Communication technology and parent-caregiver relationship quality in early childhood

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A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Human Development and Family Sciences
in the School of Human Sciences

Mississippi State, Mississippi

May 2020
Early childhood is one of the most critical times in a child’s life, and research has shown that quality experiences in an early childhood program can have many positive impacts on a child’s wellbeing. One critical determinant of success within early childhood programs is the quality of the relationship between the parent and caregiver, which is profoundly impacted by communication patterns between the two. As communication technology continues to rapidly develop, there exists a need to explore how technology is used to facilitate communication between parents and caregivers in early childhood programs. By exploring the use of communication technology, we can uncover how this type of communication may promote parent-caregiver relationship quality, which is useful to provide best practice guidelines to inform programmatic efforts. The purpose of this qualitative study was to explore parent and caregiver perspectives regarding the use of communication technology and its perceived contribution to parent-caregiver relationship quality. In order to address the lack of current empirical data, this research used online and face-to-face focus group methodology to explore the topic until saturation occurred. Participants were parents (N=24) and caregivers (N=23) of children five years of age and younger in licensed childcare programs throughout the state of
Mississippi. Study findings indicate that communication technology can be useful in promoting the parent-caregiver relationship quality, but not without caution. Practitioners must consider individual needs, barriers, and concerns of using technology as well. Implications for practice, as well as recommendations for future research, are addressed.
DEDICATION

In memory of my grandmother, Berniece Kearns, who was called home while I was on this journey. She encouraged us to spread our wings and live life to the fullest, but was also the brightest beacon to guide us home. I will never forget the profound impact she made on my life, as well as countless others. I pray I can continue to honor her memory in all that I do. While it was a goal of hers to see me achieve this milestone, I know that she has been with me every step of the way, and will continue to be with me through all of my endeavors.

“The more that you read, the more things you will know.

The more that you learn, the more places you’ll go.”

-Dr. Seuss
ACKNOWLEDGEMENTS

My sincere gratitude and humbled appreciation to my major professor, Dr. Julie Parker, for her never-ending patience throughout this process. I would also like to thank the rest of my committee members, Dr. Angel Herring, Dr. Laura Downey, and Dr. Lori Elmore-Staton for their expert insight as well as guidance and support through this research. I would also like to thank my colleagues at the University of Southern Mississippi, both former and current, for supporting and encouraging me through the many highs and lows.

Finally, I would like to thank my family, who have been my rocks and my source of encouragement and support from the very beginning. Without you all, I would never be where I am today. I owe it all to you.
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CHAPTER I
INTRODUCTION TO THE CURRENT STUDY

Introduction

Early childhood is one of the most critical times in a child’s life (National Association for the Education of Young Children (NAEYC), 2017). Recent studies have investigated the many facets of early childhood on young children’s development, which include the benefits of positive relationships between families and early childhood providers (Barnes, Guin, Allen, & Jolly, 2016; Forry et al., 2012; Hilado, Kallemeyn, & Phillips, 2013). From a family-centered practice mindset, research reveals that quality relationships between parents and caregivers have proven to be an essential variable in a child’s development (Kim et al., 2015). As such, these quality relationships between parents and caregivers are a critical component of the early childhood care and education system and something caregivers continuously strive for (NAEYC, 2017). The inclusion of family partnership indicators in state Quality Rating and Improvement Systems (QRIS), state competencies for early childhood providers, and national professional and performance standards (Porter & Bromer, 2013; Porter, Bromer, & Moodie, 2011) reflect this research. Researchers, advocates, and practitioners highlight the quality relationships between parents and caregivers as a significant aspect of early childhood programs (Kim et al., 2015). These relationships can be promoted by integrating technology to facilitate communication between home and school (Thompson, Mazer, & Grady, 2015).
Theorists, advocates, and current researchers indicate that interactions and communication between parents and caregivers are critical components for building positive parent-caregiver relationships (Bronfenbrenner, 1979; Epstein, 2010; NAEYC, 2017; Sheridan & Moorman Kim, 2015; Swick, 2003), and the use of communication technology (email, text messaging, app and social media platforms) to meet these needs has become a growing trend in this field (Thompson et al., 2015). Nejjai (2012) identifies that technology has revolutionized communication and the dissemination of information. Research shows that communication via technology has become the preferred mode of communication for parents and caregivers in early childhood (Barnes et al., 2016) as well as parents and teachers at the P-12 level (Thompson, Mazer, & Grady, 2015). By analyzing the current use of communication technology and how its use is perceived to promote the parent-caregiver relationship quality, we can gain a more thorough understanding of how communication technology can be used to strengthen the parent-caregiver relationship quality.

**Quality Relationships**

Forry and associates (2012) identified, through an extensive literature review, three broad perspectives that apply to the analysis of parent-caregiver relationships: (a) family support/family-centered care; (b) parent involvement, family involvement, and family engagement; and (c) family sensitive caregiving. These three perspectives resulted in a working model to understand quality relationships that proposes four constructs to use when looking at what influences a ‘quality’ relationship:

- **Attitudes:** The providers’ beliefs and values about the families and children that they serve, which inform their work with families.
• **Knowledge**: The specific information providers have about the families they serve.

• **Practices**: The providers’ interactions and engagement with families in the early childhood setting.

• **Environmental Features**: The tone, physical environment, organizational climate, and programmatic-level resources and supports for providers and families.

The unique element of cultural sensitivity and responsiveness are embedded within these constructs as well (Kim et al., 2015). Additionally, this model conceptualizes the relationship between parents and caregivers as bi-directional. In essence, when parents feel supported, understood, and empowered by programs and caregivers, they may be more likely to become engaged and involved in the childcare program on a regular basis. Kim and colleagues (2015) also note that when families are more actively engaged in programs, this could, in turn, influence caregivers to become more sensitive and responsive to families’ needs.

**Communication**

Leading researchers, theorists, and advocates in the field of early childhood education have identified the interactions and communication between parents and caregivers as critical components of parent-caregiver relationship quality success (Bronfenbrenner, 1979; Epstein, 2010; NAEYC, 2017). Early childhood caregivers should engage and involve parents in communication practices in ways that are reciprocal, egalitarian, and respectful (Sheridan & Moorman Kim, 2015). Halgunseth and colleagues (2009) suggest that improving communication is a primary strategy in promoting strong relationships between parents and caregivers. While there are many variations in the type, frequency, and content of communication, current standards of practice suggest that caregivers should (a) engage parents
through communication that is respectful, open, and honest (Sheridan et al., 2012), (b) utilize two-way communication versus one-way (Gestwicki, 2015), and (c) make efforts to promote reciprocal and respectful relationships with families (Castro, Bryant, Peisner-Feinberg, & Skinner, 2004).

This chapter will provide an overview of the literature that identifies the gaps in the research, the research performed to address this topic, the purpose statement, the theoretical frameworks, the research questions, the nature and significance of the study, and the definitions of key operational terms and words used. The chapter concludes with a summary and a preview of the remaining chapters.

**Background**

As more parents are working outside of the home than ever before, the demand for quality childcare practices comes to the forefront of the profession (NAEYC, 2017). As of 2014, there were 114,000 licensed childcare programs in the United States, which have a combined capacity of serving over 59 million young children (Child Care in America: 2014 State Fact Sheets, 2014). The Bureau of Labor Statistics (2019) states that as of 2018, there are 1,160,600 early childhood educator jobs in the United States. The database of all licensed childcare facilities within the state of Mississippi, maintained by the Department of Health, indicates that as of February 2019, there were 1,449 actively licensed childcare programs, serving 124,192 young children, with 12,597 childcare providers employed in these programs (C. Allgood, personal communication, February 5, 2019).

Given the large number of children and families utilizing early childhood care facilities, and the importance of quality early childhood education (NAEYC, 2017), practitioners must be knowledgeable about best practice. Research-based practices are paramount to programmatic
success and early childhood researchers and practitioners agree that quality relationships between families and caregivers play a significant role in early childhood education (Epstein, 2010; Forry et al., 2012; Kim et al., 2015). It has been found that strong relationships between parents and caregivers are linked with positive outcomes for all: parents, children, and caregivers (Kim et al., 2015). Multiple sources have identified that the interactions and communication between parents and caregivers are critical components of relationship quality development between parents and caregivers in the early childhood setting (Bronfenbrenner, 1979; Epstein, 2010; NAEYC, 2017; Sheridan & Moorman Kim, 2015; Swick, 2003).

Given the importance of interactions between parents and caregivers in early childhood (Epstein, 2010), Bouffard (2008) indicates that educators often ask, “How can we promote more frequent and meaningful communications with families?” (p. 1). Thus, there is a need to identify how early childhood caregivers can most effectively communicate with parents in the early childhood setting. Epstein (2010) identifies that one of the challenges for communication is establishing clear, two-way channels from home-to-school and school-to-home. Epstein (2010) also states that caregivers must review the readability, clarity, form, and frequency of all memos, notices, and other print and non-print communications being used to communicate with parents.

There is minimal research regarding how technology can affect communication, which, in turn, impacts the parent-caregiver relationship quality. The growth and recent advances in the field of communication technology, such as the introduction of smartphones, have had a significant impact on what communication looks like between individuals (Thompson et al., 2015). Prior to the recent increase in communicative technology use, interactions were limited to only face-to-face or telephone conversations. Now, parents and caregivers have a plethora of communication and engagement opportunities through various media outlets (Thompson, Mazer,
& Grady, 2015). It is suggested that research in this area must grow, along with this trend, to inform best practices for early childhood caregivers (Bouffard, 2008; Thompson et al., 2015). Early childhood development literature has identified this paucity in the research and the potential benefits of increasing studies in this area (Barnes et al., 2016; Bouffard, 2008; Thompson et al., 2015).

