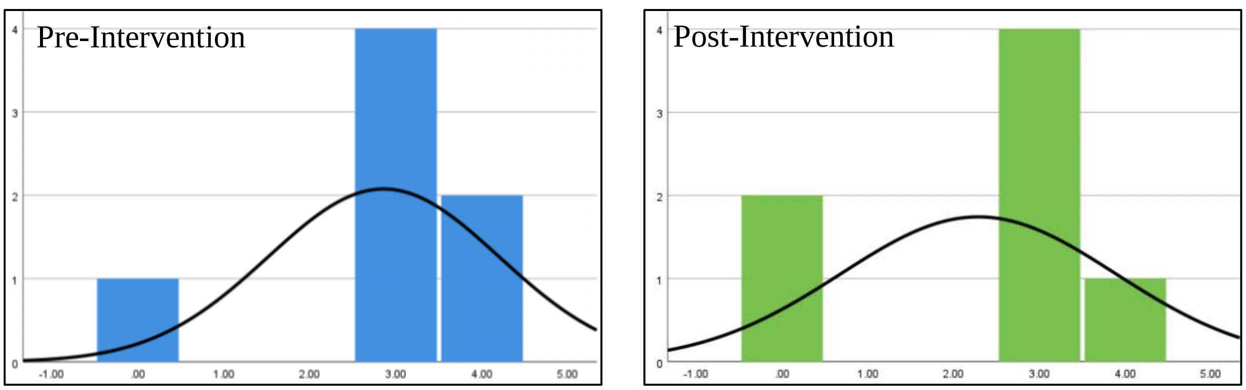
6. My preschooler's school encourages me to support my child's learning at home.



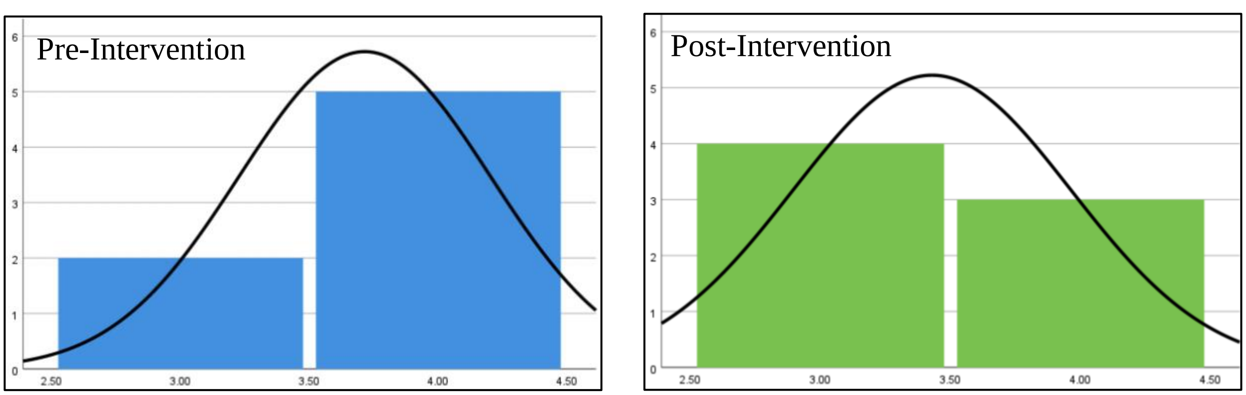
7. My skills for supporting my preschooler's learning at home are effective.



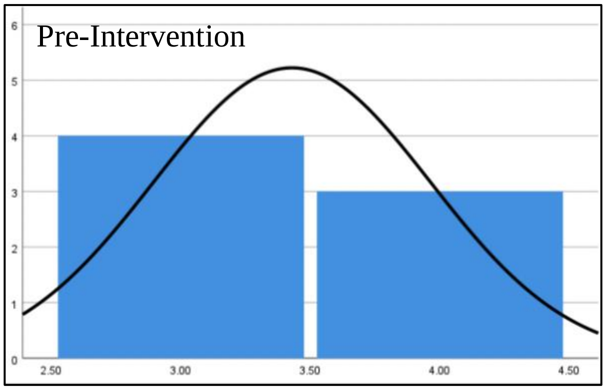
8. I know what my preschooler should be learning at this stage of development.

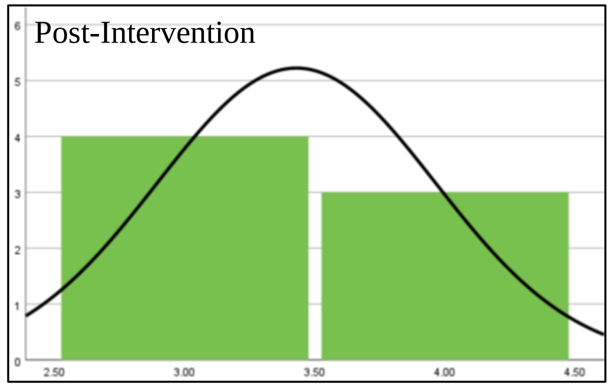


9. My preschooler's school regularly provides materials for me to support my preschooler's learning at home.

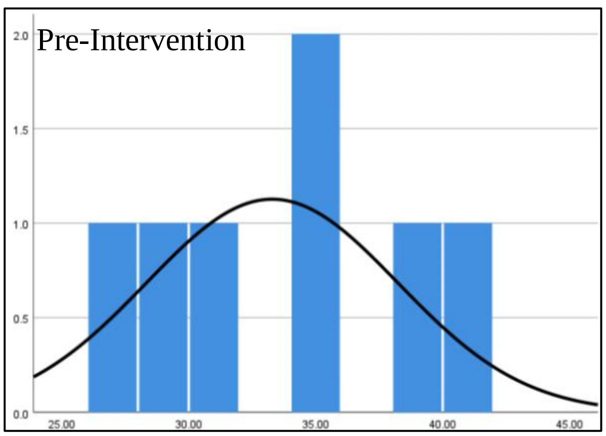


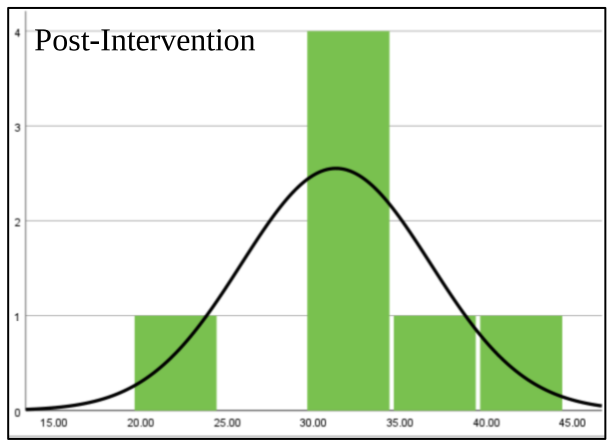
10. My preschooler's school values working with my family to help my preschooler be successful.





Summed Score





VITA

Denise Raelene Fultz

EDUCATION

William & Mary	Williamsburg, VA
Doctor of Education	May 2023

Educational Policy, Planning, and Leadership
K-12 Administration

University of Virginia	Charlottesville, VA
Education Specialist	August 2012

Reading Specialist

Averett University	Danville, VA
Master of Education	December 1996

Curriculum and Instruction

Wake Forest University	Winston-Salem, NC
Bachelor of Arts	May 1992

Education

RELEVANT EXPERIENCE

Elementary Curriculum Coordinator	July 2014–Present
Public Schools	

Title I Teacher	August 1994–June 2014
Public Schools	

First Grade Teacher	August 1992–December 1993
Public Schools	