Summer 2023

HOMESCHOOL SUPPORT FOR PARENT EDUCATORS

Shannon P. Weigel
Southeastern University - Lakeland

HOMESCHOOL SUPPORT FOR PARENT EDUCATORS

By

SHANNON P. WEIGEL

A doctoral dissertation submitted to the
College of Education
in partial fulfillment of the requirements
for the degree Doctor of Education
in Curriculum and Instruction

Southeastern University
July, 2023

HOMESCHOOL SUPPORT FOR PARENT EDUCATORS

by

SHANNON P. WEIGEL

Dissertation Approved:

Sarah Yates

Sarah J. Yates, EdD, Dissertation Chair

Thomas Gollery

Dr. Thomas J. Gollery, EdD, Methodologist

Lisa A. Coscia

Lisa A. Coscia, EdD, Dean, College of Education

DEDICATION

There is only one I can dedicate this dissertation to and that is my Lord and Savior, Jesus Christ. For it was He who placed me in this program and He who pulled me through. In preparation for this day, the Lord taught me long ago to watch for Him in ordinary things and to listen for His still small voice. I am so grateful that He has given me ears to hear, eyes to see, and a heart to obey His voice. The creation of Teach2Learn, Inc, a not-for-profit company that I started through the Lord's still small voice and built through the education I received through SEU is a testimony to how marvelously God works. Thank you Jesus, for loving me and calling me to be a part of Your plan! The following poem was given to me through the Lord's still small voice in the middle of the night just three days into my very first course, the leadership intensive. It was this poem I went back to when things got tough to remind me that God started me on this journey, and His faithfulness will see me through!

For Such a Time as This

"For the moment is here, but do not fear; for it is you I have chosen, so draw near.
Walk with Me and talk with Me; I will talk with you and walk you through.
I will hold your hand and walk with you; it is Me you will rely on and your professors too. There will be highs and there will be lows; embrace this time for it is you I chose. It is a high calling, yes; indeed, do not be alarmed, I have watered the seed. So, roll up your sleeves, put your hand to the plow; do not look back for your time is now. Take a deep breath, now is the time to embrace; it is you I have chosen to run this race." Love God

ACKNOWLEDGMENTS

I would like to thank all the professors in the Southeastern Doctoral Education department. This program has changed me! Thank you for your wisdom, insight, and guidance throughout my doctoral journey. I would like to give a special thank you to Dr. Yates for challenging me to push beyond what I thought were my limits in writing. Dr. Yates, you have instilled in me a love for writing that I never imagined I would attain.

I would like to thank my husband, Steve, and my mother-in-law, Jane. The two of you have stood by me and encouraged me every step of the way. Steve, thank you for your thoughtful and timely words and for the numerous meals you cooked and served me over the course of this journey. Jane, I know it was not easy to listen to the same story over and over, but you did. Thank you for all those evenings you dedicated to listening to me read my dissertation. Steve and Jane, you both played a big part in the success I had in my doctoral studies. I am grateful for both of you- thank you!

Abstract

The purpose of the present study was to examine the effect parent involvement in homeschool groups has on parent self-efficacy within the domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being. The quantitative, non-experimental study utilized a modified survey instrument based on Bandura's (2006) "Guide for Constructing Self-Efficacy Scales." The 56 study participants were homeschooling parents in the United States of America. The independent variable was involvement in homeschool groups and the dependent variables were the four domains of self-efficacy. The researcher sought to discover if the level of involvement in homeschool groups exerted a statistically significant effect upon the four domains of homeschooling parents' self-efficacy. The combination of the four domains of the construct of self-efficacy had a significant effect among the levels of the variable of homeschool groups (F (8, 98) = 2.36, p = .02), and the magnitude of effect for involvement in homeschool groups upon the four domains of the construct of self-efficacy was considered large ($\eta^2 p$ = 0.16). Follow-up post hoc analyses were conducted with the self-efficacy domain of social-emotional well-being identified as the only dimension reflecting a statistically significant effect on homeschooling parent self-efficacy (F (2, 52) = 6.84, p = .002).

Keywords: homeschooling parents, self-efficacy, homeschool co-ops, homeschool groups, mentors

TABLE OF CONTENTS

LIST OF TABLES

I. INTRODUCTION

As Americans have progressed through the 21st century, traditional educational habits have transformed (Neuman & Guterman, 2021). Traditional education, best described as trained educators providing curriculum and instruction for students within physical brick-and-mortar buildings, is being abandoned by many parents who have chosen to homeschool (Neuman & Guterman, 2021). With over two million students leaving the traditional brick-and-mortar education system, home education has increased by over 68% (Neuman & Guterman, 2021; Ray, 2020). Although the effect of a national pandemic pushed millions toward home education, many researchers have expressed doubt about the ability of new homeschooling parents to sustain the longevity needed to homeschool (Carpenter & Dunn, 2021).

Homeschooling necessitates parental involvement and places significant responsibility for educational outcomes on the parent (Morse, 2019). As primary educators with minimal teaching resources and having to sustain a work-life balance, homeschooling parents have found themselves in a daunting situation regarding their children's education (Duvall, 2021). In the wake of the last wave of homeschooling growth, novice homeschooling parents have utilized social media outlets to gain knowledge and support for their children's education. The internet has opened a community of homeschoolers that offers families support and educational opportunities (Morse, 2019). According to Morse (2019), homeschool groups add value to homeschooling as homeschooling groups supplement student education and support the

homeschooling parent. Examining the relationship between homeschool groups and homeschooling parents' self-efficacy is pivotal to understanding the value homeschool groups give to the homeschool community.

Background of the Study

Homeschooling has existed since the Europeans stepped foot on American soil (Murphy, 2013; Ray, 2014). In the 1700 and 1800s, home education was a common way to learn and was practiced out of necessity (Murphy, 2013). Still, in 1852, Massachusetts led the way to compulsory education by mandating all students ages eight to 14 attend a public school for 12 weeks (Ray, 2014). By the early 1900s, the American institution of education had established compulsory laws regarding attendance in most states, and public education became the norm across North America (Murphy, 2013). Further, as a system of state-by-state education gained popularity, the public attitude toward home education became hostile (Murphy, 2013).

Homeschooling has a long heritage and deep roots embedded in parental rights and cultural change (Murphy, 2013). Years into the rise of public education, two schools of thought arose from what many perceived as the government's attempt to take control of children and parental rights (Murphy, 2013). Pioneers John Holt and Raymond Moore were foundational pillars of the homeschool movement (Murphy, 2013). Holt and the liberal left and Moore and the Christian right planted seeds for homeschoolers that would have consequences decades later (Murphy, 2013; Ray, 2014). Holt and his followers contended that children should navigate their education within the walls or outside of the walls of the educational environment (Murphy, 2013). Holt supported that children should be led by their interests and within a flexible learning environment. Moore and his followers were concerned about classroom teaching content and the ill effects of secularism on children (Murphy, 2013). Although the underpinnings of belief for

Holt and Moore were very different, both found similar ground in the belief that it is the parent's right to educate their children (Murphy, 2013; Ray, 2014).

The work of Holt and Moore established a strong foundation for the homeschooling movement, but public education continued to advance, and homeschooling became an unpopular choice of schooling (Murphy, 2013). In 1980, 30 out of 50 states outlawed homeschooling (Murphy, 2013), but some families continued to choose to homeschool. Despite society's preference for academic institutions, the interest in home education left homeschooling a viable school option (Murphy, 2013).

Homeschooling popularity has evolved with societal trends, and families have chosen to homeschool for various reasons, including family culture, religious conviction, dissatisfaction with the education system, and government overreach (Neuman & Guterman, 2021; Ray, 2021). By the start of the 21st century, homeschooling was legal in all 50 states, and the American culture began to witness a revolution in education that would lead homeschooling beyond a fringe movement to mainstream education (Murphy, 2013; Ray, 2021). By the beginning of 2022, homeschooling had grown by over two million children in America (Ray, 2020). As the government's demands on education and family continue, parents turn to homeschooling as a possible source of education (Neuman & Guterman, 2021; Ray, 2021).

Over the past four decades, homeschooling has grown across the nation. The transformation of learning experiences within the homeschooling community broadened and spurred homeschooling parents to seek out homeschooling communities (Morse, 2019). The availability of homeschool groups in the local homeschool community directly resulted from the homeschooling parent's choice to homeschool (Morse, 2019). The concept of offering educational opportunities for homeschoolers through group activity is not new. For decades, the

homeschooler's school program has been supplemented and enriched with activities and educational opportunities through homeschool groups (Thomas, 2016b). However, parents do not always feel equipped to teach their children all subjects (Morse et al., 2022). To help navigate the homeschooling process confidently, the present generation of homeschooling parents is searching for a network of support that aligns with the family's beliefs and supports the parent-student relationship in education (Morse et al., 2022).

Conceptual Framework/Theoretical Foundation

Self-Efficacy Theory

Albert Bandura (1997) believed in the ability of the human mind to persevere under various circumstances. Self-efficacy theory acknowledges the diverse areas of human capacities. The central hypothesis of self-efficacy theory holds that an individual's beliefs are linked to accomplishments, and the importance of thought processes and attaining a self-governed mindset is recognized (Bandura, 1997). The principles of self-efficacy theory can be seen throughout research across an array of social sciences, including non-traditional education (Bandura, 1997; Dennison et al., 2020; Mouton & Roskam, 2015). Additionally, previous studies have demonstrated the importance of the utilization of external sources to build self-efficacy in the individual (Bandura, 1977).

Bandura (1977) suggested self-efficacy is attained through the following sources: relaxation and calmness, positive feedback, teacher modeling, and participant modeling. Bandura's social learning theory theorized people learn through observation and modeling. Previous studies have supported Bandura's social learning theory in relation to self-efficacy as demonstrated through the significance discovered when experienced teachers modeled kind and concerned behavior to preservice and novice teachers (Arcelay-Rojas, 2019). Moreover, Mouton

and Roskam (2015) discovered utilizing positive feedback as an empowerment tool is enough to create positive parenting. According to Bandura (1977), the self-efficacy model alongside the social learning theory enhances parental involvement in children's education, which is fundamental to homeschooling. Greater homeschooling parent self-efficacy can only benefit the homeschooling parent-student relationship and would be substantial to the practice of homeschooling according to Bandura's theory.

Relational-Cultural Theory (RCT)

Jordan's RCT model purports extrinsic relational influences are pivotal to an individual's self-efficacy, and feelings and motivations of self are secondary to the betterment of the individual (Jordan, 2017). The RCT model posits that an individual's confidence develops through growth fostering community connections attributed to mutuality, empowerment, and courage. Mutuality transpires through rallying alongside like-minded individuals, empowerment is developed through the encouragement of the more experienced, and courage arises as the novice learner gains confidence from the more experienced. Together, the three cornerstones of Jordan's RCT model creates a confidence that emboldens the novice learner to rise to new or challenging tasks (Jordan, 2017).

Teachers spend a significant amount of their professional time working in relationships with students, peers, co-workers, and leadership. Because of the high attrition rate for teachers in the formative years of teaching, Le Cornu (2013) studied the experiences of 60 early career teachers and examined the connection between RCT and the self-efficacy of novice teachers. Le Cornu (2013) theorized that mutuality, empowerment, and courage were the attributes that provided the framework that led to positive self-efficacy in early career teachers. In addition, like

Jordan (2017), Le Cornu (2013) discovered that the power of connection led to greater confidence in individuals taking on a new role.

Understanding Jordan's relational-cultural theory (RCT) in relation to Bandura's social learning theory as applied to self-efficacy provides a strong foundation for early teacher support from more experienced professionals in the education field. Comprehending the relationship between the two theories may also unveil pertinent information to understand better and improve teaching and learning conditions for homeschooling families.

Problem Statement

The homeschooling movement significantly increased the number of parents who chose to homeschool (Ray, 2021). Although research on homeschool groups is increasing, research addressing the relationship between homeschooling parents and homeschool group involvement is lacking (Morse, 2019). Recognizing the growth in homeschooling warrants the importance of evidence-based research on homeschool education. With minimal research on how homeschool group involvement influences the self-efficacy of homeschooling parents, examining the relationship between homeschool group involvement and homeschooling parent self-efficacy addresses a valuable topic in the homeschooling community.

Purpose Statement

This quantitative study aimed to examine the effect parent involvement in homeschool groups has on parent self-efficacy within the domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being.

Overview of Methodology

This quantitative, non-experimental survey study utilized a descriptive research design focused on homeschool group involvement and homeschooling parent self-efficacy. The following research question guided the study.

Research Question 1

Will study participant level of involvement in homeschool groups exert a statistically significant effect upon the four domains of homeschooling parents' self-efficacy: content knowledge, required administrative duties, teaching strategies, and social-emotional well-being?

Research Hypothesis 1

H_a 1:

Level of study participant involvement in homeschool groups will exert a statistically significant effect upon the four domains of homeschooling parents' self-efficacy: content knowledge, required administrative duties, teaching strategies, and social-emotional well-being.

H_a 1a:

Level of study participant involvement in homeschool groups will exert a statistically significant effect upon the domain of social-emotional well-being.

Population and Sample

The target population was homeschooling families. Participants in the study were parents homeschooling at least one child between six and 18 years old at the time of the study. The purposeful sample consisted of homeschooling parents in the United States with diverse educational backgrounds. The desired sample size was 100 participants, all of whom were at least 18 years of age and volunteered to participate in the study. Participants provided

information regarding their degree of confidence to complete skills and tasks required of homeschooling parents.