Bouffard (2008) mentions that even with the growing use of technology, limited research is available that documents how often such methods are being used or whether they are associated with benefits for parents or children. Barnes and colleagues (2016) also state that research is limited regarding how communication technology is effectively used between parents and caregivers in early childhood. Thompson and colleagues (2015) suggest that analyzing new trends in communication technology as it relates to parent engagement would be useful for the field. Finally, Barnes and colleagues (2016) suggest it is important to identify parent preference for communication, as barriers can emerge when there is a misalliance between the parent’s needs and the communication approach of the caregiver. Each one of the studies offers evidence for how and why communication technology may be useful for promoting the parent-caregiver relationship. However, specific research related to the use of communication technology within early childhood programs is limited.

**Problem Statement**

As the field of early childhood education continues to expand, the literature consistently identifies quality relationships, interactions, and communication between the parent and caregiver as essential variables for child and programmatic success (Bronfenbrenner, 1979; Moore, 2002). Current literature also suggests that two-way communication is the foundation to promoting these relationships (Moore, 2002). Thus, improving communication is a primary

Provided the limited research available and gaps in the current literature (Barnes et al., 2016) regarding communication technology and parent-caregiver relationships (Thompson et al., 2015), there exists a need to further explore the use of technology to facilitate communication between parents and caregivers in early childhood programs. This aim of research will, in turn, provide data on how this type of communication may help to promote the quality of the parent-caregiver relationship. As trends in communication technology continue to evolve, exploring the use of communication technology would be useful for the field. This would also provide guidance to inform programmatic efforts (Thompson et al., 2015).

**Purpose Statement**

The purpose of this qualitative study was to explore parent and caregiver perspectives on the use of communication technology and its perceived contribution to the quality of the parent-caregiver relationship. Through focus group sessions for both parents and caregivers in the state of Mississippi, perspectives of both groups were gathered and analyzed, determining the types of communication technology currently used and exploring perspectives on how it may promote the quality of the parent-caregiver relationship. These research results can provide evidence for developing policy and guiding practice within the field of early childhood to have successful communication efforts and, in turn, promote parent-caregiver relationship quality.

**Theoretical Framework**

More comprehensively explored in chapter two, this study falls under three theoretical frameworks. The first two, Urie Bronfenbrenner’s ecological model and Joyce Epstein’s family
engagement framework, focus on the human ecology and relationships portion of this research. Both frameworks provide guidance for, and emphasis on, the value of parent-caregiver relationships and the positive outcomes for young children. These theories are different in that Bronfenbrenner expands his theory to include how variables affect the individual as well as the overall cultural and societal setting (Bronfenbrenner, 1979), while Epstein more narrowly focuses on the child and the family/school/community triad (Epstein, 1995). The third theory, Media Richness Theory (MRT), is used for the exploration of the use of communication technology in this research.

Urie Bronfenbrenner’s ecological systems theory (1979) describes five environmental systems in which an individual interacts. The innermost level, labeled the microsystem, consists of the institutions and groups that most immediately and directly impact the child’s development. These consist of the family, school, religious institutions, neighborhoods, and peers. While all five levels can be integrated into the concept of parent-caregiver relationship quality, this research is explored through his second concentric circle surrounding the child, the mesosystem. The mesosystem level is described as the interconnections between the institutions and groups indicated at the microsystem level. For example, the exploration of the interactions between family and caregivers, and peers and family, occur at this level (Bronfenbrenner, 1979). The mesosystem provides a lens through which to analyze communication between the school and home and how it can impact parent involvement (Coleman, 2013). Communication and parent involvement, in turn, impacts child wellbeing. Coleman (2013) goes on to describe that when there are many and robust linkages among their microsystems, children’s development and education are best supported. Since this research focuses on parent-caregiver relationship quality
and the communication between parents and caregivers, the mesosystem significantly frames this study.

Joyce Epstein’s model of overlapping spheres of influence, similar to Bronfenbrenner’s theory, identifies that the three primary contexts in which the student learns and grows (family, school, and community) can be drawn together or pushed apart depending on personal and institutional actions (2010). Epstein then moves theory into practice by breaking down the interaction of the separate spheres into six major types: (1) parenting, (2) communication, (3) volunteering, (4) learning at home, (5) decision making, and (6) collaborating with the community. Exploration of the current study is through both Bronfenbrenner’s ecological model and Epstein’s spheres of influence and subsequent framework model. Through decades of research, these models are recognized as important theories of early childhood development.

The third theory, MRT, is a framework used to describe modes of communication by their ability to reproduce the information sent. It uses the richness of certain types of communication methods to rank and evaluate each method’s use (Daft & Lengel, 1986). Based on information processing theory, the goal of MRT is to help account for, and address, communication challenges within organizations (Daft & Lengel, 1986).

**Research Questions**

The research questions for this study were designed to explore parent and caregiver perspectives on the use of communication technology and how it contributes to promoting parent-caregiver relationship quality. Qualitative data allowed for more thorough, in-depth research to fully comprehend the study variables. Research questions were: RQ1: How is technology being used by caregivers regarding home to school and school to home communication? RQ2: Does the current method of communication being used by caregivers
align with the parents preferred mode of communication? RQ3: How are communication methods established between parents and caregivers? RQ4: What barriers do parents and caregivers report when utilizing technology to support communication? RQ5: What benefits do parents and caregivers report when utilizing technology to support communication? RQ6: How does technology contribute to parent-caregiver relationship quality in the early childhood setting?

**Nature of the Study**

This study utilized a qualitative design with data gathered through six focus groups with parents and five focus groups with caregivers. It explored the use of communication technology, it’s alignment to parent preferences, how the methods were established, barriers and benefits of using communication technology, and the perceived contribution of communication technology to the parent-caregiver relationship quality. Data underwent thematic analysis to produce narrative results.

**Significance of the Study**

A variety of studies have supported the notion that parent-caregiver relationships in early childhood programs can contribute to a child’s school readiness (Dunst, 2002; Dunst et al., 2002; Mendez, 2010) which is pivotal to academic success. Studies also identify that these parent-caregiver relationships can improve parent-child relationships and parental self-efficacy (Dunst, 2002; Green, McAllister, & Tarte, 2004; Kaczmareck, Goldstein, Florey, Carter, & Cannon, 2004; Kossek, Pichler, Meese, & Barrett, 2008; Small, 2009). As research provides greater awareness and evidence of the importance of parent-caregiver relationships, it is essential to explore how technology can be used to support the parent-caregiver relationship quality.
Halgunseth and colleagues (2009) indicate that improving communication is a primary strategy in promoting strong relationships. By exploring the communication technology component that framed this research, it would reveal data that is significant and useful for the field. Quality practices are informed by analyzing trends in how parents and caregivers use technology as a tool for communication (Thompson et al., 2015). Also, by compiling and analyzing data about perceptions of parents and caregivers regarding communication technology’s perceived contribution to parent-caregiver relationship quality, this research provides a best practice trajectory for the utilization of communication technology in early childhood programs.

Definitions

1. “Caregiver” refers to the primary individual involved in offering non-parental early care and education to children through center-based care (Forry et al., 2012). The caregiver may be a provider with or without a degree.

2. “Parents” are defined as adults parenting children (between the ages of six weeks and five years), either biological, adopted, or foster, who are enrolled in a community-based childcare program.

3. “Communication” is explained as “how people use messages to generate meanings within and across various contexts” (“What Is Communication”, n.d.)

4. “Technology” refers to technologies that provide access to information through telecommunications for this study, which may include the internet, wireless networks, cell phones, and other electronic communication forms (Christensson, 2010).

5. “Center-based care” can be defined as a program that provides childcare services, including early learning opportunities, in exchange for a fee in a non-residential
setting. Usually, these programs are licensed by the state, although some states exempt certain types of programs from licensing (Child Care Aware of America, 2018). For this study, data investigated was from licensed childcare programs.

**Summary**

This chapter introduced the research topic, the problem statement, the purpose statement, the theoretical framework, the research questions, the nature of the study, the significance of the study, and the key definitions of the research. Remaining sections of this study are organized into four more chapters. Chapter two presents a thorough review of the literature related to the research topic, chapter three provides the research design, collection and analysis methods, chapter four presents the findings of the study, and chapter five presents the implications and recommendations based on the current research.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

Many variables impact the quality of the childhood experiences of children, their families, and the professionals who serve them. The examination of different forms of communication technology that are used to promote the parent-caregiver relationship within early childhood education programs is a necessary process to address (Barnes et al., 2016). Leading theorists and advocates in the field of early childhood promote the interactions (Bronfenbrenner, 1979), and act of communication (Epstein, 2010; NAEYC, 2017) between parents and caregivers as critical components to parent-caregiver relationship quality. Barnes and colleagues (2016) state that barriers can emerge when there is a misalliance between parents’ needs and the communication approach of the educator.

This literature review will provide both historical and current research to support the theoretical and conceptual frameworks of the study. The literature reviews the following topics: early childhood education, benefits of positive relationship quality between parents and caregivers, communication between school and home, communication technology, barriers to communication technology in early childhood programs, and the theoretical frameworks used in this study.