Measurement

The chosen instrument was a researcher-created survey. The involvement in homeschool groups survey was created after reviewing the teacher self-efficacy scale and parental self-efficacy scale in Bandura's (2006) "Guide for Constructing Self-Efficacy Scales." Questions about self-efficacy were modified to meet current homeschooling parents' situational demands and circumstances. A 5-point Likert scale was used to capture the homeschooling parent's degree of confidence, and a 5-point Likert scale was used to assess participants' level of involvement in homeschool groups.

Method of Data Collection

The instrument was a modified survey (Appendix A) provided to homeschool groups and homeschooling parents online through Survey Monkey. The 30-question survey included six sections, including demographics, four domain-specific areas, and one open-ended question. In addition, participants answered questions regarding homeschool group involvement and their confidence to complete skills and tasks required of homeschooling parents. The survey took place online in the middle of a traditional school year in February 2023, and data were collected over two weeks.

Overview of Analyses

Study data were analyzed in two phases: preliminary and foundational, and research question and hypothesis. Preliminary analyses included evaluations of missing data, internal reliability, initial descriptive analysis of the dependent variables of the research question, and study participant demographic identifying information. Descriptive statistical techniques used in

the preliminary, foundational analyses included frequencies (*n*), percentages (%), measures of central tendency and variability, standard errors of the mean, and measures of data normality.

The research question was addressed using descriptive and inferential statistical techniques. A multivariate analysis of variance (MANOVA) was conducted to evaluate if there were significant differences in the linear combination of the self-efficacy domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being and the levels of participants' involvement in homeschool groups. To further evaluate the effects of homeschool groups upon the four dimensions of the construct of self-efficacy in the areas of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being, an analysis of variance (ANOVA) was conducted for each dependent variable in the MANOVA analysis. The threshold for statistical significance of the finding was established at $p \leq .05$. The interpretation of effect sizes (n^2) was addressed using the conventions provided by Sawilowsky (2009).

Definition of Key Terms

What follows is a list of key terms used in this dissertation.

- **creative resilience:** Flexible thinking and the ability to come up with different strategies (Aznar et al., 2021, p. 305).
- **homeschool group:** Organizations where member families cooperatively support homeschooling efforts, social activities, and often educational programming for homeschooled children (Morse, 2019, p. 1).
- **parent self-efficacy:** A belief that one can successfully parent a child, which affects one's willingness to take on the role of their child's first teacher (Bojczyk et al., 2018, p. 170).

II. REVIEW OF LITERATURE

Although previous research on homeschooling is heavily focused on the history of homeschooling, student achievement, and parent motivation, studies on how homeschooling is practiced are scant (Thomas, 2016b). Greater insight is needed into homeschooling practices to understand homeschooling parent involvement with homeschool groups better. The purpose of this quantitative study was to examine the relationship between parent involvement in homeschool groups and homeschooling parent self-efficacy. The following literature review examined previous research on the current views of homeschooling in two key areas: self-efficacy and homeschooling group involvement.

Self-efficacy

Self-efficacy is a well-studied construct defined as a belief in one's ability to organize and execute specific tasks to complete a job (Bandura, 1997, p. 3). Numerous studies have examined the self-efficacy of novice teachers. Research has indicated that individuals who see themselves as more self-efficacious are likely to be more resilient amidst challenging circumstances and have more significant positive experiences (Arcelay-Rojas, 2019; Bojczyk et al., 2018; Burik & Macuka, 2018). Both Bandura (1997) and Jordan (2017) recognized that self-efficacy beliefs are produced through experiences where behavior is modeled and mentored through the greater community. Bandura's social learning theory and Jordan's relational cultural theory (RCT) purport that the successful completion of a task increases self-efficacy

underscoring the individual's confidence to succeed while building empowerment, which leads to resilience. Investigating early teacher and parent educator self-efficacy will give insight into how to empower the homeschooling parent and build homeschooling parents' confidence in teaching. Additionally, gaining a better understanding of how homeschooling is practiced will help leaders in homeschooling communities to equip homeschooling parents with the proper tools for a successful homeschooling program.

Self-efficacy of Classroom Teachers

According to Bandura (1977), emotion contributes to a positive or negative experience with a task, and self-efficacy predicts positive and negative emotions. Buric and Macuka (2018) conducted a two-phase quantitative correlational study to examine teachers' emotions concerning work experience. In the fall of 2015, Buric and Macuka (2018) polled a convenience sample of 1,976 teachers to complete a survey. In the spring of 2016, approximately half of the original sample (n = 941) agreed to participate in the final study (Buric & Macuka, 2018).

In the first phase of the study, participants were asked by school psychologists to complete and return the survey within two weeks, and the second part of the study repeated the same procedure. The final sample consisted of 157 males, 777 females, and seven undeclared, with an average of 14.87 years of experience as a teacher. The participants were employed in schools in surrounding areas of Croatia. Participants' responses were coded, and three scales of measures were used. Emotions were measured with the Teacher Emotion Questionnaire (TEQ; Buric et al., 2017), work engagement was measured with the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003), and self-efficacy was measured with the Teacher Self-efficacy Scale (Schwarzer et al., 1999). The TEQ and the UWES were measured at both points of the two-phase study, and the self-efficacy scale was measured in the first phase (Buric &

Macuka, 2018).

Correlational analysis and a descriptive statistical analysis across both phases of the study were conducted, and self-efficacy was used as a predictor (Buric & Macuka, 2018). Further, the results indicated a positive correlation between positive emotions ($\beta = .41$, $p < .001$) and work engagement ($\beta = .53$, $p < .001$). Because self-efficacy was only measured at the onset of the study and not over both phases, the results gave a partial account of the effect self-efficacy had on emotion. Still, previous research substantiates the predictive power of self-efficacy (Arcelay-Rojas, 2019; Bojczyk et al., 2018). Moreover, the results of Buric and Macuka's (2018) study indicated that teachers with a strong sense of competence regarding work requirements have a positive emotional outlook regarding teaching. Similarly, homeschooling parents who are intentional in planning and implementing their homeschooling program find homeschooling a positive experience (Morse, 2019; Thomas, 2016a, 2016b)

Like Buric and Macuka (2018), Mieghem et al. (2022) identified the human element as a contributing factor in positive self-efficacy among teachers. According to Mieghem et al. (2022), the self-efficacy of teachers who work with students with special educational needs (SEN) is affected by the knowledge the teacher has or does not have regarding students' needs. Therefore, Mieghem et al. (2022) investigated the effect of support on teacher self-efficacy. Participating schools in Belgium were sent a link to the survey, and school leaders were asked to send the link to an online questionnaire to the schoolteachers. Of the 610 teachers who responded to the survey, 486 were female. The years of teaching ranged from three months to 40 years, with almost half (44.9%) having taught for seven to 18 years. All the participants were working with students with SEN and students without SEN at the time of the study and were asked to complete two surveys, one for students with SEN and one for students without SEN (Mieghem et al.,

2022).

Multiple sub-scales of the Dutch version of the Student-Specific TSE Scale (Zee & Koomen, 2015) were measured to examine teacher self-efficacy. The subscales measured were instructional strategies, behavior management, student engagement, and emotional support. Each subscale was shortened to four questions. To ensure strong internal reliability, self-efficacy scores were based on the average of all subscale scores for students with SEN (α = .95) and students without SEN (α= .96; Mieghem et al., 2022). Teachers were asked to record the degree of effectiveness for nine sources of support when working with students with SEN. Some of the most effective supports for teacher self-efficacy were emotional support (M = 2.93), support outside of the classroom (M = 2.57), materials (M = 2.48), and coaching (M = 2.45). The researchers performed a multiple regression analysis to determine the relationship between teacher self-efficacy and resources concerning working with students with SEN and cooperative sources (p = .008; Mieghem et al., 2022).

Mieghem et al. (2022) discovered the importance of building teachers' self-efficacy through support from the school. Similarly, homeschool groups offer homeschooling parents a sense of community and support. Additionally, homeschool groups help homeschooling parents with additional resources to support home education which builds the confidence of homeschooling parents (Morse, 2019). Mieghem et al. (2022) discovered that classroom teachers had high self-efficacy when the support of other teachers was available. Moreover, the more resources utilized in the teaching process, the more confident and empowered the teachers felt. When families choose to homeschool, parents become the teachers for their children, and homeschooling parents, like teachers, feel supported when others come alongside to encourage and when equipped with resources to enhance their children's education (Morse, 2019).

Mentoring is viewed as a co-partnering opportunity for experienced and novice teachers to share ideas and experiences to encourage and support one another (Cavanagh & King, 2020). Jordan's (2017) RCT model emphasizes the importance of peer-group support and partnering together on individual growth. Through a critical constructivist perspective, Cavanagh and King (2020) explored the experiences of 55 preservice teachers who were enrolled in New South Wales University and were invited to participate voluntarily in an eight-week peer-group mentoring (PGM) program. Of the 55 participants, 15 preservice teachers participated in all eight-week sessions (Cavanagh & King, 2020).

One of the two researchers organized and initiated each session. Each session consisted of informal activities, teatime, and discussion. Participants were asked to complete a weekly questionnaire, of which 83 were collected. Participants were invited to participate in an interview at the end of the eight-week program, and six accepted the invitation. Two interviewees agreed to be interviewed together, and the remaining four were interviewed individually (Cavanagh & King, 2020). Interview questions were emailed to the six interviewees. Three preservice teachers submitted written responses prior to the interview, and three brought written responses to the interview. One of the researchers wrote responses and notes at each interview to capture the essence of each participant's experience (Cavanagh & King, 2020).

Data analysis was conducted in two phases and completed by a research assistant who did not participate in the PGM program (Cavanagh & King, 2020). The researcher read and reread the participants' responses in the initial phase. Then, through multiple readings, the researcher understood and created the responses and created tentative codes for emerging themes. In the second phase, data were organized into codes, sorted into categories, and merged into themes.

Three of the top themes were the role of professional standards, confidence to teach, and collaborating with colleagues (Cavanagh & King, 2020).

The results of Cavanagh and King's (2020) study indicated that preservice teachers voiced a better understanding of the teaching regulations when other professionals in the teaching field supported them. Through collaboration and networking with experienced teachers, preservice teachers felt a part of something bigger than themselves, a sense of belonging. A common theme in the data was related to the participants' self-efficacy. The preservice teachers recognized the support received through the PGM program as a catalyst for increased confidence in teaching. Like Buric and Macuka (2018) and Mieghem et al. (2022), the participants in Cavanagh and King's (2020) study discovered growth through sharing ideas and experiences with others in the profession. Homeschooling parents seek similar experiences found through participation in homeschool groups (Morse, 2019).

Researchers involved with early teacher service training have explored ways to enhance a novice teacher's confidence, resilience, and empowerment (Arcelay-Rojas, 2019). Through a qualitative design, Arcelay-Rojas (2019) provided insights into the experiences of 10 secondary-level preservice teachers from a private accredited university on the island of Puerto Rico. The researcher collected data from five participants through two 90-minute focus groups. Interview questions gave greater depth and breadth to the participants' opinions. Follow-up questions were developed through the student teaching process and the primary constructs of Jordan's (2017) model of relational resilience. Data from the focus groups were recorded and transcribed, and themes were identified and categorized according to Jordan's RCT model's primary constructs: mutuality, empowerment, and development of courage. The three themes derived from the study added to the participants' self-efficacy and desire to persevere through the first years of teaching.

For example, one participant stated, "I consider myself resilient because I have been determined to become a teacher amidst all the challenges" (Arcelay-Rojas, 2019, p. 377). Like previous research, Arcelay-Rojas (2019) discovered that a mentoring system and support for a teacher's well-being benefited new teachers.

According to Arcelay-Rojas (2019), an established environment that supports teacher self-efficacy leads to individuals in the teaching profession who are confident in their ability to perform and have a sense of fulfillment in their career choice. Specifically, when early teachers are given opportunities to learn from more experienced professionals, novice teachers are empowered to independently overcome challenges encountered in the classroom (Arcelay-Rojas, 2019). In addition, previous research recognized that establishing mentoring relationships with novice and experienced individuals increased confidence and self-efficacy, which added to the resilience of early teachers (Arcelay-Rojas, 2019; Cavanagh & King, 2020). Supporting Jordan's (2017) RCT model, Mieghem et al. (2022) emphasized the importance of teachers partnering to build and encourage confidence in one another. Understanding the connection between self-efficacy, empowerment, and new teachers gives insight into how to support novice homeschooling parents.

Self-efficacy of Parent Educators

Morse et al. (2022) performed a qualitative eight-phase longitudinal study to explore homeschooling parents' experiences. Participants were randomly selected from a sample of Australian adults. All parent participants spoke the English language and had access to the internet. The first seven phases (P1-P7) took place between March and June 2020, and the last phase (P8) took place in March 2021. Analyses were conducted during phases P4, P7, and P8.

The sample of 1,296 participants included participants who homeschooled one or more children during the COVID-19 lockdown (*N*P4 = 176), (*N*P7 = 145), and (*N*P8 = 57).

Demographics were completed in P1, participants' experiences were described in P4, participants were asked what they would do differently in P7, and participants were asked to reflect on homeschooling in the future in P8 (Morse et al., 2022). The participants' experiences were reported and coded for themes and subthemes. To clarify concepts, the research team discussed analyses regularly. One of the themes to emerge from the study was homeschooling parents' self-efficacy (Morse et al., 2022). Like novice teachers, participants in the study felt additional support would increase parent teaching confidence. Although most challenges participants experienced related to the inability to plan for homeschooling, parents did suggest external support systems would make homeschooling parents' job easier (Morse et al., 2022).