Sources of literature were collected using a variety of techniques including internet searches, academic and peer-reviewed journal databases, as well as identification and exploration
of various printed texts. The majority of first-order articles were found employing Mississippi State University and The University of Southern Mississippi’s online database collections using keywords such as “parent involvement”, “parent-caregiver relationships”, “communication”, “technology”, and “early childhood”. Sources used were peer-reviewed articles, published books, and informational websites.

**Early Childhood Education**

Early childhood, defined as all young children from birth through age eight, is one of the most critical times in a child’s life (NAEYC, 2017). This time is thought to be a foundation for all future outcomes: what a child experiences within the first eight years can continue to have an impact through the rest of their life (NAEYC, 2017). This vitally important time, which includes physical, social, emotional, language, and cognitive development, strongly influences an individual’s current and future physical well-being, mental health, competence in academics, economic success, and even criminality throughout the remainder of their life (Campbell et al., 2012). In other words, what happens to a child in the early years is critical and highly influential on the child’s developmental trajectory and life course (World Health Organization, 2017).

The average family’s structure and economic status continue to change. For example, rising trends in mothers’ labor force participation, increases in the number of split-family households, and increases in the number of single-parent households continue to evolve (Laughlin, 2013). Because of this, the need for alternative childcare arrangements has increased (Laughlin, 2013). The most recent study by the U.S. Census Bureau (2017b) using data collected in 2011, states that of the approximately 20.4 million children under age five, roughly 12.5 million (61%) were in some type of regular childcare arrangement. Of these children, almost 33% were in nonrelative care, and 12% were regularly cared for by both relative and non-
relative caregivers (Laughlin, 2013). A separate study, performed by the U.S. Department of Education, looked explicitly at arrangements for four- and five-year-old children. The study found that there are approximately 58% of children enrolled in a program-based early childhood program as their primary care arrangement (Rathbun & Zhang, 2016). The use of program-based care, or organized facilities, has fluctuated but has seen growth overall. From 1985 to 1990, the proportion of preschoolers enrolled in organized facilities rose from 23% to 28%. This rate dropped to around 21% in the late 1990s but rose again in 2011 to 25%. According to Rathbun and Zhang (2016), this number is expected to continue to grow, as more and more families are expected to transition into dual-income households. Additionally, there are increased funding opportunities for childcare programs at the national level (Jackson, 2016). With the percentage of young children enrolled in childcare facilities increasing, and given the knowledge of the importance of the parent-caregiver relationship for a child’s successful development, there is a need for more research on parent-caregiver communication and its perceived contribution to relationship quality between the two (Barnes et al., 2016).

Due to the increase in demand for early childhood programs, professional and political groups have shifted their focus to the importance of higher quality experiences in early childhood. For example, in former President Obama’s State of the Union Address in 2013, he called on Congress to expand access to high-quality early childhood programs for every child in America by putting substantial resources toward investing in high-quality early learning. His proposal, “Preschool for All”, sought to improve quality and expand access to early childhood programs through a cost-sharing partnership with all 50 states (Office of the Press Secretary, 2013). Continuing in President Obama’s path, President Trump’s campaign has also pushed early childhood issues. In his campaign for presidency, he proposed a “Childcare Affordability
Plan”. This plan would allow parents to deduct early childhood program expenses from their income taxes, guarantee six weeks of paid maternity leave, and create new “Dependent Care Savings Accounts” (Jackson, 2016). As of December 2019, some of these efforts are underway. The child care tax credit has doubled ($1,000 to $2,000 per child), further development of bipartisan consideration of national paid family leave has occurred, and the largest ever increase in funding for the Child Care and Development Block Grant (an increase of $2.4 billion) has occurred (Child Care Aware of America, 2020; “White House Principles for Child Care Reform”, 2019), These national initiatives frame the importance given to quality experiences for young children and their families.

The increases in financial support on the national level and the push for higher quality education lead the way for growth in the field of early childhood. According to the Bureau of Labor Statistics Occupational Outlook Handbook (2019), employment of childcare workers is projected to grow 2% from 2018 to 2028, while employment of preschool teachers, also included in the early childhood umbrella, is expected to grow 7% within the same timeframe. More childcare workers and preschool teachers will be needed due to the continued focus on the importance of early childhood education (Bureau of Labor Statistics, 2019. The formalized education system has a plethora of literature regarding K-12 environments and home-to-school connections, but early childhood is significantly different (Blackwell, Lauricella, Wartella, Robb, & Schomburg, 2013). Thus, research needs to explore the use of communication technology to promote parent-caregiver relationship quality in order to inform practice in a research-driven, evidence-based manner. Research-driven practice, in turn, supports the growing profession as a whole.
The Parent-Caregiver Relationship

As described through Bronfenbrenner’s (1979) mesosystem, the relationships between components in the child’s microsystem (i.e. parents and caregivers) exerts a foundational level of influence on a child’s development. As this field is increasingly in demand, early childhood caregivers and professionals must work collaboratively with families to meet the needs of children served. An extensive literature review by Forry and colleagues (2012) proposed there are seven inter-related constructs of parent and child characteristics associated with parent-caregiver relationships. Each of these constructs may affect the parent and caregiver tendency and ability to engage in the parent-caregiver relationship. Characteristics of the parent include:

1. Demographic characteristics of the family may influence the parent-caregiver relationship. For example, family resources may facilitate or hinder the relationship due to the amount of time, or type of technology, parents have for communicating with providers; the family’s cultural background may regulate relationship expectations; or differences in primary language may influence their ability to communicate with the caregiver.

2. Personal characteristics of the parents, such as education, faith/religion, relationship with the child, and personality, may also influence the parent-caregiver relationship. Personal characteristics can affect how an individual relates to others in general, and this can carry over to relating with the caregiver as well.

3. A parent’s physical or mental health may limit the parent’s accessibility or ability to engage positively with a provider.

4. Attitudes, values, and expectations, including the parent’s personal feelings and perceptions of early childhood education, their self-efficacy, and attitudes towards
involvement, may influence their confidence and willingness to participate in a relationship with the child’s caregiver.

5. Characteristics of parental employment may influence a parent’s approach or schedule availability to participate in the parent-caregiver relationship. For example, work schedules, job demands, or nature of employment can be conducive to or hinder participation in engagement with the child’s caregiver.

6. Stressors, like unexpected life events, emergencies, lack of adequate resources, or violence, can impact the relationship as well. These stressors can create barriers that may prohibit the parent or caregiver from actively participating in the relationship.

7. Resources such as geographic proximity, social networks, positive role models, pre-existing relationships, and other sources of community support, can affect the parent’s motivation, confidence, and capacity to engage in the relationship.

Additionally, Forry and colleagues (2012) also identify six constructs of provider/program characteristics that are associated with parent-caregiver relationships, many of which are similar to the parent characteristics identified above. Provider/program characteristics include:

1. Personal and professional characteristics of the provider may have the ability to influence his or her approach to parent-caregiver relationships and the willingness or ability to engage families in the care and education setting.

2. Physical health or mental health of a provider could limit the provider’s mental and physical energy level to engage with families.
3. The provider’s values and expectations, such as biases, stereotypes, expectations of family members, or their feelings of self-efficacy, can become a barrier or facilitator to parent-caregiver relationships.

4. Characteristics of the organization, program, or home-based childcare setting, such as type of setting, schedule, job demands, characteristics of children served, philosophy and expectations of leadership, policies, and available organization-level support for providers, may affect the provider’s ability and willingness to engage families in relationship-building practices.

5. Stressors of a provider

6. Resources of a provider

These characteristics, demonstrated through both the parent and caregiver lens, can have a profound impact on the willingness and ability of parents and caregivers to facilitate quality relationships in the early childhood setting. Through identification of not only best practice to support the parent-caregiver relationship, but also awareness of communication barriers, research can be used to guide effective early childhood practices. When parents and caregivers can overcome barriers and use their personal characteristics to facilitate relationship growth, benefits for all groups involved can occur.

Research has consistently shown through a wide variety of studies (Campbell et al., 2012; Forry et al., 2012; Sheridan et al., 2010) that good relationships between parents and caregivers are associated with many positive benefits for parents, children, and caregivers. Multiple studies report that when there are strong relationships between parents and caregivers, parents can benefit by being more able to positively engage in their child’s early childhood program and have increased supports for children’s learning (Brookes, Summers, Thornburg, Ispa, & Lane,
improved parental satisfaction with early childhood education arrangements (Adams & Christenson, 2000; Dempsey & Keen, 2008; King, King, Rosenbaum & Goffin, 1999; Mensing, French, Fuller, & Kagan, 2000). Parents also have increased feelings of empowerment and self-efficacy (Dunst & Dempsey, 2007; Dunst, Trivette, & Hamby, 1996; Green et al., 2004), reduced stress, and improved mental health (Chazan-Cohen et al., 2007; Dunst & Trivette, 2009; Guterman & Hahm, 2001; Trivette, Dunst, & Hamby, 2010) when there are positive relationships between parents and caregivers. Finally, when there are positive relationships between parents and caregivers, parents benefit by having more experiences with positive parenting (Dunst, Trivette, & Hamby, 1996), home learning environments (Green et al., 2004), and parent-child relationships (Reid et al., 2007).

There are also many positive outcomes for children associated with positive parent-caregiver relationships. For example, data indicates children experience improved cognitive development and academic performance (Mendez, 2010; Rimm-Kaufman, Pianta, Cox, & Bradley, 2003), as well as have positive physical health outcomes (Palfrey et al., 2005) when parents and caregivers have a positive relationship. Children also demonstrate improved social-emotional development (Powell, Son, File, & San Juan, 2010; Lee et al., 2009), attachment regulation (Roggman, Boyce, & Cook, 2009), and an increase in appropriate social behaviors (Sheridan, Knoche, Edwards, Bovaird, & Kupzyk, 2010; Graves & Shelton, 2007), when positive parent-caregiver relationships are present.

Finally, several research studies suggest an association between positive parent-caregiver relationships and caregiver outcomes, including an increase in a caregiver’s feelings of competency (Trivette et al., 2010), self-efficacy (Brown, Knoche, Edwards, & Sheridan, 2009;
Trivette et al., 2010), and connectedness with families (Brown et al., 2009). It has also been shown that caregivers have enhanced skills in communicating with families when there are positive relationships (Brown et al., 2009; Kaczmarek et al., 2004). The benefit of the caregiver’s competency is proposed to continue the cycle of building positive relationships because the caregiver recognizes the value of the connection to the family (Sheridan & Moorman Kim, 2015). These benefits can continue to grow and positively affect parents, caregivers, and children when methods are identified to promote relationship quality between parents and caregivers.

**Communication Between School and Home**

Communication between school and home is the very foundation of an early childhood program’s success (Moore, 2002) and improving communication is a primary strategy in promoting strong relationships (Halgunseth et al., 2009). However, conceptualizations of what this entails varies widely. Epstein’s (1995) framework describes the concept of communicating as “design(ing) effective forms of school-to-home and home-to-school communication about school programs and children’s progress.” (p. 706). When caregivers use effective forms of school-to-home communication, they are demonstrating a greater awareness of the importance of clear communication and the impact it may have on the family views regarding children’s programs and progress (Epstein, 1995). Likewise, when caregivers show awareness and investment in quality communication, they can positively influence important outcomes such as: increasing parental understanding of school programs and policies, promoting parent and caregiver awareness of a child’s progress, supporting effective responses to student problems, and helping parents feel more comfortable with communication practices (Epstein, 1995). These outcomes, combined with the wide variation of what could be considered quality, indicate a need
to identify how to accomplish this suggested quality communication. This information can be used to promote stronger connections and more positive relationship quality with families.

To more fully understand its impact on school-to-home connections and positive relationship quality, it is necessary to study the many facets of communication efforts at the grassroots level. Bouffard (2008) states that educators often ask, “How can we promote more frequent and meaningful communication with families?” (p. 1). Epstein (2010) suggests that caregivers should consider communication methods used, parents’ language preferences, and how to facilitate opportunities for open feedback when establishing and maintaining the parent-caregiver relationship. However, Anderson and Minke (2007) suggest that there is a need to further explore these communication avenues in order to utilize strategies for parent-caregiver communication and relationships more effectively.

Challenges remain with establishing clear, two-way channels for communication as well as evaluating the readability, clarity, form, and frequency of all memos, notices, and other print and non-print communications (Epstein, 1996). Similarly, Barnes and colleagues (2016) indicate it is important to identify how the parent receives the communication. Parents have diverse needs and preferences regarding communication, and potential barriers can emerge when there is a misalliance between parents’ needs and the communication approach of the caregiver. For example, research with middle school students suggests that parents and teachers perceive communication efforts differently (Halsey, 2005), which may lead to difficulty in promoting strong relationships. Findings from this research indicate that teachers tend to employ institutional communicative messages (e.g. general newsletters, flyers), yet parents prefer more individual, personal invitations for information and involvement. The difference can lead to a
mismatch of communication preferences, which can lead to both teachers and parents becoming discouraged (Halsey, 2005).

**Communication Technology**

Recent advances in the realm of technology have had a significant impact on communication between individuals. Blackwell and colleagues (2013) identify that laptop or desktop computers are universally (determined by 75% or more) available to early childhood caregivers. They found that almost 78% of caregivers had access to a laptop or desktop computer in program-based care, 86% had access in school-based care, and 92% had access in Head Start locations. Regarding home access for families, nationwide data shows that in 2015, households with children under 18 years old were more likely to have a computer and internet subscription than households without children. In households with children under 18, 85% owned a desktop or laptop, and the same percentage reported having a broadband internet connection. In households without children, this number falls to 75% owning a desktop or laptop, and only 73% reported having a broadband internet connection. Handheld computers also had a large gap in ownership, evidenced by 89% of households with children owning a handheld computer versus 68% in non-child households (U.S. Census Bureau, 2017a).

Internet use and access vary by geographic location. Households in metropolitan areas were more likely to report owning or using a desktop or laptop (80%) and subscribing to broadband internet (78%) than nonmetropolitan areas (70% and 67%, respectively) (U.S. Census Bureau, 2017a). Ownership or use of a desktop or laptop and having broadband internet subscriptions were lowest for states in the South, compared to the West, Northeast, and Midwest. For the state of Mississippi, only 61% of households report having a broadband subscription, which is significantly less than the national average of almost 77% (U.S. Census Bureau, 2017a).
In addition to traditional computers and internet access, the advent of smartphones is changing how the average American connects. The majority (64%) of American adults reported owning a smartphone of some kind, and smartphone ownership was found to be exceptionally high among younger Americans (ages 18-29) (Smith, 2015). This data, considered alongside the recent data from the Center for Disease Control (2017) which indicated that from 2011-2015 the mean age for having a first child for women 15-44 years of age was 23.1 years and for men 15-44 years of age was 25.5 years, suggests that the majority of parents of young children have a smartphone. The frequency of smartphone use is important to consider when analyzing communication technology within the context of parent-caregiver relationships.

Nejjai (2012) identifies that technology has revolutionized communication and the dissemination of information. Individuals around the world can instantly be connected at the ‘click of a button’ and can easily communicate and collaborate with others through a variety of outlets and platforms. The introduction of technology has led to caregivers being more accessible and has made communication more convenient, which leads to reported increases in parent-caregiver communication (Jennings, Wartella, & Vangelisti, 2004). Whereas traditional face-to-face communication was infrequent, only occurring at formal and specific times such as conferences and open houses, or frequently occurring during hectic transition periods like child drop-off and pick-up (Gestwicki, 2015), parents and caregivers can now utilize a variety of methods to stay connected throughout the day. Examples of communication technology include emailing, texting, instant messaging, social networking (i.e. Facebook, Instagram, Twitter), blogging, and video conferencing (Johnston, 2017). A variety of these types of technologies are used for communication within the context of the parent-caregiver relationship.
Using technology for communication can have a larger environmental impact as well. The Northeast Recycling Council’s (NERC) 2011 publication suggests several components regarding paper use reduction in schools. The document suggests that schools adopt a “Paper Use Reduction” goal with a policy of promoting the use of electronic media to reduce paper use. Teachers and administrators are encouraged to “create and distribute publications, reports, and memos electronically” (Northeast Recycling Council, Inc, 2011, p. 2). By reducing paper use, schools can experience benefits such as reduced cost for paper and other materials, reduced wear and tear on the printer, reduced storage needs, as well as have a positive environmental impact by saving energy and landfill space and reducing greenhouse gas emissions (NERC, 2011).

Barnes and colleagues (2016) found in their own research that caregivers use communication technology for regular, ongoing communication. However, Barnes and associates (2016) state that although technology is used, research remains limited on how it can be most effectively used. This research helps to fill gaps in the literature by providing evidence of the use of communication technology and it’s perceived contribution to parent-caregiver relationship quality. Several factors, described below, come into play when looking at the use of technology.

Mode of Communication

When analyzing communication technology, some modes can be used more effectively than others, a concept understood through the Media Richness Theory framework (Daft & Lengel, 1986). This theory suggests individuals select media based on the richness of information as well as the complexity of the task (Daft & Lengel, 1986). A flyer may be useful for a program-wide event, but an email or text message to an individual parent may be more useful for a specific topic (Olmstead, 2013). It has been suggested that studies should be
conducted to consider not only what the integration of technology looks like (Blackwell et al., 2013), but also the effectiveness of these technologies to connect school and home to increase parent-caregiver connections at the early childhood level. In similar studies, Olmstead’s (2013) and Blackwell and associates’ (2013) research on technology and parent engagement show that both parents and caregivers perceive technology to be an effective tool to promote parent engagement, thus enhancing the parent-caregiver relationship. Both studies found that it is essential that the caregiver choose the right method to deliver information to parents, and this depends on the subject matter needing communicated. For example, health information about a child should be handled in a one-on-one manner, while a flyer about a community event could be distributed to all families through a mass email.

**Mode Preference**

As communication technology continues to evolve, more modes of technology have become available. Whereas before parents and caregivers only had the option of face-to-face or telephone conversations, alternatives such as email, texting, social media, Skype/Facetime, apps, and others could all be viable options to maintain regular, two-way communication. Current studies investigating mode preference between parents and caregivers, such as the ones explored below, are limited in that they only study one specific kind of technology (Yost & Fan, 2014), or are conducted with families and teachers of P-12 children (Thompson et al., 2015), who are significantly different when compared to early childhood parents and caregivers. For example, early childhood caregivers tend to be less educated than K-12 teachers, programs vary in quality despite initiatives to provide universal quality measurements, caregiver turnover rate is higher, and the longstanding argument of if technology should be integrated into the lives of young
children may impact caregiver belief systems for integrating technology (Blackwell et al., 2013). These limitations within the current literature prompts the need for additional research.