Bandura (1977) suggested that the most helpful way to investigate self-efficacy with a multidimensional topic such as parenting is through combining the efficacy information of domain levels. Utilizing a convenience sample, Mouton and Roskam (2015) recruited 42 participants from a longitudinal research program conducted at the Psychological Sciences Research Institute of the University of Louvainla-Neuve and performed a quasi-experimental micro-trial to examine parenting and self-efficacy behavior (SEB) through Bandura's social learning theory model. Five domain-specific activities were evaluated: "teaching, playing, providing instrumental care, nurturing or disciplining their child" (Mouton & Roskam, 2015, p. 2488). In addition, participants were made aware of the nature of the study through social media outlets and leaflets distributed in surrounding schools. For participation in the study, small rewards such as coupons or entry tickets to events were given (Mouton & Roskam, 2015).

Participants were placed in mother-child dyads. Dyads were randomly selected and placed in either the control or experimental groups. The control group consisted of 11 dyads, with the mothers' median age of 36.45 years and the children's median age of four years and nine months. The experimental group consisted of 11 dyads, with the mothers' median age of 36.68 years and the children's median age of four years and seven months. More than 90% of the mothers in the sample had an education level of university or higher. The procedure consisted of four parts (Mouton & Roskam, 2015).

For the initial stage of Mouton and Roskam's (2015) study, mother-participants were asked to complete three questionnaires at home. The primary experimenter was unaware of the information on the questionnaires, and the questions were only encoded and analyzed after the fourth and final step in the study. Mothers came to the university lab with their children for the second stage of the study, and participants were randomly placed in either a control or experimental group. The experimenter in the experimental group represented herself as an expert in parenting and gave positive feedback to the mothers highlighting the mothers' parenting performance by mentioning the questionnaires completed at home and the child's behavior. All the mothers in the experimental group were told their parenting style and their childrearing practices were exceptional based on previous research. The researchers in the experimental group doted on the mothers' ability to parent. Even though the participants were randomly placed in the experimental group, mothers were shown a false virtual graph ranking the mothers' parenting skills as being in the top 20% of parents who appear to be most effective in parenting (Mouton & Roskam, 2015). The experimenter in the control group said nothing and watched the mother and child interact. For the third step in the study, the mother and child participated in free play and

semi-structured tasks, and the fourth step consisted of debriefing every mother participant without the child present (Mouton & Roskam, 2015).

The primary analysis was the relationship between mothers' SEB and mother-child behavior. Results from the *t*-test demonstrated positive feedback to the mothers enhanced parent self-efficacy, which created positive parenting ($p = .05$) with a considerable effect size ($d = .63$). Mouton and Roskam (2015) demonstrated the power of Bandura's social learning theory. Adding strength to Bandura's social learning theory and consistent with previous research, the study depicted the importance of utilizing positive feedback as an empowerment tool to enhance positive parenting (Aznar et al., 2021; Mouton & Roskam, 2015). Further, the results demonstrated the empowerment the mothers in the experimental group felt after receiving positive praise, adding value to the importance of Jordan's (2017) RCT model on parenting. The results of the study performed by Mouton and Roskam (2015) represented the multidimensional construct of parenting. Therefore, parents' self-efficacy beliefs encompass all aspects of parenting, including parents as teachers. The study's results further contributed to the importance of using social support to enhance parental self-efficacy (Mouton & Roskam, 2015).

Through a quantitative study, Bojczyk et al. (2018) examined mothers' self-efficacy and the home learning environment (HLEP) of 121 mother-child dyads enrolled in one of six rural Head Start programs. The average age of the mothers in the study was 27.57, and over half of the participants were Caucasian ($n = 65$), 42% African American ($n = 51$), 3% Hispanic ($n = 3$), and 2% reported as Other ($n = 2$). At the time of the study, over half of the mothers (52%) were unemployed. The average age of the children in the study was four years-eight months, with 49% males ($n = 60$) and 51% females ($n = 62$; Bojczyk et al., 2018).

Bojczyk et al. (2018) utilized descriptive statistics and correlations to depict a relationship between the constructs that measured maternal self-efficacy and maternal perceptions of the child's school readiness. For example, Cronbach's alpha values depicted maternal self-efficacy and were positively correlated to maternal perception of a child's school readiness ($r = .24$) and HLEP ($r = .31$). The results indicated higher maternal self-efficacy led to higher maternal perceptions of child readiness for school ($p < .005$; Bojczyk et al., 2018).

Empowerment is felt throughout the home learning environment when the mother believes in her teaching ability (Bojczyk, 2018). Further, enhanced maternal self-efficacy leads to higher academic success and strengthens the home learning environment (Aznar et al., 2021; Bojczyk, 2018; Oppermann et al., 2021). A vast majority of homeschooling takes place in the home learning environment, which makes homeschooling parents' self-efficacy beliefs and social supports critical to homeschooling parents' ability to teach.

Burke (2019) conducted a qualitative study to explore home educators' support structures for teaching art. Participants for the study were recruited from popular online platforms and included 193 Australian home educators, of which 175 completed the online survey in full. The researcher attempted to demonstrate the experiences of individuals through the participants' cognitive constructions, so the methodology took a constructivist, epistemological, and ontological approach (Burke, 2019). The survey consisted of multiple-choice and short-answer questions, allowing participants to voice their perspectives on how home educators approach the arts (Burke, 2019).

Inductive, thematic analysis was utilized to develop depth, breadth, and authenticity to the interpretation of the data (Burke, 2019). The multi-step process began with reading through the data and identifying a pattern of themes. Next, the researcher searched for relationships

between themes and patterns between responses to questions. The researcher's documentation of emerging points of interest was recorded in a journal. Next, the data and journal were read, reread, and finally coded. After the first round of coding was completed, the second round of coding that focused on the researcher's questions took place. The second round of analysis yielded five themes, helped the researcher gain a deeper understanding of the challenges of arts learning for home educators, including lack of knowledge and confidence, art resources, limited time, and the scope of knowledge and skills necessary to teach the arts and to meet individual needs.

The results of Burke's (2019) study reflect a relationship between parent-educator self-efficacy and background knowledge. Like Bojczyk et al. (2018), Burke (2019) discovered that parent educators who have confidence in their ability to teach feel empowered in homeschooling. Many participants in the study described their confidence in teaching the arts as severely lacking. The participants noted that hard-to-teach subjects were easy to put off (Burke, 2019). Previous research has demonstrated that outsourcing hard-to-teach subjects lessens the burden for home educators (Burke, 2019; Morse, 2019; Thomas, 2016b). For instance, Thomas (2016a) and Morse (2019) found homeschooling parents utilized homeschool groups to teach the harder subjects for homeschooling parents. Homeschool groups offer parent educators the opportunity to collaborate with other like-minded parent educators and to use community resources to enhance homeschooling practices, which increases homeschooling parents' self-efficacy (Bojczyk et al., 2018; Morse, 2019; Thomas, 2016a).

Homeschooling Parent Self-efficacy and Stress

As a result of the worldwide COVID-19 pandemic, many parents were pushed into homeschooling with minimal resources and external support systems, which led to increased

stress levels in parents (Aznar et al., 2021; Oppermann et al., 2021). At the time of this research, information on the effects of COVID-19 on families and education was still being gathered. Still, COVID-19 has led to more research on parents as teachers. To gauge homeschooling parents' well-being, studies investigating parental self-efficacy, social support, and the effects of stressors on homeschooling parents are slowly evolving (Aznar et al., 2021; Morse et al., 2022; Oppermann et al., 2021). Additionally, recent studies on homeschooling parents present insights into better serving the homeschooling community (Arcelay-Rojas, 2019; Aznar et al., 2021; Morse et al., 2022; Oppermann et al., 2021).

Novice teachers with minimal support have had many adverse effects, including high stress (Arcelay-Rojas, 2019; Buric & Macuka, 2018; Morse et al., 2022). To examine the role of parental self-efficacy and perceived social support on homeschooling parent stress, Oppermann et al. (2021) conducted a nationwide cross-sectional online survey in Germany. Data were collected through a convenience sample of 7,837 participants who were parents of children ages one to six, where participants were 88.3% female and 74.2% highly educated. All participants had children attending daycare during COVID-19 and experienced the mandatory shutdown of daycares.

Oppermann et al. (2021) hypothesized that parental self-efficacy and perceived social supports would be negatively related to parental stress and positively related to home learning activities (HLA). Upon collecting survey results, descriptive statistics and bivariate correlations were analyzed using path analyses. The results indicated that parental self-efficacy (β = -0.20, p < 0.01) and perceived social support (β = -0.19, p < 0.01) were negatively related to parental stress. Perceived social support was positively related to the changes in HLA. Oppermann et al. (2021) discovered that self-efficacy and social supports buffer the adverse effects of stress on

novice teachers and, like previous researchers, realized the importance of social support on parental self-efficacy (Gann & Carpenter, 2019). Like previous researchers, Oppermann et al. (2021) further discovered that social support led to a home learning environment that supports homeschooling (Bojczyk et al., 2018). Research on the COVID-19 pandemic has suggested that novice homeschooling parents faced high stress when exhibiting low self-efficacy (Aznar et al., 2021). The study performed by Oppermann et al. (2021) supports a connection between self-efficacy, social support, and home learning activities and aligns with previous research on parental self-efficacy and social support as protective barriers to parental stress (Bojczyk et al., 2018).

Aznar et al. (2021) performed a cross-sectional quantitative study to investigate the relationship between stress, resources, and parental self-efficacy. The objective of the study was to arrive at an understanding of the experiences of homeschooling parents during COVID-19 and to utilize the information to understand better the relationship between stress and parental self-efficacy (Aznar et al., 2021). Between May 1 and July 24 of 2020, Aznar et al. (2021) used social media outlets to examine 183 United Kingdom homeschooling parents' homeschooling experiences, of which 161 parents were females, 10 were males, and 12 were undeclared. All participants had at least one child homeschooled during the COVID-19 lockdown (Aznar et al., 2021).

Participants completed multiple online questionnaires, including Parents' Confidence and Enjoyment While Home-Schooling and Parenting Their Children, Stress Questions, Cognitive Emotion Regulation Questionnaire (CERQ-Short Version: Garnefski et al., 2001), Kaufman Domains of Creativity Scale (K-DOCS: Kaufman, 2012), and the Creative Self-Efficacy Questionnaire (Beghetto, 2006, 2009). Resources and stress were predictor variables, and

parental self-efficacy and homeschooling experience were identified as outcome variables or criterion. Additionally, reliability analyses were conducted, and scores were strong for parent self-efficacy (α = .81) and homeschooling experience (α = .73; Aznar et al., 2021).

Aznar et al. (2021) examined parents' homeschooling experiences concerning stress and found that the parent's ability to be creative with resources was linked to stress (b = -.26, p = .001), and stress was linked to parenting self-efficacy (b = -.51, p = .001). According to Aznar et al. (2021), parents with higher coping mechanisms reported higher levels of self-efficacy and better homeschooling relationships. Like Oppermann et al. (2021), Aznar et al. (2021) discovered that the ability to think outside of what is ordinary increased creativity which led to higher self-efficacy, aligning with Jordan's RCT and the notion that confidence leads to greater resilience. As the parent educator and role model for the children in the home, the homeschooling parents' ability to adjust to change is critical to the quality of the family and the child's education (Aznar et al., 2021).

A plethora of research has identified Bandura's social learning theory as an intricate component of the development of self-efficacy in novice positions. Aznar et al. (2021) observed a positive correlation between feedback and encouragement from experienced sources and parental self-efficacy (b = .075. p = .001), strengthening Bandura's self-efficacy theory and the importance of social support. Like previous research, Aznar et al. (2021) discovered the importance of programs and support for homeschooling parents.

Parent Self-efficacy and Involvement with Traditional Schooling

A surplus of research exists on the relationship between traditional school support and home learning (Buric & Macuka, 2018; Mieghem et al., 2022; Oppermann et al., 2021; Sukys et al., 2015). Further research suggests that traditional school support leads to greater parental self-

efficacy (Buric & Macuka, 2018; Oppermann et al., 2021). Homeschool groups act as an outside educational resource for homeschooling parents. Like the teacher-parent connection in a non-homeschool setting, the homeschool group empowers novice homeschooling parents to succeed as teachers through positive words, modeling, encouragement, and programming. Understanding the teacher-parent relationship as it exists in a non-homeschool setting helps to further the understanding of the connection between homeschool groups and homeschooling parents.

A quantitative study using descriptive statistics to examine the relationship between mothers' teaching self-efficacy and school support during the 2020 COVID-19 pandemic was conducted by de Jong et al. (2022). The sample consisted of 173 mother-child dyads from 23 schools in the rural Netherlands. Of the 173 children, 65 were in kindergarten (30 boys), 75 were in grade one (46 boys), and 33 (17 boys) were in grade two. The average age of the mothers was 37.5, and the number of mothers with a college degree or higher was above 50%. During the study, the mothers worked no more than 22.5 hours per week (de Jong et al., 2022).

Parents were asked to complete a questionnaire to report the support received from the school during the lockdown period (de Jong et al., 2022). Three scales from the Student-Specific Teacher Self-efficacy Scale (Zee et al., 2016; Zee et al., 2018) were used to measure mothers' teaching self-efficacy. Parents were asked to evaluate the quality of the homeschooling experience. On average, the questionnaire took 45 minutes to complete and consisted of demographics, quality of school support, and parents' teaching self-efficacy. Path analyses were conducted between variables, and the results indicated that the mothers felt more confident about teaching when school support was more substantial ($p < .16$).

Like previous researchers, de Jong et al. (2022) established a relationship between resources outside of the home and parents' self-efficacy. Moreover, the study conducted by de

Jong et al. (2022) is one of the few to examine parents' teaching self-efficacy specifically. Drawing on Bandura's social learning theory, school support affects parents' involvement in the education of their children. Support systems such as homeschool groups may play an essential role in homeschooling parents' teaching self-efficacy.

Sukys et al. (2015) addressed the relationship between parent involvement and parent self-efficacy in a study of 170 parents with children with special educational needs (SEN) between the ages of 12 and 16. The participants' children were enrolled in a mainstream school in Kaunas, Lithuania, and participated in inclusive classes. Just under 90% of the sample was women, and 80% had less than a college or university-level education. The researchers received permission to have personal contact with the participants. Surveys were handed out and completed in the participants' homes. Parents were divided into groups based on their level of education. The 18-item Parental Involvement at School Scale (Eccles & Harold, 1993) was utilized and divided into three subscales, parental involvement at home ($\alpha = .89$), parental involvement with outside activities ($\alpha = .78$), and involvement with the child's teacher ($\alpha = .83$). Cronbach's alpha analysis on all three subscales demonstrated strong internal consistency. The measure was translated from English to Lithuanian, then from Lithuanian back to English. Finally, the two translations were compared using the back-translated version of the measure (Sukys et al., 2015).

Statistical significance was demonstrated between teacher and parent partnerships ($F = 4.00$, $p < .01$). The researchers discovered that parents who perceived that they were on an equal level with teachers were more engaged in activities at home and outside the home. Further, the researchers discovered that the best parent-teacher relationships were those with like-minded individuals (Sukys et al., 2015). The underlying initiative of homeschooling groups is to offer

support to homeschooling families (Morse, 2019). Although homeschool groups vary in course and activity offerings, homeschool organizations are administered by homeschooling parents and for homeschooling parents. Therefore, everyone involved is moving toward a common goal.

Research on homeschooling is in the early stages of uncovering the many barriers homeschooling parents face. However, current research on homeschooling has revealed that homeschool groups fill the void of uncertainty for novice homeschooling parents and encourage homeschooling parents with knowledge and expertise (Gann & Carpenter, 2019; Guterman & Neuman, 2017; Morse, 2019; Thomas, 2016b). To understand the relationship between homeschool groups and homeschooling parents' self-efficacy, it is essential to understand the role homeschool groups have in homeschooling practices.

Homeschool Groups

Homeschool Group Involvement

Morse (2019) conducted a quantitative study investigating parents' involvement with homeschool support groups. The target population was families who were homeschooling in the southeastern part of the United States in the 2013-2014 school year. An email invitation introducing the researcher as a homeschooler and member of a well-known homeschool organization was sent to 16 homeschool groups totaling 1500 members requesting parent participation. A second request was sent five days after the first, and a final request was sent 12 days after the initial email. The survey was closed eight days after the final request was sent out. The sample size for the study was (n = 278) and the average years of homeschooling were eight and a half years. Over half of the study participants enrolled their children in private or public schools before homeschooling.

The study consisted of a 33-question questionnaire divided into five sections (Morse (2019). Section one examined how homeschooling parents used homeschool groups and section two questioned what parents deemed essential in a homeschool support group. Section three examined parent satisfaction with homeschool groups, and section four focused on parents' perception of parent involvement within the homeschool support group. Finally, section five observed how homeschool organizations are developed and used by homeschooling parents as a support system. Descriptive statistics were conducted and analyzed through SPSS.

The results of the study indicated that the parent participants used homeschool groups primarily for support with curriculum and teaching methods ($N = 247$, $M = 2.74$, $SD = 1.225$) and were satisfied with this aspect of homeschool support ($N = 231$, $M = 3.82$, $SD = .85$). While parents are both the administrators and parents of students enrolled in the homeschool groups, parent satisfaction with the level of parental involvement that is encouraged was high ($N = 233$, $M = 4.33$, $SD = .839$) which suggests parents feel a sense of equal footing or like-mindedness. Previous research suggests that being of one mind with a common goal is critical to a successful relationship between the parent and the out-of-home support partnership (Sukys et al., 2015).

Through a quantitative correlational study, Guterman and Neuman (2017) examined the relationship between parent personality, homeschooling social encounters, and the level of structure of the homeschool. The researchers hypothesized that an extroverted parent and a structured homeschool environment would lead to more social encounters for the homeschooling family. The participants were 139 Israeli parents of homeschoolers in a homeschool group, of which 103 were female, and 36 were male (Guterman & Neuman, 2017). Of the 139 families in the study, 131 were married, the mother was the primary teacher in 105, the father was the

principal teacher in four, and 30 of the families shared teaching responsibilities. Further, the participants were told about the study in advance.

Three surveys were utilized, including the Big Five inventory (BFI) to examine parent personality, a parental attachment questionnaire to examine the relationship between parent and child, and a demographic questionnaire to include socioeconomic variables and hours devoted to social encounters and schooling. Ninety-two percent of the participants completed the questionnaire. Pearson correlations were calculated, and data were analyzed in stages, first through hierarchical regression analysis and then a five-stage final regression analysis (Guterman & Neuman, 2017).

Due to the low involvement of the fathers in the study as the primary contributor to homeschooling, the results included only mothers (Guterman & Neuman, 2017). However, several significant results were found in the Guterman and Neuman (2017) study. First, the more extroverted the mother was, the greater the effect on the child's social encounters ($\beta = .18$, $p < .05$). In other words, if mothers enjoyed the social activity and group involvement, the family would utilize homeschool groups and activities more frequently.

Mothers' agreeableness was a contributing factor in the child's social involvement as well. The mothers' agreeableness was positively correlated to social encounters ($\beta = .15$, $p < .05$), but there was no significant correlation found between agreeableness and social encounters of mothers with large families ($\beta = -.05$, $p > .05$). Moreover, mothers with a low level of education demonstrated significantly less agreeableness and were less likely to participate in social encounters ($\beta = .29$, $p < .05$).

The most pronounced relationship in Guterman and Neuman's (2017) study was the number of hours a mother puts into homeschooling and a child's social encounters ($r = .29$, p

< .01). In other words, the more time a mother puts into schooling her children positively correlated with the number of social activities in which the homeschooling family was involved in. Like Morse (2019) and Thomas (2016b), Guterman and Neuman (2017) discovered mothers who set goals, establish a schedule, and maintain a structured environment utilized social opportunities and homeschool groups more frequently.

As seen in previous research, the degree of parental involvement played a significant role in homeschooling practices (Morse, 2019; Guterman & Neuman, 2017). Specifically, in the Morse (2019) study, participants indicated that the top three key elements of parental involvement in regards to homeschool groups were to be given opportunities to learn new curriculum and instruction ($N = 228$, $M = 3.64$, $SD = 1.127$); to be given opportunities to volunteer or assist with support group needs ($N = 231$, $M = 3.92$, $SD = 1.040$); and to be given the opportunity to learn of community events, activities, and resources ($N = 230$, $M = 3.98$, $SD = .995$).

Conscientiousness, extroversion, and agreeableness were personality factors that contributed to a homeschooling family's social encounters (Guterman & Neuman, 2017). Like Morse (2019), Guterman and Neuman (2017) found parents with conscientiousness were willing to put effort into creating a positive homeschooling experience. Extroverted parents found it easy to make friendships and build and support community. Finally, agreeableness was an attribute that was shown to bring comfort and kindness to an environment (Guterman & Neuman, 2017). Understanding how the three personality factors in the Guterman and Neuman (2017) study influence homeschooling parents' choices to get involved in support systems gives insight and understanding into homeschooling parents and homeschooling practices.

Thomas (2016a) explored the motivations of homeschooling parents. More specifically, the study aimed to understand homeschooling parents' curriculum and instruction for home learning using an ethnographic approach to capture the homeschooling culture (Thomas, 2016a). Multiple sources of data collection were used, including a survey, interviews, and reflexive journaling. Initially, 830 emails were emailed to homeschool directors throughout the United States of America. The emails contained a link to access the survey. Directors were asked to distribute the emails to local homeschoolers. Further, homeschooling parents were asked to invite homeschooling friends to participate. The use of convenience and snowball sampling made way for a large sample of 1,282 participants across 49 states.

The survey consisted of 20 closed and open-ended questions that focused on the homeschoolers' academic schedule, time spent, and routine. The survey was analyzed through Qualtrics, and the results were placed in a spreadsheet (Thomas, 2016a). One thousand fifty-five of the 1,282 original participants completed the survey in full. Therefore, the results of the survey yielded an 82.3% completion rate. Upon completing the survey, participants were allowed to request to be interviewed. Of the 500 requests, nine interview participants were chosen. The selection of the nine interviewees was based on the order in which participants responded and the participant location of residency: Northeast, South, Midwest, and West America. The semi-structured interviews were categorized through a multi-step process. First, the comments were placed into general categories, then broken down into themes (Thomas, 2016a).

Community resources was a theme that developed from the results of Thomas's (2016a) study. The results of the study indicated the importance homeschooling parents place on class instruction and outside activities and can be seen through the statement of the following participant "We schedule around community resource classes and activities. Then we build in

solid basic time for math and language arts" (Thomas, 2016a, p. 2084). Homeschooling parents do not intend to "go at it alone" when it comes to teaching their children. As Thomas (2016a) pointed out, many homeschooling parents establish the home learning environment based on the homeschool group connections the family has built.

Utilizing the previous participant sample and focusing the survey questions on curriculum and instruction, Thomas (2016b) explored educational routines across homeschooling families. Thomas's study revealed four common themes among the 1,055 participants' results: collaboration, community, faith, and individualized instruction. Additionally, involvement in outside activities and classes appeared as a common thread across participants' daily schedules. Finally, in line with Bandura's social learning theory and Jordan's relational resilience model, Thomas (2016b) discovered that a critical component of the success of homeschooling parents is the collaboration of likeminded families that is found in local homeschool groups.

Similarly, Carpenter and Gann (2016) explored the educational activities of high schoolers in homeschooling families. The researchers used a qualitative case study approach to produce depth and breadth of the participants' experiences. Case study research requires an "up close and personal" presence when conducting the research (Creswell & Creswell, 2018). Hence, three parents from a co-op with at least one student taking high school courses were purposefully selected based on their relationship with the researchers. Data sources were triangulated through observations, interviews, field notes, documents, and a research journal. Observations and field notes were followed up with interviews to confirm documentation. Member checks established credibility, and the researcher utilized a research journal to document the process.

Interviews and observations were analyzed through audio recording and transcription. Codes were created from transcripts and themes, and sub-themes were developed. According to

Carpenter and Gann (2016), two main findings from the study were networking and homeschooling co-ops. One of the participants commented, "It is kind of neat visiting with other homeschool moms," and even "when you have homeschooled for a long time, you still find out new things from different moms" (Carpenter & Gann, 2016, p. 330).

All three parents had at least one of their children enrolled in a local homeschool group or co-op. Another participant summed up her feelings when stating: "We like the co-op…I love the co-op… It would be a really good day for my high schoolers to stay home and be able to do schoolwork, but I really love the science labs" (Carpenter & Gann, 2016, p. 330). Whether educational or social, Carpenter and Gann (2016) discovered homeschool groups filled a need for the participants in the study. Like Thomas (2016a) and Thomas (2016b), Carpenter and Gann (2016) found homeschooling parents search for community and engagement.

Gann and Carpenter (2019) conducted a study to identify STEM activities used in a homeschooling community. The two-phase qualitative case study was designed to capture the parent's perspective as the parent educator. Twenty-nine parents and guardians from a homeschool group in the southern part of the United States were purposefully selected to participate in the study. Ten chose to participate in the second phase. The parents were from one homeschool group who met once a week during the school year to provide academic courses to students. All the participants had at least one student enrolled in a high school course through the homeschool program (Gann & Carpenter, 2019).

The study's first phase consisted of an online questionnaire distributed by the director of the homeschool group (Gann & Carpenter, 2019). Participants were asked to click the link and respond to the open-ended questions that reflected on teaching style, methodology, and STEM activities. Upon completing the questionnaire, the participants were asked if they would like to

participate in phase two of the study. Ten participants volunteered to participate in follow-up observations and semi-formal interviews. Data were collected and analyzed (Gann & Carpenter, 2019).

To effectively analyze the data, the researchers read the questionnaires, observation field notes, and interview transcripts to identify patterns, trends, and themes in the data. Additionally, the results were validated through the triangulation of multiple forms of data. Finally, data were coded and categorized into themes and subthemes. Three themes emerged after the study, which included an eclectic mix of homeschooling styles, a reliance on homeschool groups, and the role of the parent as facilitator and manager (Gann & Carpenter, 2019).

Gann and Carpenter (2019) discovered the support homeschool groups offer homeschooling families is essential in homeschooling practices and builds confidence in homeschooling parents. Whether to gain knowledge on the administrative requirements for homeschoolers (Lyubitskaya & Polivanova, 2022), for social-emotional bonding (de Jong et al., 2022), or to gain content knowledge (Gann & Carpenter, 2019; Morse, 2019; Thomas, 2016b), homeschooling parents' self-efficacy was increased through participation in homeschool groups. The findings from Gann and Carpenter's (2019) study and previous studies support the proposed study's hypothesis that homeschool groups positively influence homeschooling parents' self-efficacy.

Homeschooling Barriers

Lyubitskaya and Polivanova (2022) performed a mixed methods study investigating parent participation in homeschooling. The purposeful snowball sample was selected from popular social media outlets for homeschoolers in Russia. The participants consisted of 33 Russian mothers who participated in the interviews and 151 Russian parents who participated in

the online survey, of which 93% were mothers. The average age of the survey participants was 37 years; 57% had three or more children, 85% held a university degree, and 50% worked a job while homeschooling. The study was conducted in several phases between 2015 and 2019 (Lyubitskaya & Polivanova, 2022).