The advent of smartphones has changed the way parents and caregivers access social media technologies. Two studies found that easy access to smartphones increases the convenience of multiple modes of communication technology (Thompson et al., 2015), allowing for efficiency, convenience, and flexibility in communication (Yost & Fan, 2014). However, parents and caregivers at the early childhood level both cite confidentiality as a concern when utilizing smartphone technology, especially social media (Yost & Fan, 2014). A third study, conducted with parents of elementary and secondary students, revealed that email is a commonly preferred mode of communication, but also revealed that parents and teachers combine a variety of modes of communication to take advantage of specific elements of each, indicating that parents and teachers demonstrate preference for certain modes, depending on the content to be addressed in the message. (Thompson, 2008). All three studies indicate a need for further research in this area. Research performed thus far is limited in that the focus has been with P-12 school populations (Thompson, 2008; Thompson et al., 2015), the sample sizes are limited (Yost & Fan, 2014), or the study only uses one unique type of mode of communication (Thompson, 2008; Thompson et al., 2015; Yost & Fan, 2014). There is a need for new, original research focused on current mode use and preference of parents and caregivers at the early childhood level, with a sufficient sample size (Thompson, 2008; Yost & Fan, 2014).

**Barriers to Technology and Communication in Early Childhood Programs**

When analyzing early childhood education and how its use of technology may promote parent-caregiver relationship quality, it is also important to recognize that there are many barriers that caregivers face when using technology. First-order barriers, described as those at the
institutional level, focus specifically on current practice without acknowledging beliefs (Ertmer, 1999). For example, first-order extrinsic barriers, such as lack of access to technology (Blackwell et al., 2013; Ertmer, 1999), can prevent the adoption and use of technology in the early childhood setting. While data indicates that more than 70% of early childhood educators, both family providers and classroom teachers, own a desktop computer, and more than 60% own a laptop (Wartella, Schomburg, Lauricella, Robb, & Flynn, 2010), data is not clear on how many facilities have computers and internet for caregiver use. In other words, the 70% of caregivers owning computers and laptops does not necessarily reflect the same technologies for business use. It should be noted that Mississippi, and the south in general, has a lower rate of computer and internet access than the national average (U.S. Census Bureau, 2017a). Blackwell and colleagues (2013) also suggest that computer access is not as universal as once thought, with indications that caregivers working with middle-income students have less access to technology compared to caregivers of low-income students. The authors indicate that this may be due to technology funding initiatives targeted at low-income populations (i.e. Head Start and Early Head Start). Thus, a gap is created in policies and may preclude caregivers of children from middle-income families from equal access to technology compared to caregivers of children from higher-income and lower-income families. Other first-order extrinsic barriers to the use of technology for caregivers include school type (Blackwell et al., 2013), time to learn and use technology, training and support, and professional development (Ertmer, 1999).

In addition, there are second-order intrinsic barriers, described as those that confront beliefs about current practice and are more on the personal level of the caregiver (Ertmer, 1999). These beliefs may limit the caregiver’s use of technology and attempts at parent-caregiver communication. Ertmer (1999) identified that teaching beliefs, comfort with technology, and
perceived values of technology play a role in the adoption and use of technology. This, considered alongside data which reveals that only 25% of new teachers describe their relationship with parents as satisfying, and 31% of teachers report that the biggest challenge they face is communicating with and involving parents (Blackwell et al., 2013), indicates a need to identify how to use technology to promote the parent-caregiver relationship quality.

Studies suggest barriers also exist regarding the caregiver’s expectations of parent engagement and interactions. For example, some barriers may be that caregiver does not consider a parent’s time (Halgunseth et al., 2009), finances (Souto-Manning & Swick, 2006), or culture (Weiss, Caspe, & Lopez, 2006) when developing certain expectations for parent actions. These barriers may create a lack of involvement, which is sometimes perceived by teachers as disinterest from the parents (Souto-Manning & Swick, 2006), thus adding to the challenge of establishing a successful parent-caregiver and parent-program relationship (Barnes et al., 2016).

Given the negligible amount of research on the topic, studying and identifying effective forms of communication to promote parent-caregiver relationships in early childhood may be vital to overcoming these barriers. Previous research indicated that when teachers make efforts to improve communication with parents, the parents become more comfortable with the school and involvement with activities at school (Ames, 1995). Given the unique dynamic of the early childhood environment discussed earlier, research in this area would prove useful for quality practice in the field.

**Theoretical Framework**

Urie Bronfenbrenner’s ecological systems theory (1979) broadly frames parent involvement. The theory suggests there are five environmental systems within which an individual interacts. At the innermost level, labeled the microsystem, are the institutions and
groups that most immediately and directly impact the child’s development. These consist of the family, school, religious institutions, neighborhoods, and peers. The next level, the mesosystem, is the interconnections between the Microsystems. In other words, the interactions between family and teachers, peers and family, and the like. Third is the exosystem, which involves the links between social settings that do not involve the child. Fourth, the macrosystem, is the overarching culture that influences the child, along with the Microsystems and Mesosystems embedded within these cultures. Fifth, and final, is the chronosystem, which is described as the changes and patterns of environmental events and transitions over the life course, in addition to the changes in socio-historical events. While all five levels play a role in influencing the child as well as the parent-caregiver relationship, the mesosystem is most directly related to this research. It is of note that this research uses Bronfenbrenner’s original ecological model, as opposed to the more recent bioecological model that recognizes the gene-environment interactions as well (Bronfenbrenner, 1994).

As Coleman (2013) describes, the mesosystem provides a lens through which to analyze the concept of communication and its impact on parent and caregiver relationship quality. The mesosystem is the number and quality of connections between children’s Microsystems. The current study utilizes the specific Microsystem components of parents and caregivers. “Children’s development and education are supported best when there are frequent and strong linkages among their Microsystems” (Coleman, 2013, p. 50). Coleman (2013) identifies several mesosystem supports for children’s development and education within Bronfenbrenner’s ecological model. He suggests that “parents and teachers collaborate in sending consistent messages about their behavior (and) in reinforcing similar learning experiences in the classroom and home” (p. 49). Coleman also identifies that “parents, teachers, and other school personnel
collaborate in assessing the physical, cognitive, and emotional needs of children” (2013, p. 49). These mesosystem level supports require effective communication to collaborate positively.

This theory helps to provide an understanding of the web of relationships surrounding the child, with emphasis on the parent and caregiver segments. Overall, Bronfenbrenner’s theory addresses the importance of the parent-caregiver relationship, with interactions being a critical component of the system. This theory provided the foundation for the study’s research questions.

A more recent theory that analyzes parents and caregivers through the relationship between the school and home is Epstein’s overlapping spheres of influence. Joyce Epstein is a prominent researcher and theorist that studies and promotes the interactions and relationships between family and school. She has published numerous works regarding parent involvement and has created a framework to help describe and define the topic (Epstein 1995, 1996, 2001, 2005, 2010, 2011; Epstein & Dauber, 1995; Epstein & Jansorn, 2004). Epstein (1995) states that “when parents, teachers, students, and others view one another as partners in education, a caring community forms around students and begins its work” (p. 702).

Epstein (2010) suggests two different spheres of influence. The first, identified as an external model, describes how the three primary contexts in which students learn and grow, the family, the school, and the community, can be drawn together or pushed apart. Practices conducted by schools, families, and communities can be conducted separately or jointly to influence the child’s learning and development. Second, the internal model recognizes the influence of where and how complex the interpersonal relations and patterns of influence occur between the individuals at the home, school, and community levels. She identifies that these relationships can engage at, and be analyzed at, the individual and institutional levels. By
describing the impact of the interactions of the three spheres of influence, this theory also provided a framework for the research. As Epstein (2010) suggests, studying the social relationships at an institutional level and individual level can help to assess how the relationships work in practice.

The third and final theory used for this research is the Media Richness Theory (Daft & Lengel, 1986). Media richness is a description of a communication medium’s ability to reproduce the information that is sent over it (Daft & Lengel, 1986). This theory states that types of communication (“media”) differ in richness (Daft & Lengel, 1986). Four factors influence media richness: 1) the ability of the medium to transmit multiple cues such as the tone of voice and body language mentioned above, 2) the immediacy of feedback available, 3) the variety of language used, and 4) the personal focus of the medium. For example, face-to-face communication is the richest form because it has many opportunities to transmit multiple cues, provides immediate feedback, is open to a wide variety of language use, and is done on a very personal level. In contrast, other media, like text messaging or email, have fewer cues such as tone of voice and body language, which make them more lean. The theorists state that communication is more successful when communicators use richer methods for tasks that may have variations in interpretation, and leaner methods for communication that is more straightforward and less ambiguous (Daft & Lengel, 1986).

Summary

In summary, the years of early childhood are a critical time in a child’s life, and the field of early childhood education continues to expand and grow professionally (NAEYC, 2017) as the need for out-of-home childcare continues to increase (Rathbun & Zhang, 2016). Two prominent theoretical frameworks (Bronfenbrenner, 1979; Epstein, 1995) identify that
interactions and communication between school and home is a critical component of parent-caregiver relationship quality. There is an essential need to identify and utilize effective forms of communication in order to successfully promote parent-caregiver relationships (Epstein, 1995). The growing advances in the field of technology, particularly communication technology, warrant further study.