Between 2015 and 2016, the initial interviews with five participants were conducted (Lyubitskaya & Polivanova, 2022). The goal of the five interviews was to identify a need to survey the homeschooling population. From 2017 to 2019, 54 participants were interviewed. Of the 59 participants, 33 had homeschooled for two years or more or were involved in homeschool groups and were selected to participate in a final interview. The interviews were 30-60 minutes, and the questions consisted of topics surrounding reasons for homeschooling, background knowledge of administrative duties of homeschooling parents, social-emotional relationships, and problems in homeschooling. The survey comprised two sections, including demographic data and the application of homeschooling (Lyubitskaya & Polivanova, 2022).

Data were analyzed for themes based on Russian transcripts and translated into English (Lyubitskaya & Polivanova, 2022). Three main themes were identified: the reasons for homeschooling, the problems with homeschooling, and solutions. As witnessed in the Ray et al. (2021) study, the participants in the study reported a need for more understanding of how to get started with homeschooling and how to navigate the administrative process. Further, homeschooling parents felt isolated and misunderstood by family and friends who did not homeschool, which may explain homeschooling parent participants' overwhelming involvement (65%) in homeschool groups (Lyubitskaya & Polivanova, 2022).

Like de Jong et al. (2022), Lyubitskaya and Polivanova (2022) discovered a need for group involvement for homeschooling parents. Having a place where like-minded individuals

collaborate and encourage one another builds confidence and perseverance in the home educator. Jordan's relational cultural theory and Bandura's social learning theory have supported the idea that encouraging one another in a community setting and modeling positive behavior build self-efficacy in individuals, especially individuals who are taking on a new role (Bandura, 1997; Jordan, 2017). With the upsurge in homeschooling, many parents are walking in unfamiliar territory. Homeschool groups and leaders in the homeschooling community could fulfill the needs of the novice homeschooling parent and strengthen homeschooling parents' self-efficacy.

Ray et al. (2021) conducted a quantitative randomized, double-blind methodological study to examine the self-perceived barriers to homeschooling in an underprivileged community. Eight hundred male participants from the state of Georgia were recruited from an online platform, of which 44% were Caucasian, 50% were African American, 3% were Hispanic, 2% were Asian, and 1% were other. Ninety-seven percent of the participants were parents with 40% married, 43% single, 12% divorced, and 6% separated or widowed. Eighty-seven percent of the participants had less than a bachelor's degree. Of the 776 parent participants in the study, 155 were homeschooling their children, and 248 expressed a desire to homeschool in the future (Ray et al., 2021).

The survey consisted of 63 questions that were recoded into 11 themes through factor analysis (Ray et al., 2021). The 11 themes were then categorized based on the participants' views. Three of the themes surrounded social-emotional relationships, two of the themes regarded curriculum and resources, four of the themes were attributed to parents' concerns and experiences, and two of the themes regarded the socialization of the homeschooler (Ray et al., 2021).

Like Lyubitskaya and Polivanova (2022), Ray et al. (2021) discovered that homeschooling parents viewed their lack of knowledge ($p < 0.01$) and inability to understand homeschooling laws ($p < 0.01$) as barriers to homeschooling. Further, participants who desired to homeschool in the future believed the lack of a support system ($p < .01$) would be a struggle. In contrast, participants who were homeschooling did not see a network of support as a problem (Ray et al., 2021). Like previous researchers, Ray et al. (2021) discovered novice homeschoolers, or parents who have not stepped into the role of parent educator but would like to, struggled with teacher self-efficacy (Arcelay-Rojas, 2019; Mieghem et al., 2022; Morse et al. 2022). Moreover, Ray et al. (2021) identified a need for experienced homeschoolers to encourage and support homeschooling parents who are new to home education.

Homeschool organizations have become a critical resource for empowerment and confidence for the homeschooling parent (Morse, 2019; Thomas, 2016a). Previous researchers reported homeschooling resources are sought out, and often, the choice to homeschool is based on the community resources available to the homeschooling family (Morse, 2019; Morse et al., 2022; Thomas, 2016b). In addition, research exists on how homeschool groups motivate and build confidence in homeschooling students. However, research on homeschool groups' effect on homeschooling parents' self-efficacy is scant (de Jong et al., 2022; Morse, 2019). Understanding homeschooling parents' needs and the value homeschooling parents place on social support and community resources is pivotal to identifying the relationship between homeschooling groups and homeschooling parents' self-efficacy. The study conducted by Ray et al. (2021) and previous studies strengthen the hypothesis of the current study and give support to the influence homeschool groups have on homeschooling parents' self-efficacy.

Summary

Chapter II reviewed current literature that reflects the barriers that hinder self-efficacy for classroom teachers and parent educators and provided valuable information on current literature regarding stress and parent involvement as predictors of homeschooling parents' self-efficacy. Additionally, Chapter II provided an overview of current literature demonstrating homeschooling parents' reliance on homeschooling groups.

III. METHODOLOGY

The quantitative, non-experimental study was designed to evaluate the effect parent involvement in homeschool groups has upon parent self-efficacy within the domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being. Chapter III contains a presentation of the study's essential methodological elements of research design, research methodology, sample participants, research instrumentation, data collection, and data analysis.

Research Design

The quantitative, non-experimental research design featuring a survey research approach (Edmunds & Kennedy, 2017) was used to evaluate the effect of homeschool group involvement and homeschooling parent self-efficacy. The data collected included demographic information as well as data associated with the following four domains of homeschooling parents' self-efficacy: content knowledge, required administrative duties, teaching strategies, and social-emotional well-being.

Participants

The target population for the study was homeschooling families. Study participants were limited to parents who were at least 18 years of age and were homeschooling at least one child at the time of the study. The purposeful sample consisted of homeschooling parents in the United States with diverse educational backgrounds of which 75% had a post-high-school education level. The desired sample size at the outset of the study was 100 participants. A sample size of 56 participants was achieved, representing the study's final actionable sample. Participants in the study were predominantly female ($n = 53$), and roughly half of the participants surveyed ($n = 24$)

had three years or less of homeschooling experience. Participants provided information regarding involvement in homeschool groups and their confidence to complete skills and tasks required of homeschooling parents.

Research Instrumentation

The study's research instrument was a researcher-created adaptation of existing standardized research instruments associated with the study's constructs. The involvement in homeschool groups survey was created after reviewing the Teacher Self-Efficacy Scale and Parental Self-Efficacy Scale in Bandura's (2006) "Guide for Constructing Self-Efficacy Scales." The 30-item survey included six sections, including demographics; four domain-specific areas including content knowledge, required administrative duties, teaching strategies, and social-emotional well-being; and one open-ended question. A 5-point Likert scale was used to secure the perceptions of the homeschooling parent's degree of confidence based on the levels of involvement listed below.

A 5-point Likert scale was used to assess participants' involvement in homeschool groups. Level one represented no parent participation in homeschool groups, level two represented parent participation in one homeschool group, level three represented parent participation in two homeschool groups, level four represented parent participation in three homeschool groups, and level five represented parent participation in four or more homeschool groups.

A 5-point Likert scale was used in the study for internal reliability purposes. The most common format used today employs the five categories of "strongly agree, agree, undecided (or neither agree or disagree), disagree, and strongly disagree." The use of such named categories is

user-friendly and has been found to provide acceptable levels of reliability (Dillman et al., 2014, p. 159).

Research Instrument Validation

A pilot study was conducted to evaluate the degree to which data produced with the use of the study's research instrument accurately and reliably addressed the study's overarching construct. A total of 18 homeschooling families were invited to participate in the survey of which 16 families completed and submitted the survey. A Cronbach's alpha level of .89 was achieved in the pilot administration of the research instrument, thereby validating the use of the research instrument for the study purposes.

Research Question and Hypothesis

One overarching research question and hypothesis was stated to address the study's topic and purpose. The following research question guided the study.

Research Question 1

Will study participant level of involvement in homeschool groups exert a statistically significant effect upon the four domains of homeschooling parents' self-efficacy in the areas of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being?

Research Hypothesis 1

H_a 1:

Level of study participant involvement in homeschool groups will exert a statistically significant effect upon the four domains of homeschooling parents' self-efficacy in the areas of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being.

H_a 1a:

Level of study participant involvement in homeschool groups will exert a statistically significant effect upon the domain of social-emotional well-being.

Data Collection

The collection of data was executed through the Survey Monkey platform. The online survey was open for participation for 10 days. A total of 56 participants completed the survey. The Institutional Review Board (IRB) at the sponsoring institution approved the study prior to the data collection process. Data collected through the administration of the study's Involvement with Homeschool Groups Survey were downloaded from Survey Monkey and compiled into an Excel spreadsheet and then exported for formal data analysis. Data analysis and reporting of study findings were conducted using the 29th version of IBM's Statistical Package for the Social Sciences (SPSS).

Data Analysis

Preliminary/Foundational Analyses Analysis

Preliminary analyses of a foundational nature were conducted that included evaluations of missing data, internal reliability, initial descriptive analysis of the dependent variable of the research question, and study participants' demographic information. To evaluate the study's demographic information descriptive statistical techniques were used, including frequencies (*n*) and percentages (%).

The study's survey response data were evaluated using the descriptive statistical techniques associated with measures of central tendency (mean scores), variability (standard deviations; minimums/maximums), standard errors of mean, and measures of data normality (skewness; kurtosis). The descriptive statistical techniques of frequencies (*n*) and percentages

(%) were used to evaluate the extent of data missingness at the person level and for the study's survey response data.

The internal reliability of study participant response to survey items represented on the research instrument was evaluated using Cronbach's alpha. The conventions of alpha interpretation proposed by George and Mallery (2020) were used for alpha levels achieved at the pilot study administration of the study's research instrument and for the final administration of the study.

Data Analysis by Research Question

The research question was addressed using descriptive and inferential statistical techniques. A multivariate analysis of variance (MANOVA) was conducted to evaluate if there were significant differences in the linear combination of the self-efficacy domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being and the levels of participants' involvement in homeschool groups. To further evaluate the effects of homeschool groups upon the four dimensions of the construct of self-efficacy for content knowledge, required administrative duties, teaching strategies, and social-emotional well-being, an analysis of variance (ANOVA) was conducted for each dependent variable in the MANOVA analysis. The threshold for statistical significance of the finding was established at $p \leq .05$. The interpretation of effect sizes (n^2) was addressed using the conventions provided by Sawilowsky (2009).

The assumptions associated with the use of MANOVA were addressed through statistical means and visual inspection of scatterplots. The assumptions included multivariate normality, independence, equal variance, and multivariate outliers (Tabachnick & Fidell, 2019). Multivariate normality was assessed through visual inspection of Q-Q Plots. Independence was

assured and satisfied through the separation of participants by category of participant. Equal variance was assessed through interpretation of Box's M test for population covariance matrices, and multivariate outliers were assessed through the application of Mahalanobis distances (Tabachnick & Fidell, 2019).

Summary

Chapter III contained a presentation of the essential methodological elements associated with the study's commission. The essential elements of the study's methodology included the study's design, participant sample, research instrumentation, data collection, and analysis of data. One overarching research question and concomitant hypothesis were stated to address the study's topic and purpose. A quantitative, non-experimental research design was used for study purposes. A survey research approach represented the study's specific research methodology. Descriptive and inferential statistical techniques were used to analyze study data. Chapter VI contains the formal reporting of study findings.

IV. RESULTS

The study was designed to evaluate the effect of parent involvement in homeschool groups upon homeschooling parent self-efficacy. The construct of self-efficacy was defined through the four specific domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being. A quantitative, non-experimental research design featuring a survey research methodology was used to address the study's topic and research problem. One research question and hypothesis were stated to address the study's overarching purpose. Descriptive, inferential, and predictive statistical techniques were used to analyze study data at the preliminary level and for the research question and hypothesis. The following sections represent the formal reporting of the study's findings.

Descriptive Statistics Findings

Descriptive statistical techniques were used to analyze study data in a preliminary, foundational manner. The following represents the reporting of the findings achieved in the preliminary, foundational phase of the study's data analyses.

Demographic Identifying Information

The study's participant demographic information was evaluated using descriptive statistical techniques. The study's demographic information was specifically addressed using the descriptive statistical techniques of frequencies (*n*) and percentages (*%*). Table 1 contains a summary of findings for the descriptive statistical analysis of the study's demographic

identifying information of participant gender, geographical region, educational level, and years of experience in homeschooling.

Table 1

Descriptive Statistics Summary Table: Gender, Geographic Region, Education Level, and Years of Experience in Homeschooling

Variable	*n*	%	Cumulative %
Gender			
Female	53	94.64	94.64
Male	1	1.79	96.43
Missing	2	3.57	100.00
Geographic Region			
Northeast	51	91.07	91.07
Northwest	1	1.79	92.86
Midwest	2	3.57	96.43
Southeast	1	1.79	98.21
Missing	1	1.79	100.00
Education Level			
High School	4	7.14	7.14
2 Years Post High School	14	25.00	32.14
4 Years or More Post High School	27	48.21	80.36
Certifications	3	5.36	85.71
Bachelor's Degree	7	12.50	98.21
Missing	1	1.79	100.00
Years Experience in Homeschooling			
3 Years or Less	24	42.86	42.86
4 to 9 Years	18	32.14	75.00
10 Years or More	13	23.21	98.21
Missing	1	1.79	100.00

Table 2 contains a summary of finding for the descriptive statistical analysis of the study's demographic identifying information of participant primary household teacher status, homeschool group involvement, Child's homeschool, Homeschool group travel willingness.

Table 2

Descriptive Statistics Summary Table: Demographic Information: Primary Household Teacher Status, Homeschool Group Involvement, Child's Homeschool Groups, and Homeschool Group Travel Willingness

Variable	*n*	%	Cumulative %
Primary Household Teacher Status			
No	2	3.57	3.57
Yes	53	94.64	98.21
Missing	1	1.79	100.00
Homeschool Group Involvement			
1 or Less	16	28.57	28.57
2 to 3	29	51.79	80.36
4 or More	10	17.86	98.21
Missing	1	1.79	100.00
Child's Homeschool Groups			
1 or Less	23	41.07	41.07
2 to 3	28	50.00	91.07
4 or More	4	7.14	98.21
Missing	1	1.79	100.00
Homeschool Group Travel Willingness			
10 Miles or Less	6	10.71	10.71
11-20 Miles	22	39.29	50.00
Over 20 Miles	27	48.21	98.21
Missing	1	1.79	100.00

Descriptive Statistics: Self-Efficacy and Domains of Self-Efficacy

Descriptive statistical techniques were utilized to assess the study's response set data for the primary construct of self-efficacy and four domains of self-efficacy. The study's response data for survey items represented on the research instrument were specifically addressed using the descriptive statistical techniques of frequencies (*n*), measures of typicality (mean scores), variability (minimum/maximum; standard deviations), standard errors of the mean (SE_M), and data normality (skew; kurtosis). Table 3 contains a summary of findings for the descriptive statistical analysis of the study's response set data associated with the construct of self-efficacy

and the dimensions of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being.

Table 3

Descriptive Statistics Summary Table: Self-Efficacy and the Domains of Content knowledge, Required Administrative Duties, Teaching Strategies, and Social-Emotional Well-Being

Self-Efficacy Dimension	*M*	*SD*	*n*	SE_M	Min	Max	Skew	Kurtosis
Content Knowledge	3.58	0.71	56	0.09	1.89	5.00	-0.35	-0.41
Required Administrative Duties	4.33	0.79	56	0.11	2.00	5.00	-1.42	1.89
Teaching Strategies	3.87	0.85	55	0.11	2.00	5.00	-0.47	-0.73
Social-Emotional Well-Being	4.02	0.75	55	0.10	1.75	5.00	-0.94	0.76
Overall Self-Efficacy	3.89	0.58	54	0.08	2.67	5.00	-0.39	-0.49

Table 4 contains a summary of findings for the descriptive statistical analysis of the study's response set data associated with the construct of self-efficacy and its dimensions of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being by study participants' years of experience in homeschooling.

Table 4

Descriptive Statistics Summary Table: Self-Efficacy and the Domains of Content knowledge, Required Administrative Duties, Teaching Strategies, and Social-Emotional Well-Being Study Participant Years of Experience in Homeschooling

Years' Experience/Construct	*M*	*SD*	*n*	SE_M	Min	Max	Skew	Kurtosis
3 Years or Less								
Content Knowledge	3.55	0.68	24	0.14	2.11	5.00	-0.18	-0.37
Required Administrative Duties	4.24	0.72	24	0.15	2.00	5.00	-1.28	1.97
Teaching Strategies	3.89	0.88	24	0.18	2.00	5.00	-0.51	-0.48
Social-Emotional Well-Being	3.83	0.70	24	0.14	1.75	5.00	-0.99	1.58
Overall Self-Efficacy	3.80	0.53	24	0.11	2.67	5.00	0.05	-0.05
4 to 9 Years								
Content Knowledge	3.61	0.80	18	0.19	1.89	4.78	-0.48	-0.49
Required Administrative Duties	4.50	0.61	18	0.14	3.00	5.00	-0.86	-0.23
Teaching Strategies	3.88	0.81	18	0.19	2.50	5.00	-0.42	-1.02
Social-Emotional Well-Being	4.15	0.81	18	0.19	2.25	5.00	-0.95	0.06
Overall Self-Efficacy	3.93	0.62	18	0.15	2.67	4.81	-0.61	-0.72

10 Years or More								
Content Knowledge	3.62	0.69	13	0.19	2.33	4.67	-0.50	-0.54
Required Administrative Duties	4.46	0.88	13	0.24	2.00	5.00	-1.81	2.73
Teaching Strategies	3.96	0.86	12	0.25	2.25	5.00	-0.63	-0.49
Social-Emotional Well-Being	4.19	0.73	13	0.20	2.25	5.00	-1.39	1.93
Overall Self-Efficacy	3.99	0.65	12	0.19	2.67	4.86	-0.87	-0.003

Internal Reliability

The internal reliability of study participant response to the 21 survey items associated with the construct of self-efficacy featured in the study was evaluated using Cronbach's alpha (α). Using the conventions of alpha interpretation offered by George and Mallery (2020), the internal reliability levels achieved in the study across the 21 survey items was very good to excellent. The internal reliability levels achieved for the four dimensions of the construct of self-efficacy and for the overall construct of self-efficacy are reported as follows.

Self-Efficacy Domain: Content Knowledge

Table 5 contains a summary of findings for the evaluation of internal reliability of study participant response to the nine survey items represented on the study's research instrument for the self-efficacy dimension of content.

Table 5

Internal Reliability Summary Table: Self-Efficacy Domain of Content Knowledge

Scale	# of Items	α	Lower Bound	Upper Bound
Content	9	.79	.72	.86

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Self-Efficacy Domain: Required Administrative Duties

Table 6 contains a summary of findings for the evaluation of internal reliability of study participant response to the four survey items represented on the study's research instrument for the self-efficacy dimension of required duties.

Table 6

Internal Reliability Summary Table: Domain of Required Administrative Duties

Scale	# of Items	α	Lower Bound	Upper Bound
Required Duties	4	.86	.80	.91

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Self-Efficacy Domain: Teaching Strategies

Table 7 contains a summary of findings for the evaluation of internal reliability of study participant response to the four survey items represented on the study's research instrument for the self-efficacy dimension of teaching strategies.

Table 7

Internal Reliability Summary Table: Domain of Teaching Strategies

Scale	# of Items	α	Lower Bound	Upper Bound
Teaching Strategies	4	.80	.74	.87

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Self-Efficacy Domain: Social-Emotional Well-Being

Table 8 contains a summary of findings for the evaluation of internal reliability of study participant response to the four survey items represented on the study's research instrument for the self-efficacy dimension of social-emotional well-being.

Table 8

Internal Reliability Summary Table: Domain of Social Emotional Well-Being

Scale	# of Items	α	Lower Bound	Upper Bound
Social Emotional Well-Being	4	.70	.59	.81

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Self-Efficacy: Overall

Table 9 contains a summary of findings for the evaluation of internal reliability of study participant response to the 21 survey items represented on the study's research instrument for the construct of self-efficacy.

Table 9

Internal Reliability Summary Table: Overall Self-Efficacy

Scale	# of Items	α	Lower Bound	Upper Bound
Overall Self-Efficacy	21	.88	.84	.92

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Findings by Research Question

One overarching research question and hypothesis was stated to address the topic, research problem, and purpose of the study. The probability level of $p < .05$ was adopted to represent the threshold for statistical significance. The following represents the study's findings achieved in the analyses associated with the respective research question and hypothesis stated.

Research Question 1

Considering the four domains of self-efficacy identified for the purpose of the study, which dimension reflects the greatest degree of effect for study participants' level of involvement in homeschool groups? A multivariate analysis of variance (MANOVA) was conducted to evaluate if there were significant differences in the linear combination of the self-efficacy dimensions of content knowledge, required administrative duties, teaching strategies, and social-

emotional well-being and the levels of study participants involvement in homeschool groups. The assumption of homogeneity of covariance matrices was assessed through the interpretation of Box's *M* test. The Box's *M* value was non-statistically significant ($\chi^2(20) = 15.27$, $p = .76$), indicating that the covariance matrices for each group of the variable of homeschool groups were similar to one another, and that the assumption was therefore satisfied. The assumption of multivariate outliers was addressed through inspection of Mahalanobis distances compared to a χ^2 distribution. As a result, no Mahalanobis distance exceeded 18.47, the 0.999 quantile of a χ^2 distribution with 4 degrees of freedom (Kline, 2015), and as such, there were no outliers detected in the model. A correlation matrix was calculated to evaluate possible multicollinearity between the four dependent variables in the analysis. All variable combinations had correlations less than 0.9 in absolute value, indicating the results of the MANOVA analysis were not significantly influenced by issues of multicollinearity.

The main effect for the independent variable of level involvement in homeschool groups was statistically significant (F (8, 98) = 2.36, $p = .02$), indicating the linear combination of the dimensions of the construct of self-efficacy in the areas of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being were significantly different among the levels of the variable of homeschool groups. The magnitude of effect for homeschool groups upon the linear combination of the domains of the construct of self-efficacy in the areas of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being were considered large ($\eta^2_p = 0.16$). Table 10 contains the findings for the MANOVA analysis in research question one.

Table 10

MANOVA Summary Table: Effect for Homeschool Group Involvement upon the Domains of Self-Efficacy (Content Knowledge, Required Administrative Duties, Teaching Strategies, and Social-Emotional Well-Being)

Variable	Pillai	*F*	*df*	Residual df	*p*	η_p^2
Homeschool Groups	0.32	2.36	8	98	.02*	0.16

*$p < .05$

Considering the statistically significant effect for homeschool group participation upon the linear combination of the domains of the construct of self-efficacy in the areas of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being, the alternative hypothesis in the research question was retained.

Post hoc Analyses

To further evaluate the effects of homeschool groups upon the four domains of the construct of self-efficacy in the areas of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being, an analysis of variance (ANOVA) was conducted for each dependent variable in the MANOVA analysis.

Self-Efficacy Domain: Content Knowledge

A univariate analysis of variance (ANOVA) was conducted to determine whether there were statistically significant differences in the self-efficacy domain of content knowledge by the variable of homeschool group involvement. The finding was non-statistically significant (F (2, 52) = 0.71, p = .50), indicating the differences in the domain of content knowledge among the levels of homeschool group involvement were all similar (Table 11a). The main effect, homeschool group involvement, was non-statistically significant (F (2, 52) = 0.71, p = .50), indicating there were no statistically significant differences of the dimension of content knowledge by homeschool group level of involvement. The means and standard deviations of the ANOVA for the domain of content knowledge are summarized in Table 11a and 11b.

Table 11a

Analysis of Variance Summary Table: Effect of Homeschool Group Involvement upon the Self-Efficacy Domain of Content Knowledge

Model	*SS*	*df*	*F*	*p*	η_p^2
Homeschool Group Involvement	0.73	2	0.71	.50	0.03
Residuals	26.78	52			

Table 11b

Mean, Standard Deviation, and Sample Size for the Self-Efficacy Domain of Content Knowledge by Homeschool Group Involvement

Homeschool Group Involvement Category	*M*	*SD*	*n*
1 or Less	3.72	0.66	16
2 to 3	3.48	0.63	29
4 or More	3.69	1.00	10

Self-Efficacy Domain: Required Administrative Duties

A univariate analysis of variance (ANOVA) was conducted to determine whether there were statistically significant differences in the self-efficacy domain of required administrative duties by the variable of homeschool group involvement. The finding was non-statistically significant (F (2, 52) = 0.25, p = .78), indicating the differences in the dimension of required administrative duties among the levels of homeschool group involvement were all similar (Table 12a). The main effect, homeschool group involvement, was non-statistically significant (F (2, 52) = 0.25, p = .78), indicating there were no statistically significant differences of the dimension of required administrative duties by homeschool group level of involvement. The means and standard deviations of the ANOVA for the domain of required administrative duties are summarized in Table 12a and 12b.

Table 12a

Analysis of Variance Summary Table: Effect of Homeschool Group Involvement upon the Self-Efficacy Domain of Required Administrative Duties

Model	*SS*	*df*	*F*	*p*	η_p^2
Homeschool Group Involvement	0.27	2	0.25	.78	0.01
Residuals	28.21	52			

Table 12b

Mean, Standard Deviation, and Sample Size for the Self-Efficacy Domain of Required Administrative Duties by Homeschool Group Involvement

Homeschool Group Involvement Category	*M*	*SD*	*n*
1 or Less	4.33	0.76	16
2 to 3	4.35	0.63	29
4 or More	4.53	0.96	10

Self-Efficacy Domain: Teaching Strategies

A univariate analysis of variance (ANOVA) was conducted to determine whether there were statistically significant differences in the self-efficacy domain of teaching strategies by the variable of homeschool groups. The finding was non-statistically significant (F (2, 51) = 0.09, p = .91), indicating the differences in the dimension of teaching strategies among the levels of homeschool groups were all similar (Table 13a). The main effect, homeschool groups, was non-statistically significant (F (2, 51) = 0.09, p = .91), indicating there were no statistically significant differences of the dimension of teaching strategies by homeschool group level of involvement. The means and standard deviations of the ANOVA for the domain of teaching strategies are summarized in Table 13a and 13b.

Table 13a

Analysis of Variance Summary Table: Effect of Homeschool Group Involvement upon the Self-Efficacy Domain of Teaching Strategies

Term	*SS*	*df*	*F*	*p*	η_p^2
Homeschool Group Involvement	0.13	2	0.09	.91	0.00
Residuals	36.68	51			

Table 13b

Mean, Standard Deviation, and Sample Size for the Self-Efficacy Domain of Teaching Strategies by Homeschool Group Involvement

Homeschool Group Involvement Category	*M*	*SD*	*n*

1 or Less	3.86	0.85	16
2 to 3	3.88	0.78	28
4 or More	4.00	1.03	10

Self-Efficacy Domain: Social-Emotional Well-Being

A univariate analysis of variance (ANOVA) was conducted to determine whether there were statistically significant differences in the self-efficacy domain of social-emotional well-being by the variable of homeschool groups. The finding was statistically significant (F (2, 52) = 6.84, p = 002), indicating that there were significant differences in the dimension of social-emotional well-being among the levels of homeschool groups (Table 14a). The main effect, homeschool groups, was statistically significant (F (2, 52) = 6.84, p = .002), indicating there were statistically significant differences for the dimension of social-emotional well-being by homeschool groups levels. The magnitude of effect for the variable of homeschool group level of involvement upon study participant perceptions of the dimension of social-emotional well-being was considered between large and very large. The means and standard deviations of the ANOVA for the domain of social-emotional well-being are summarized in Table 14a and 14b.