There is limited research regarding the use of this technology and how it could be used to effectively promote parent-caregiver relationship quality at the early childhood level (Barnes et al., 2016). Evident gaps in the literature exist regarding parent preferences for modes of communication (Barnes et al., 2016). Thompson and colleagues (2015) suggest that analyzing new trends in communication technology as it relates to the parent-caregiver relationship would be useful for the field. This study fills a gap in the literature by providing research-based evidence regarding the current uses and methods of communication technology and parent and caregiver perspectives of the use of communication technology and its perceived contribution to parent-caregiver relationship quality in the early childhood setting. By having this data, early childhood professionals and policymakers can endorse evidence-based practices to foster parent-caregiver relationship quality effectively.
CHAPTER III
RESEARCH METHODOLOGY

Introduction

The purpose of this qualitative study was to explore parent and caregiver viewpoints on the use of different types of communication technology and the perceived contribution of communication technology on parent-caregiver relationship quality. This chapter contains the research questions, method, a description of recruitment procedures, a detailed description of the instruments used and the data collection procedures, the processing and analysis methods, the methodological assumptions, limitations, and delimitations, the ethical assurances, and closes with a summary.

Research Questions

The research questions for this study are qualitative in nature.

1. How is technology being used by caregivers regarding home to school and school to home communication?

2. Does the current method of communication being used by caregivers align with the parents preferred mode of communication?

3. How are communication methods established between parents and caregivers?

4. What barriers do parents and caregivers report when utilizing technology to support communication?
5. What benefits do parents and caregivers report when utilizing technology to support communication?

6. How does technology contribute to parent-caregiver relationship quality in the early childhood setting?

**Research Method**

While many studies exist addressing the relationship between parents and caregivers (Anderson & Minke, 2007; Christenson & Sheridan, 2001; Halgunseth, Peterson, Stark, & Moodie, 2009; Hilado et al., 2013) data remains limited regarding the role of technology in this process (Barnes et al., 2016). Qualitative data can help to refine and explain the topic by exploring the participants’ views in depth (Creswell, 2009; Rossman & Wilson, 1985).

**Qualitative Research Methods**

A qualitative methodological approach was preferred based on the evidence that this topic has yet to be explored through empirical, academic research (Barnes et al., 2016). For this research, qualitative data has an advantage over quantitative data because it provides a deeper understanding of how individuals perceive certain phenomena, rather than testing a hypothesis that may be formed at the beginning of the study (Neuman, 1997). This creates the ability to develop themes, motifs, generalizations, or taxonomies (Neuman, 1997), which is useful when discovering and exploring new and underdeveloped topics; a goal of this research. Qualitative researchers identify five genres of qualitative research: narrative research, phenomenology, grounded theory, ethnography, and case study (Creswell, 2009; Creswell & Plano Clark, 2007; Grbich, 2007; Merriam, 1998).
This research took a hermeneutic phenomenological approach, due to the aim of the research to bring light to, reflect upon, and develop a profound understanding of the lived experiences common to a group of people (Goble & Yin, 2014; Creswell, 2009). This style of approach allows for a description of meaning from individuals who have lived experiences of a concept or phenomenon, as well as allows for a reduction in individual experiences and provides for a composite description of the universal principle of the phenomenon (Creswell, 2009). Phenomenological data analysis highlights significant statements, sentences, and quotes and provides for the development of clusters of meaning from themes, which can then be used to write a textual and structural description, framing the essence of the phenomenon (Creswell, 2009). Finally, hermeneutic phenomenological research highlights the perspectives of the participants, and the role of the researcher becomes less prominent (Grbich, 2007).

**Focus Groups**

Focus group research gathers information on participant’s cultures and beliefs that influence behaviors, feelings, and attitudes for research topics that are inadequately defined (Stalmeijer, Mcnaughton, & Van Mook, 2014). The aim is not to reach consensus on issues discussed, but to uncover a range of perspectives and experiences (Hennink, 2014), which provides data for the inductive researcher to derive understanding based on the discussion, as opposed to testing a preconceived hypothesis or theory (Krueger & Casey, 2000). For this research, a focus group format was helpful due to its unique ability to elicit group interaction.

Participants are able to discuss, agree, or oppose, while also elaborating on the opinions and views they present (Nili, Tate, & Johnstone, 2016). This presents rich interaction data, which is valuable for studies which explore the behaviors of others as part of a social system (Belanger, 2012), an aim of the research. The researcher is able to probe and clarify
participants’ comments immediately if they are moderating the group. Morgan (2010) also posits that focus groups can explore topics and generate hypotheses with relatively little direct input from the researcher, an advantage that provides useful data.

Conversely, focus groups face several challenges. Recruitment for focus group participants can be challenging (Edmunds, 1999), and there is concern that participants may not be entirely accurate in what they say due to the group setting. Additionally, there is risk that individual behavior is subject to group influence (Morgan, 2010). While these concerns have merit for focus group sessions, the research design combats against these deterrents. Considering the purpose of the research and the need for rich, exploratory data, a focus group design was considered as best suited for this study.

**Focus Group Design**

Health, social science, and educational research is increasingly using online research methodologies (Liampuntong, 2011) due to the ability to increase access to remote or dispersed study populations (Barbour, 2007; Bloor, Frankland, Thomas, & Robson, 2001) with greater geographic diversity (Edmunds, 1999; Rupert, Poehlman, Hayes, Ray, & Moultrie, 2017). Henninck (2014) states that online focus groups can be particularly useful for specific study populations such as those with concerns about attending a face-to-face group or those that are difficult to schedule. Specific to this study, this was helpful for parents who needed to arrange childcare for their young children, and caregivers who have their own families or obligations outside of work. Hennink (2014) also states that there is a reduction in the time and cost of conducting focus group research, if web-based conferencing is used. Transportation and facility rental costs are eliminated, and participants can join the focus group from their own home or workplace, which provides for greater comfort and convenience (Smith, Sullivan, & Baxter,
2009). With this method, participants can join the discussion from the comfort of their own home without some of the identified scheduling issues or travel barriers.

Face-to-face sessions were also offered, promoting opportunities for a more comprehensive sample. Face-to-face sessions address several negative issues considered with online focus groups. For example, face-to-face sessions provide for visual cues such as body language and enhanced group interaction, a limit to online focus groups (Edmunds, 1999). Additionally, participants may not feel comfortable using technology to contribute, preventing some from agreeing to participate. Having face-to-face focus groups provides the opportunity to be a part of a group without the use of technology (Edmunds, 1999). Finally, by hosting both online and face-to-face sessions, the participant’s level of comfort is addressed, as they were able to choose which method was preferable for them.

Focus group best practices guided this study. The number of focus groups needed to reach saturation may vary, but typical practice is to plan for three to five focus groups (Morgan, 2010). Within each of these groups, six to eight participants are ideal (Creswell, 2009), as too few participants can prevent stimulating discussion (Stewart & Shamdasani, 1990), and too many can limit individual opportunities for participation (Morgan, 2010). Due to the topic of this research being reasonably straightforward, the researcher proposed to conduct a total of eight focus groups: four with parents and four with caregivers. However, due to low turnout for scheduled sessions, a total of six focus groups were completed with parents ($N=24$) and five with caregivers ($N=23$) to ensure a robust sample size (Creswell, 2009).

Focus groups should be composed of homogenous strangers (Stewart & Shamdasani, 1990). When participants perceive each other as fundamentally similar, they can spend less time explaining themselves and more time discussing the issues of the focus group (Morgan, 2010).
The inclusion criteria for the parent focus groups were (a) a child enrolled in a licensed childcare program in Mississippi, and (b) the child was between the ages of six weeks to five years old. The inclusion criteria for the caregiver focus groups included (a) active employment at a licensed childcare program in Mississippi as a lead or assistant teacher, and (b) currently work with children six weeks to five years old.

Participants

The participants for this study were parents and caregivers of children five years of age and younger enrolled in a licensed childcare program in the state of Mississippi. The study participants recruited represented two groups, caregivers in licensed early childhood programs and parents of young children attending a licensed childcare program, both within the state of Mississippi.

Population

The population for this study was early childhood caregivers and parents of children enrolled in an early learning and development program in the state of Mississippi. The researcher chose only to include licensed childcare programs (non-home based). Programs that are not licensed may not meet basic health and safety requirements, which serve as a baseline for the protection of young children (National Association for Regulatory Administration, 2017). As of February 2019, there were 1,449 actively licensed childcare programs in the state of Mississippi, which have a combined maximum capacity of 124,192 spots for enrolling young children (C. Allgood, personal communication, February 5, 2019). The total population of childcare providers, identified through the state of Mississippi licensed childcare program database, was roughly 12,500 (C. Allgood, personal communication, February 5, 2019).
To address the parent population, the U.S. Census Bureau (2018) identifies that approximately 6.3% of the 2,984,100 individuals living in Mississippi are persons under the age of 5 years. This would suggest that there were about 187,998 children under five years of age. This number is higher than the maximum enrollment capacity currently in the state due to the availability of alternative arrangements for childcare including home-based care, staying with parents or relatives, or non-licensed programs. In other words, children in the state are not all enrolled in an early childhood program. Considering the number of enrollment spots, the data regarding children under the age of five in Mississippi, and the assumption that some children may have siblings also attending the same program, it is estimated that there were 110,000 parents of children enrolled in childcare programs.

**Participant Characteristics**

Due to low turnout rates, the researcher conducted a total of 11 focus groups. Six focus group sessions were conducted with parents, totaling 24 parent participants, and five sessions were conducted with caregivers, with 23 participants total. Before each focus group started, a short demographic survey (Appendix C) was collected. A detailed description of demographics for both parent and caregiver samples is located in Table 1 (below).

40
### Table 1  Demographic Data for Parent and Caregiver Samples

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Parent Demographics</th>
<th>Caregiver Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>75%</td>
</tr>
<tr>
<td><strong>Age at time of survey (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>3</td>
<td>13%</td>
</tr>
<tr>
<td>30-39</td>
<td>19</td>
<td>79%</td>
</tr>
<tr>
<td>40-49</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>50-59</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Highest level of education completed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school degree or equivalent</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Some college but no degree</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>9</td>
<td>37%</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>10</td>
<td>42%</td>
</tr>
<tr>
<td><strong>Annual Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0 to $9,999</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>$10,000 to $24,999</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td>$25,000 to $49,999</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>$100,000 and up</td>
<td>8</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>21</td>
<td>88%</td>
</tr>
<tr>
<td>Black or African-American</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Facility Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community-Based Childcare</td>
<td>18</td>
<td>75%</td>
</tr>
<tr>
<td>Head Start</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>University Lab School</td>
<td>6</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Note:* Parent focus groups represented a total of 9 different facilities, while caregiver focus groups represented a total of 13 different facilities.
Additionally, demographics can be broken down by participation in type of focus groups.

Tables 2 and 3 (below) include the demographics for participants divided by focus group style.

**Table 2  Parent Demographics Distributed by Focus Group Style**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Online (n=19)</th>
<th>Face-to-Face (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Female</td>
<td>4</td>
<td>Female</td>
</tr>
<tr>
<td>5 Male</td>
<td>1</td>
<td>Male</td>
</tr>
<tr>
<td>Age Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 20-29</td>
<td>0</td>
<td>20-29</td>
</tr>
<tr>
<td>14 30-39</td>
<td>5</td>
<td>30-39</td>
</tr>
<tr>
<td>1 40-49</td>
<td>0</td>
<td>40-49</td>
</tr>
<tr>
<td>1 50-59</td>
<td>0</td>
<td>50-59</td>
</tr>
<tr>
<td>Highest Level of Degree Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 High school or GED</td>
<td>0</td>
<td>High school or GED</td>
</tr>
<tr>
<td>3 Some college no degree</td>
<td>1</td>
<td>Some college no degree</td>
</tr>
<tr>
<td>1 Associate’s Degree</td>
<td>0</td>
<td>Associate’s Degree</td>
</tr>
<tr>
<td>5 Bachelor’s Degree</td>
<td>4</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>10 Graduate Degree</td>
<td>0</td>
<td>Graduate Degree</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 $0-$9,999</td>
<td>0</td>
<td>$0-$9,999</td>
</tr>
<tr>
<td>4 $10-$24,000</td>
<td>0</td>
<td>$10-$24,000</td>
</tr>
<tr>
<td>1 $25,000-$49,999</td>
<td>0</td>
<td>$25,000-$49,999</td>
</tr>
<tr>
<td>3 $50,000-$74,999</td>
<td>1</td>
<td>$50,000-$74,999</td>
</tr>
<tr>
<td>5 $75,000-$99,999</td>
<td>1</td>
<td>$75,000-$99,999</td>
</tr>
<tr>
<td>5 $100,000 and up</td>
<td>3</td>
<td>$100,000 and up</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 White</td>
<td>5</td>
<td>White</td>
</tr>
<tr>
<td>2 Black or African American</td>
<td>0</td>
<td>Black or African American</td>
</tr>
<tr>
<td>1 Asian</td>
<td>0</td>
<td>Asian</td>
</tr>
</tbody>
</table>
Table 3  Caregiver Demographics Distributed by Focus Group Style

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Online (n=2)</th>
<th>Face-to-Face (n=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>2 Female</td>
<td>21 Female</td>
</tr>
<tr>
<td></td>
<td>0 Male</td>
<td>0 Male</td>
</tr>
<tr>
<td>Age Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>20-29</td>
<td>10 20-29</td>
</tr>
<tr>
<td>0</td>
<td>30-39</td>
<td>7 30-39</td>
</tr>
<tr>
<td>0</td>
<td>40-49</td>
<td>4 40-49</td>
</tr>
<tr>
<td>2</td>
<td>50-59</td>
<td>0 50-59</td>
</tr>
<tr>
<td>Highest Level of Degree</td>
<td>0 High school or GED</td>
<td>3 High school or GED</td>
</tr>
<tr>
<td>Completed</td>
<td>1 Some college no degree</td>
<td>6 Some college no degree</td>
</tr>
<tr>
<td></td>
<td>0 Associate’s Degree</td>
<td>4 Associate’s Degree</td>
</tr>
<tr>
<td></td>
<td>0 Bachelor’s Degree</td>
<td>7 Bachelor’s Degree</td>
</tr>
<tr>
<td></td>
<td>1 Graduate Degree</td>
<td>1 Graduate Degree</td>
</tr>
<tr>
<td>Income</td>
<td>0 $0-$9,999</td>
<td>1 $0-$9,999</td>
</tr>
<tr>
<td></td>
<td>0 $10-$24,000</td>
<td>5 $10-$24,000</td>
</tr>
<tr>
<td></td>
<td>2 $25,000-$49,999</td>
<td>6 $25,000-$49,999</td>
</tr>
<tr>
<td></td>
<td>0 $50,000-$74,999</td>
<td>4 $50,000-$74,999</td>
</tr>
<tr>
<td></td>
<td>0 $75,000-$99,999</td>
<td>4 $75,000-$99,999</td>
</tr>
<tr>
<td></td>
<td>0 $100,000 and up</td>
<td>1 $100,000 and up</td>
</tr>
<tr>
<td>Race</td>
<td>2 White</td>
<td>10 White</td>
</tr>
<tr>
<td></td>
<td>0 Black or African American</td>
<td>11 Black or African American</td>
</tr>
<tr>
<td></td>
<td>0 Asian</td>
<td>0 Asian</td>
</tr>
</tbody>
</table>

**Sampling Procedures**

The researcher used a variety of sampling methods to garner enough participants for the focus groups. First, the researcher used the Mississippi Department of Health childcare facility database to obtain email addresses for every facility licensed in the state of Mississippi. The researcher then emailed every location to introduce the study and ask for recruitment assistance (Appendix A). In the same email, the researcher included a flyer and requested the director to forward it to parents and caregivers, as well as to post at their facility (Appendix B). Parents and
caregivers were provided a link on the flyer to access the online consent form and demographic survey (Appendix C).

Second, the researcher submitted a conference session proposal to present at the 2019 Early Childhood Conference in June 2019 in Natchez, Mississippi. This conference was chosen due to it being one of the largest early childhood education conferences in the South. In addition, it was developed by the Mississippi Head Start Association (2018), an organization responsible for all Head Starts (260 facilities) throughout the state. This provided a higher likelihood of the researcher being able to present to a large, geographically diverse crowd. During the researcher’s presentation, participants were provided an overview of the proposed study, and flyers were distributed to 20 session attendees. Attendees were also asked to share the flyer with their facility caregivers and parents, inviting anyone who met the inclusion criteria to use the link to complete the survey and consent form.

Third, the researcher shared through the social media platform Facebook, a graphic (Appendix B) and request for participants through the researcher’s personal page. This posting was also shared by known associates of the researcher to produce a snowball effect. The same link to the survey and consent form was provided on this social media posting. Individual private messages with the graphic was sent to all childcare facilities in Mississippi who had an active Facebook account as well.

Fourth, the researcher worked with several agencies throughout the state of Mississippi, including the Department of Health, the Early Childhood Academy, and the University of Southern Mississippi’s Early Childhood Inclusion Center to identify potential face-to-face trainings that the researcher could attend and distribute flyers for the focus group recruitment.
Incentive

Both parent and caregiver participants were informed of a $15 gift card incentive for participating in the focus group session. When the session ended, the researcher emailed a Walmart e-gift card to the online focus group participants. Physical gift cards to both Walmart and Target were brought, and distributed, to face-to-face participant groups. Additionally, for each facility that had a parent or caregiver participate, the facility name was put into a drawing for one $150 gift card that was selected at random after the data collection period ended, and given directly to the program director.

Materials

Focus group interview protocol (Appendix D) was developed after reviewing the literature on current evidence-based practices regarding communication, use of technology, and relationship building in early childhood. Three experts in the field of early childhood were asked to review the instrument for clarity. Based on feedback, the initial interview protocol was adjusted accordingly. Examples of questions in the instrument included 1) How has your child’s teacher used technology as a tool for communication? 2) How was this methodology established? 3) What are some advantages for using communication technology? 4) In what ways do you think the use of technology for communication can support the parent-caregiver relationship?

Additionally, an online pilot study was conducted to test the research protocols and recruitment strategies, as well as to identify potential problem areas and deficiencies in the research instrument and protocol prior to implementation of the full study. The pilot study used a small sample of parents and caregivers (N=7) using the questions of the proposed interview protocol. After the pilot study, two methodology experts reviewed the raw data. As a result of
their recommendations the interview protocol was further refined by adding an additional question regarding barriers experienced when using communication technology.

**Data Collection Procedures**

Of the six parent focus group sessions, five were conducted online using the web conferencing platform Zoom. Four of those sessions were moderated by the researcher in her office at the University of Southern Mississippi’s (USM) Hattiesburg campus, and one was moderated by the researcher at her home, also in Hattiesburg, Mississippi. The only face-to-face parent focus group session was located at a community-based childcare facility in Hattiesburg.