Table 14a

Analysis of Variance Summary Table: Effect of Homeschool Group Involvement upon the Self-Efficacy Domain of Social-Emotional Well-Being

Model	*SS*	*df*	*F*	*p*	η_p^2
Homeschool Group Involvement	6.31	2	6.84	.002**	0.21
Residuals	23.97	52			

**$p < .01$

Table 14b

Mean, Standard Deviation, and Sample Size for the Self-Efficacy Domain of Social-Emotional Well-Being by Homeschool Group Involvement

Homeschool Group Involvement Category	*M*	*SD*	*n*
1 or Less	3.52	0.80	16

2 to 3	4.16	0.61	29
4 or More	4.42	0.66	10

H_a 1(a)

Considering the linear combination of the domains of the construct of self-efficacy in the areas of content Knowledge, required administrative duties, teaching strategies, and social-emotional well-being, the dimension of social-emotional well-being will reflect the greatest degree of effect exerted by study participant level of home group involvement. Considering the statistically significant effect exerted by study participant involvement in homeschool groups upon the self-efficacy dimension of social-emotional well-being, alternative hypothesis 1a was retained.

Summary

Chapter IV contained the formal reporting of findings achieved in the study. An exceptional level of internal reliability was achieved for study participant responses to the 30 survey items represented on the research instrument. A statistically significant effect was established for study participant level of involvement in homeschool groups upon perceptions of the self-efficacy construct in the four dimensions of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being. Follow-up post hoc analyses were conducted with the self-efficacy domain of social-emotional well-being identified as the only dimension reflecting a statistically significant effect by study participants' level of homeschool group involvement. Chapter V contains a discussion of the study's findings as presented in Chapter IV.

V. DISCUSSION

The current study was designed to evaluate the effect of parent involvement in homeschool groups upon homeschooling parents' self-efficacy. The construct of self-efficacy was defined through the four specific domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being. Chapter V discusses the connection between homeschool group involvement and homeschooling parents' self-efficacy. Additionally, the researcher discusses the construct of self-efficacy as it relates to the homeschooling parents' social-emotional well-being. Further, study limitations and implications for future practice are addressed. Recommendations for future research conclude the chapter.

Review of Methodology

The current study examined the effect of homeschool group involvement upon homeschooling parents' self-efficacy. A quantitative, non-experimental survey research design was used for study purposes. The study's research instrument was an adaptation of existing standardized research instruments associated with the study's constructs. The 30-question survey included six sections, including demographics, four domain-specific areas, and one open-ended question. In addition, participants answered questions regarding homeschool group involvement and their confidence to complete skills and tasks required of homeschooling parents. A 5-point Likert scale was used to capture the homeschooling parents' degree of confidence, and a 5-point Likert scale was used to assess participants' level of involvement in homeschool groups. The

researcher conducted a pilot study to evaluate the degree to which data produced with the use of the study's research instrument accurately and reliably addressed the study's overarching construct. The Cronbach's alpha was very good to excellent (α = .89).

The sample for this quantitative research study was accessed through social media platforms, utilizing a purposeful sampling technique. The researcher's target population for study purposes was homeschooling families in the United States of America. Participants in the study totaled 56 and were predominantly female (n = 53). Roughly half of the participants surveyed (n = 24) had three years or less of homeschooling experience, and 75% of the participants had a post-high-school education level (n = 41).

The researcher collected data over 10 days through the Survey Monkey platform. Data were downloaded from Survey Monkey and compiled into an Excel spreadsheet and then exported for formal data analysis. The data collected included demographic information, as well as data associated with four domains of homeschooling parents' self-efficacy: content knowledge, required administrative duties, teaching strategies, and social-emotional well-being.

Data analysis was conducted in two phases. Preliminary analyses of a foundational nature were conducted and included evaluations of missing data, internal reliability, initial descriptive analysis of the dependent variable of the research question, and study participants' demographic information. The research question was addressed using descriptive and inferential statistical techniques. The researcher conducted a multivariate analysis of variance (MANOVA) to evaluate if there were significant differences in the linear combination of the self-efficacy domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being and the levels of participants' involvement in homeschool groups. To further evaluate the effects of homeschool groups upon the construct of self-efficacy in the four dimensions of

content knowledge, required administrative duties, teaching strategies, and social-emotional well-being, the researcher conducted an analysis of variance (ANOVA) for each dependent variable in the MANOVA analysis.

Summary of Results

The current study was designed to evaluate the effect of parent involvement in homeschool groups upon homeschooling parents' self-efficacy, as defined through four domains. A statistically significant effect was discovered for study participants' involvement in homeschool groups upon perceptions of self-efficacy in the four domains of content knowledge, required administrative duties, teaching strategies, and social-emotional well-being. Follow-up post hoc analyses were conducted with the self-efficacy dimension of social-emotional well-being, reflecting a statistically significant effect by study participants in homeschool groups.

Discussion by Research Question

Research Question 1

Of the four domains of homeschooling parents' self-efficacy: content knowledge, required administrative duties, teaching strategies, and social-emotional well-being, which domain is most associated with and predictive of study participants' level of involvement in homeschool groups?

Synopsis of Findings

In the overarching research question, the researcher conducted a MANOVA. The main effect for the independent variable of homeschool group involvement was statistically significant, indicating that the linear combination of the dimensions of the construct of self-efficacy on content knowledge, required administrative duties, teaching strategies, and social-emotional well-being was significantly different among the levels of the variable of homeschool

groups (F (8, 98) = 2.36, p = .02). The researcher concluded parents' self-efficacy increased as the number of homeschool groups homeschooling parents were involved in increased. The magnitude of effect for homeschool group involvement upon the linear combination of the dimensions of the construct of self-efficacy, as seen in content knowledge, required administrative duties, teaching strategies, and social-emotional well-being, was considered large ($\eta^2 p$ = 0.16).

Considering the overall statistical findings with the MANOVA, follow-up post hoc analyses were conducted. As a result, non-statistically significant effects were reflected for homeschool group participation upon content knowledge: involvement in one homeschool group (M = 3.72), involvement in two to three homeschool groups (M = 3.48), involvement in four or more homeschool groups (M = 3.69); required administrative duties: involvement in one homeschool group (M = 4.33), involvement in two to three homeschool groups (M = 4.35), involvement in four or more homeschool groups (M = 4.53); and teaching strategies: involvement in one homeschool group (M = 3.86), involvement in two to three homeschool groups (M = 3.88), involvement in four or more homeschool groups (M = 4.00). However, corroborating novice teachers' and homeschooling parents' desire for social support and community with likeminded individuals as demonstrated in previous studies (Arcelay-Rojas, 2019; Buric & Macuka, 2018; Mieghem et al., 2022; Morse, 2019). A statistically significant effect for the level of homeschool group involvement upon social-emotional well-being of homeschooling parents was discovered: involvement in one homeschool group (M = 3.52), involvement in two to three homeschool groups (M = 4.16), involvement in four or more homeschool groups (M = 4.42).

Significance

Although a plethora of evidence-based research has been conducted on teacher self-efficacy and teaching (Arcelay-Rojas, 2019), research on social-emotional support for homeschooling parents is scarce (Morse, 2019). Akin to the positive relationship between experienced and novice traditional schoolteachers, the researcher discovered veteran homeschooling parents emboldened homeschooling parents who were unfamiliar with homeschooling methods. The present study examined the effect of homeschool group involvement upon homeschooling parents' self-efficacy, and the results substantiated the importance of understanding the homeschooling parent-homeschool group relationship. The key implication drawn from the current study is that novice homeschooling parents, like novice traditional educators, gain self-efficacy when supported through a community of likeminded individuals (Buric & Macuka, 2018; Cavanagh & King, 2020).

The purpose of homeschool groups is to support and encourage homeschooling families (Morse, 2019; Thomas, 2016a; 2016b). Involvement in homeschool groups builds confidence in homeschooling parents, which adds value to the homeschooling experience and gives homeschooling parents an opportunity to succeed in unfamiliar territory. In addition, the current study strengthened Jordan's relational cultural theory and Bandura's social learning theory, which point to the importance of self-efficacious behavior when completing a new task. The confidence homeschooling parents gain from experienced homeschoolers is worth noting because previous research suggests parent involvement in homeschool groups has increased homeschooling parents' self-efficacious behavior (Morse, 2019).

As homeschooling parents join homeschool groups, homeschooling parents gain a sense of confidence and resilience that helps them to successfully complete the task of teaching their

children. Previous research makes it clear that shared experiences between novice and experienced teachers are crucial to the success of future educators (Buric & Macuka, 2018; Miegham et al., 2022; Sukys et al., 2015). Likewise, the social-emotional well-being domain of the self-efficacy construct in the present study supports homeschooling parents spending time together, which calls attention to the importance of sharing ideas and experiences with likeminded individuals. Like previous research (Buric & Macuka, 2018; Miegham et al., 2022; Sukys et al., 2015), the current study highlighted the significance of homeschooling parents' involvement with homeschool groups for the purposes of growing and learning with individuals who share a common purpose.

Homeschooling is a growing trend in education across America, and homeschooling parents are turning to homeschool groups as a vital resource in the education process (Ray, 2021). Understanding how homeschool groups can support homeschooling parents will add value to the homeschooling community (Morse, 2019). The current study demonstrated the impact homeschool group involvement has on homeschooling parents' self-efficacy specifically around social-emotional well-being. Like de Jong et al. (2022), the researcher of the present study concluded support systems, such as homeschool groups, play an essential role in the social-emotional well-being of homeschooling parents' self-efficacy. Lack of understanding homeschooling, concerns for the socialization of children, and limited availability of resources can serve as barriers for homeschooling parents to succeed at homeschooling (Ray et al., 2021). Homeschool groups offer support in these barriers and can become a catalyst for helping the novice homeschooler with homeschooling methods (Ray et al., 2021). With the growing number of homeschoolers and the rapid changes in the institution of education, research addressing the relationship between homeschool group involvement and homeschooling parents' self-efficacy

around social-emotional well-being will serve a critical role in helping homeschooling parents feel successful and confident in teaching their children.

Implications for Future Practice

The current study highlighted the significance of the social-emotional well-being needs of the homeschooling parent. Participants in the current study desire to connect and grow in the homeschooling world. The results of the present study indicated homeschooling parents are looking for a welcoming community, a community that will encourage and build parents' knowledge of homeschooling, and a community where parents can foster relationships with one another and grow together through the homeschooling experience.

Although previous research affirms professional development for educators, support structures for homeschooling parents are scarce, and some homeschool educators feel unsupported (Burke, 2019). The present study aided in understanding the importance of homeschool group involvement for homeschooling parents. Homeschool classes for homeschooling parents are a resource that serve as a support structure, giving homeschooling parents a place where they can share learning and new ideas, offer insights into what works and what does not work, and meet individuals that share in a common cause. Additionally, regular meetings that focus on homeschooling parents' task of homeschooling their children will remind parents of the importance of their role in the education of their children.

Experienced homeschoolers in the community should work together to establish effective programming to meet the needs of homeschooling parents. Offering topics that explore the tiresome duties of parenting and the variety of ways to homeschool would help to encourage and build confidence in homeschooling parents. Traditionally, homeschooling is a family affair; where the homeschooling parents go, the children go. Opportunities where homeschooling

parents converse while children play is another way to meet homeschooling parents' self-efficacy needs. Finally, by offering a space for homeschooling groups to meet, local churches can make a significant impact on the lives of homeschooling parents.

Study Limitations

Although the present study yielded valuable information surrounding homeschool group involvement and parents' self-efficacy, the researcher acknowledges limitations that warrant attention. Although the researcher assumed homeschooling parents from across the country would participate in the study, the study was largely a perception of homeschooling parents in the NE. Additionally, the sample was small, reducing statistical power. Of the 56 study participants, 53 were female, and 3 were male. This population is not atypical for a homeschool education setting because, traditionally, the mother is the main teacher in the homeschooling family (Neuman & Guterman, 2021).

Another limitation that cannot be overlooked is within the construct self-efficacy. For the purposes of the present study, self-efficacy was defined based on four domains: content knowledge, required administrative duties, teaching strategies, and social-emotional well-being. The four domains reflected attitudes and beliefs rather than behavior. An individual's attitudes and beliefs are largely subjective and difficult to measure. Participants in the study may have had a bad day, very little time to complete the survey, or may have a negative view of their own ability to perform. All of which can skew the results of the current study.

Finally, the MANOVA identifying covariates were not disaggregated for grade level, which may have skewed the results. Homeschooling parents may have a harder time teaching different ages and grade levels. Some may prefer teaching older children rather than young, while others may have greater confidence teaching younger children.

Recommendations for Future Research

For richness, depth, and breadth, future research should consider studies with a larger and more diverse sample. To control for the effects that might be exerted upon the outcome by certain demographic variables, future studies might consider conducting a multivariate analysis of covariance (MANCOVA), allowing the researcher to examine the effect of each demographic variable on the independent variable of homeschool group involvement. Further, the researcher suggests conducting a linear combination effect for primary and secondary grade levels, which would allow for a better understanding of resources needed by study participants. Dividing grade levels into primary and secondary and examining the effect each covariate has on the independent variables would cut down on error in the results and help the researcher define the areas of need specific to student grade for homeschooling parents.

Recommendations for future research also include taking a deeper look into the time of year the survey research is conducted. When a new school year begins, there is a fresh excitement and energy that homeschooling parents' exhibit. Some seasons are busier and more exhausting than others, and busyness and exhaustion may have contributed to the small sample size.

Additionally, to explore the differences and perspectives of the participants in the current study, future research should consider a follow-up qualitative study. Homeschooling is a growing phenomenon that for some people is misunderstood. To understand homeschooling better, gaining a deep understanding of the participants' experiences will give meaning to the practice of homeschooling (Neuman & Guterman, 2017). Listening, observing, and documenting the stories of the individuals living the homeschooling experience will give deeper insight into how homeschool groups can help meet the self-efficacy needs of homeschooling parents.

Finally, future research should consider gaps in the literature. There is plenty of research on homeschooling students' self-efficacy, but minimal studies have been conducted on homeschooling parents' self-efficacy (Morse, 2019). With the growing number of homeschoolers, it is inevitable that homeschooling parents' self-efficacy will become a growing endowment to their children and to the future success of education.

Conclusion

Homeschooling practices are on the rise and connections amongst homeschooling families are at the highest they have ever been (Morse, 2019; Ray, 2021). Although homeschool group involvement for homeschooling students has been heavily researched, studies on homeschooling parents' involvement in homeschool groups are scant (Morse, 2019). As homeschooling continues to grow, the homeschooling parents' self-efficacy needs will continue to grow as well. Experienced homeschoolers who offer resources and programs to the homeschool community should be aware of the self-efficacy needs of homeschooling parents.

The present study examined the effect of homeschool group involvement on self-efficacy within four domains, of which the effect of homeschool group involvement on homeschooling parents' social-emotional well-being was significant. Homeschooling parents are looking for a community of homeschooling support, specifically around social-emotional well-being. Like the comradery brick-and-mortar schoolteachers have when they connect and share ideas (Arcelay-Rojas, 2019; Cavanagh & King, 2020), homeschooling parents desire this same connection (Burke, 2019). Homeschool group involvement brings both novice and experienced homeschooling parents together to share in the homeschooling experience and to encourage each other as they work toward a common purpose. The current study contributes to the body of knowledge in homeschooling as the study results indicate a greater need for creating

environments where homeschooling parents are building relationships with other homeschooling families and are engaging in activities that build their knowledge of homeschooling.

References

Arcelay-Rojas, Y. A. (2019). Exploring Puerto Rican preservice teachers' resilience: A focus group study. *Journal of Educational Research and Practice, 9*(1), 369-385. DOI:10.5590/JERAP.2019.09.1.26

Aznar, A., Sowden, P., Bayless, S., Ross, K., Warhurst, A., & Pachi, D. (2021). Homeschooling during COVID-19 lockdown: Effects of coping style, home space, and everyday creativity on stress and homeschooling outcomes. *Couple and Family Psychology, 10*(4), 294–312. https://doi.org/10.1037/cfp0000182

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bandura, A. (2006). *Self-efficacy beliefs of adolescents: Guide for constructing self-efficacy scales.* Information Age Publishing, pp. 307-337.

Bandura, A., Adams, N. E., Hardy, A. B., Howells, G. N. (1980). Tests of generality of self-efficacy theory. *Cognitive Therapy and Research, 4*(1), 39–66.

Bojczyk, K., Davis, A., and Rana, V. (2016). Mother-child interaction quality in shared book reading: Relation to child vocabulary and readiness to read. *Early Childhood Research Quarterly, 36*, 404-414. http://dx.doi.org/10.1016/j.ecresq.2016.01.006

Bojczyk, K., Rogers Haverback, H., and Pae, H. (2018). Investigating maternal self-efficacy and home learning environment of families enrolled in Head Start. *Early Childhood Education Journal, 46*, 169-178. DOI:10.1007/s10643-017-0853-y

Buric, I. & Macuka, I. (2018). Self-efficacy, emotions and work engagement among teachers: A two wave cross-legged analysis. *Journal of Happiness Studies, 19*, 1917-1933. https://doi.org/10.1007/s10902-017-9903-9

Burke, K. (2019). The challenges of facilitating arts learning in home education. *British Educational Research Journal, 45*(5), 961-978. https://doi.10.1002/berj.3546

Carpenter, D. & Dunn, J. (2020). We're all teachers now: Remote learning during COVID-19. *Journal of School Choice, 14*(4), 567–594. DOI:10.1080/15582159.2020.1822727

Carpenter, D. & Gann, C. (2016). Educational activities and the role of the parent in homeschool families with high school students. *Educational Review, 68*(3), 322-339. https://dx.doi.org/10.1080/00131911.2015.1087971

Cavanagh, M. & King, A. (2020). Peer-group mentoring for primary preservice teachers during professional experience. *Asia-Pacific Journal of Teacher Education, 48*(3), 287–300. https://doi.org/10.1080/1359866X.2019.1633622

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. (5th ed.). Sage Publications, Inc.

de Jong, P. F., Schreurs, B. G. M., and Zee, M. (2022). Parent-child conflict during homeschooling in times of the COVID-19 pandemic: A key role for mothers' self-efficacy in teaching. *Contemporary Educational Psychology, 70*, 1-11. https://doi.org/10.1016/j.cedpsych.2022.102083

Dennison, A., Lasser, J., Madres, D. A., and Lerma, Y. (2020). Understanding families who choose to homeschool: Agency in context. *School Psychology, 35*(1), 20-27. DOI: 10.1037/spq0000341

Dillman, D. A., Smyth, J. D., and Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method.* (4th ed.). Hoboken, NJ: John Wiley.

Duvall, S. (2021). A research note: Number of adults who homeschool children is growing rapidly. *Journal of School Choice, 15*(2), 215–224. https://doi.org/10.1080/15582159.2021.1912563

Gann, C. & Carpenter, D. (2019). STEM educational activities and the role of the parent in the home education of high school students. *Educational Review, 71*(2), 166-181. https://doi.org/10.1080/00131911.2017.1359149

George, D. & Mallery, P. (2020). *IBM SPSS 26 Statistics step by step: A simple guide and reference.* (16th ed.). Routledge Taylor & Francis Group. ISBN 9780367174354.

Guterman, O. & Neuman, A. (2017). The role of family and parental characteristics in the scope of social encounters of children in homeschooling. *Journal of Child and Family Studies, 26*(10), 2782-2789. DOI 10.1007/s10826-0170773-x

Jordan, V. J. (2017). Relational-cultural theory: The power of connection to transform our lives. *Journal of Humanistic Counseling, 56*, 228-243. DOI: 10.1002/johc.12055

Le Cornu, R. (2013). Building early career teacher resilience: The role of relationships. *Australian Journal of Teacher Education, 38*(4),1. Ro.ecu.edu.au/ajte/vol38/iss4/1

Lyubitskaya, K., & Polivanova, K. (2022). Parental engagement: Why parents in Russia choose homeschooling and what problems they have to solve. Journal of School Choice, 16(2), 191-209. https://doi.org/10.1080/15582159.2021.2018785

Mieghem, A. V., Struyf, E., and Verschueren, K. (2022). The relevance of sources of support for teachers' self-efficacy beliefs towards students with special educational needs. *European*

Journal of Special Needs Education, 37(1). 28-42, https://doi.org/10/1080/08856257.2020.1829866

Morse, A. R., Banfield, M., Batterham, P. J., Amelia, G., Sonia, M., Cherbuin, N., Farrer, L. M., & Calear, A. L. (2022). What could we do differently next time? Australian parents' experiences of the short-term and long-term impacts of homeschooling during the Covid-19 pandemic. *BMC Public Health,* pp. 1–9.

Morse, M.L. (2019). Homeschool support groups: A model for parental involvement in education. *Home School Researcher, 35*(1), 1–9. mmorse@westga.edu

Mouton, B. & Roskam, I. (2015). Confident mothers, easier children: A quasi-experimental manipulation of mother's self-efficacy. *Journal of Child and Family Studies, 24*, 2485-2495. DOI:10.1007/s10826-014-0051-0

Murphy, J. (2013). Riding history: The organizational development of homeschooling in the U. S. *American Educational History Journal, 40*(2), 335-354. Joseph.f.murphy@Vanderbilt.edu

Neuman, A. & Guterman, O. (2017). Homeschooling is not just about education: Focus of meaning. Journal of School Choice, 11(1), 148-167. DOI:10.1080/15582159.2016.1262231

Neuman, A. & Guterman, O. (2021). Different solutions to similar problems: Parents' reasons for choosing to homeschool and social criticism of the education system. International *Journal of Qualitative Studies in Education, 34*(1), 37-54. https://doi.org/10.1080/09518398.2020.1720852

Oppermann, E., Cohen, F., Wolf, K., Burghardt, L., and Anders, Y. (2021). Changes in parents' home learning activities with their children during the COVID-19 lockdown: The role of

parental stress, parents' self-efficacy and social support. *Frontiers in Psychology, 12*, 1-13. DOI:10.3389/psyg.2021.682540

Ray, B. D. (2014, July 10). *Left, right, and online: A historic view of homeschooling.* https://www.nheri.org/home-school-researcher-left-right-and-online-a-historic-view-of-homeschooling/

Ray, B. D. (2020, August 21). *Research facts on homeschooling.*

Ray, B. D. (2021, September 9). *General Facts, Statistics, and Trends.*

Ray, B. D., Shakeel, M. D., Worth, F., & Bryant, V. (2021). Four key barriers affecting the choice to homeschool: Evidence from a fragile community. *Journal of School Choice, 15*(2), 194-214. https://doi.org/10.1080/15582159.2021.1924583

Sawilowsky, S.S. (2009). *New effect size rules of thumb. Journal of Modern Applied Statistical Methods, 8*(2), 597-599. http://digitalcommons.wayne.edu/jmasm/vol8/iss2/26?utm_source=digitalcommons.wayne.edu%2Fjmasm%2Fvol8%2Fiss2%2F26&utm_medium=PDF&utm_campaign=PDFCoverPages

Sukys, S., Dumciene, A., & Lapeniene, D. (2015). Parental involvement in inclusive education of children with special educational needs. *Social Behavior and Personality Research, 43*(2), 327-338. https://dx.doi.org/10.2224/sbp.2015.43.2.327

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics.* (8th ed.). Boston: Allyn and Bacon.

Thomas, J. (2016a). Instructional motivations: What can we learn from homeschooling families? *The Qualitative Report, 21*(11), 2073-2087. https://go-gale-

com.seu.idm.oclc.org/ps/i.do?p=AONE&sw=w&issn=10520147&v=2.1&it=r&id=GALE%7CA486283799&sid=googleScholar&linkaccess=abs

Thomas, J. (2016b). Learning from homeschooling routines. *Journal of Research on Christian Education, 25*(3), 233-250.

Appendix A

Involvement in Homeschool Groups

By participating in this survey, you are indicating that you freely and voluntarily agree to participate in this survey, and you also acknowledge that you are at least 18 years of age.

For the purposes of this survey, homeschool groups will be defined, according to Morse (2019) "organizations where member families cooperatively provide support for homeschooling efforts, social activities, and often educational programming for homeschooled students." Homeschool involvement will be measured based on the parent participation in homeschool groups.

Please rate how certain you are that you can do the activities below.
Rate your degree of confidence by recording a number from 1-5 using the following scale:

1 Not Confident **2** Somewhat Confident **3** Uncertain

4 Confident **5** Very Confident

Content Knowledge

1. Teach Math

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

2. Teach English

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

3. Teach History

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

4. Teach Science

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

5. Teach Writing

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

6. Teach Music

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

7. Teach Art

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

8. Teach Extra-Curricular Activities

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

9. Overall, I am equipped to educate my child

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

State or County Required Administrative Duties

10. Complete a homeschool instruction plan

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

11. Complete proper paperwork for homeschooling

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

12. Report quarterly reports

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

13. Conduct an end-of-year assessment

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

Teaching Strategies

14. Utilize creativity in my teaching

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

15. Teach different modalities (word, logic, picture, music, body, nature, people, self)

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

16. Use manipulatives when I teach

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

17. Teach away from the classroom (desk, table, couch)

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

Social-Emotional Well-Being

18. Complete all the tasks set before me

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

19. Spend time with other homeschooled families

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

20. Engage in activities that build my knowledge of homeschooling

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

21. Reflect on my day

1 Not Confident **2** Somewhat Confident **3** Uncertain **4** Confident **5** Very Confident

22. **Tell me how participating in a homeschool group may have contributed to your confidence in homeschooling.**

Demographics

23. Are you

a. male b. female

24. Are you the primary homeschool teacher for your children?

a. yes b. no

25. How many homeschool groups do you participate in? (Via social connections, field groups, information sessions, and homeschool teaching classes)

a. 0 b. 1 c. 2 d. 3 e. 4+

26. How many years of education do you have?

a. High School (HS) b. 2 years Post HS c. 4+ years Post HS

d. Education Degree e. Certifications

27. How many homeschool groups do your children participate in?

a. 0 b. 1 c. 2 d. 3 e. 4+

28. How many years have you been homeschooling your children?

a. 0-1 b. 2-3 c. 4-5 d. 6-9 e. 10+

29. How far are you willing to travel to participate in a homeschool group?

a.1-5 mi b. 6-10 mi c. 11-20 mi d. 21-30 mi e. 30+ mi

30. Which part of the country do you reside in?

a. Northeast b. Northwest c. Southeast d. Southwest e. Midwest