Of the five caregiver focus group sessions, one was conducted online, moderated by the researcher in her office at USM. The remaining four focus group sessions were conducted in a face-to-face format. Two sessions were held in community-based childcare facilities (one in Jackson, MS and one in Hattiesburg, MS), one in a venue used by the Department of Health for a caregiver licensure training in Gulfport, Mississippi, and one in the Hattiesburg Public Library.

Both focus groups were scheduled for a particular time and date. The researcher led the focus groups using semi-structured, open-ended questions that connected with the research questions (Appendix D). Consistent with best practices, each focus group was scheduled for one to one and a half hours in order to allow for a thorough discussion of the topic (Creswell, 2004). The web conferences were recorded using Zoom, but as an additional measure, an iPad was used to record the conference as well. The face-to-face sessions were recorded using an iPad. All responses were then transcribed and saved to a password protected memory stick kept in a locked drawer. Once the recordings were transcribed, responses were used to identify themes and categories which emerged regarding uses and perceptions of communication technology and the parent-caregiver relationship quality.
Data Analysis

Glesne (2011) states that “in thematic analysis, the researcher focuses on analytical techniques, searching through the data for themes and patterns” (p. 187). Through thematic analysis, the researcher can make comparisons, which is an essential analytical step in identifying patterns within some themes. Not only does the data provide the opportunity to identify unifying aspects of the data, but it also goes beyond identifying the norm by helping to reveal underlying complexities (Glesne, 2011). By utilizing a focus group methodology, these variations may easily come to light as participants have the opportunity to express their dissimilarities or contradict other participants (Glesne, 2011).

The researcher began data analysis by transcribing all audio files into word processor documents. Once transcripts were complete, the researcher re-played the audio recordings while reading the transcripts to verify the correctness of the typed text. Focus group transcriptions were stored in separate files. Completing the typed transcripts allowed the researcher to become more familiar with the data and helped to perform preliminary theme development.

Then, data analysis was augmented by the use of a grid, in which the horizontal axis categorized themes and subthemes, while the vertical columns organized the pieces of data. Data from both participant groups (parents and caregivers) were distributed into the same grid, allowing for comparisons from one group to another within a category and from one category to another (Krueger & Casey, 2000). This method also lent to overall analysis from all of the focus group data. The researcher was able to extract data as transcripts were reviewed to develop themes as they appeared and then organize subsequent findings within those themes. After the creation of an initial outline, the researcher condensed, relocated, and shifted themes and subthemes until all relevant data was included in a complete, flowing outline.
Role of the Researcher

The role of the researcher can present a range of strategic, ethical, and personal issues (Creswell, 2009). Lichtman (2009) states that researchers in qualitative studies should have experience and understanding of the problems, issues, and procedures pertaining to the research problem. The researcher is the person who filters the data through his or her worldview and constructs meaning from the data collected. For this data, the researcher has the role of analyzing the data to determine themes and categories. The researcher for this study is a Visiting Instructor for a state University, specializing in early childhood courses. The researcher holds a bachelor’s and a master’s degree in child development and family sciences and has over 12 years of experience working directly with staff and parents in multiple licensed and accredited childcare programs. This experience allowed the researcher to bring background knowledge and experience to the formulation and design of the research because of the researcher’s awareness of current practices at several facilities. The researcher provided initial interview questions, as well as follow-up questions until the research questions had been answered thoroughly (Grbich, 2007). As discussed earlier, by utilizing hermeneutic phenomenology, the perspectives of the participants were especially highlighted, thus making the role of the researcher less prominent (Grbich, 2007).

Finally, one must respect the rights of participants involved in the research (Corti, Day, & Backhouse, 2000). Respecting participant rights includes performing research ethically, providing informed consent, maintaining confidentiality, and practicing anonymization of data (Corti et al., 2000). Participants were protected by the researcher acquiring IRB approval and following all research protocols.
Methodological Assumptions, Limitations, and Delimitations

This research has two significant assumptions. First, is the assumption that focus group participants will answer honestly. When participants have similar characteristics, they can feel a sense of belongingness, enabling participants to feel they can answer more openly and honestly (Creswell, 2009). In addition, by hosting remote focus groups compiled from participants from around the state, it is less likely that participants knew each other, which can lead to more open and honest responses. The second assumption is that the majority of the targeted population has internet access and thus the capability to participate in the focus group. A recent report from American Community Survey Reports (Ryan, 2017) highlights that in 2016, 89% of all households had a computer, and 81% had a broadband subscription. Households with member(s) under 18 years of age had a total of 96.9% reporting owning a computer and 90% with an Internet subscription. Data collected in 2016 also shows that smartphone use has become common among younger households (those under age 45), households headed by Blacks or Hispanics, and households with low incomes (under $25,000). While the state of Mississippi had the lowest percentage of households with a broadband internet subscription (70.7% compared to the highest of 87.4%), low-income and households with a Black or Hispanic householder had lower rates of connectivity but higher proportions that used smartphones (Ryan, 2017). This data will likely continue to evolve as new devices become available and technology adapts. Face-to-face focus group options were also provided, allowing for the opportunity to participate in the focus group without a computer and internet or phone access.

As with the majority of focus group research, there were limitations to this methodology. First is a limitation that is common for focus group protocol: small sample sizes. By having only a few participants, it limits the ability of the researcher to be able to generalize to the broader
population. In anticipation of this, the researcher proposed to have four focus groups for each population (parents and caregivers). The researcher continued beyond the original eight groups proposed to address several groups only consisting of a few participants. The researcher continued with focus group protocol until a total of 11 groups were completed, when the point of data saturation was met.

Second, for the online focus groups, participants must have access to a computer or smartphone in order to participate in the online conference-style focus group, which omits participants who do not have access to such technologies. This limitation was addressed twofold. First, it could be assumed that if the participant does not have access to such technology, they also do not receive or use this technology to communicate within the parent-caregiver relationship, thus making the participant ill-suited for the focus group questions. Second, face-to-face focus groups were offered as an option as well.

Delimitations, defined as characteristics that limit the scope and define the boundaries of the study, are in the researcher’s control (Simon, 2011). For this study, an example of a delimitation is the communication method studied to promote or not promote parent-caregiver communication and relationship quality. The researcher purposefully chose to study communication methods utilizing technology in order to add to the literature. Thus, this data will only add to the literature regarding the technology component of communication and does not look at other facets. In addition, the data is only reflective of licensed childcare facilities in the state of Mississippi and does not include unlicensed or home-based care across the nation, which only allows for generalizability to similar facilities across the state.
Ethical Assurances

This study complies with all standards for research with human participants and was approved by the IRB. Individual informed consent for the focus groups were obtained prior to the start of each group session. When the Invitation for Focus Group (Appendix B) was distributed, the researcher also provided the Consent Form for Participation in Focus Group (Appendix C) so participants were able to review it prior to agreeing to participate in the focus group. Focus group participants were informed that the study data would be published through Mississippi State University’s dissertation publishing resource, ProQuest. The participants were assured all presented information would be in summary format, and no direct identification of participants or childcare facilities would be included.

All data from the focus group interviews were kept confidential by utilizing pseudonyms for program names (if used) as well as participant names. A separate master key with the identifying information was kept on a computer separate from the audio files and transcribed data. The audio recordings, transcription, and master key will be destroyed three years after the close of the study. IRB approval was obtained prior to any data collection.

Summary

This chapter presented information on this qualitative study on the use of communication technology and its perceived contribution to parent-caregiver relationship quality. Data was gathered through focus group interviews conducted with parents and early childhood caregivers from licensed early childhood facilities throughout the state of Mississippi. This chapter presented the research method and design, participants, materials and instruments, data collection and analysis procedures, methodological assumptions, limitations, and delimitations, and the ethical assurances. The research results are presented in chapter four.
CHAPTER IV
RESEARCH RESULTS

Overview

This chapter presents the research results, organized by the research questions. The organizational layout of the chapter is provided in table 4 (below). Further analysis of the formulated meanings and extension to the research questions will be provided in chapter five.

Table 4  Table 4  Research Question and Data Alignment

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<th>Research Question</th>
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  1.2 Types not being used by parents and caregivers for school-home communication  
  1.3 Individual purposes of communication |
| 2. Does the current method of communication being used by caregivers align with the parent’s preferred mode of communication? | 2.1 Parents have not been asked/feedback                              |
| 3. How are communication methods established between parents and caregivers?     | 3.1 Communication options addressed during the enrollment process     |
| 4. What barriers do parents and caregivers report when utilizing technology to support communication? | 4.1 When communication is not instantaneous  
  4.2 Technical issues, access, and permission  
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<td>6.1 More access and more connection felt</td>
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Research Question One: How is technology being used by caregivers regarding home to school and school to home communication?

Both parent and caregiver participants reported a wide variety of types of communication being used for school-home communication, such as text messaging (both individual and group), email, social media such as Facebook and Instagram, as well as commercial “apps” designed for parent-caregiver communication (Remind101, Seesaw, HeyMama, ClassDojo, GroupMe, and Cluster). While the style of use varied from group to group, the highest rate of response for type of communication used was apps (for parents) and text messaging (for caregivers). Email had the lowest rate of response for both groups. Figure 1 (below) shows the response rates provided.
Figure 1  Types of Communication Used by Parents and Caregivers

*Note:* Response rates for parents and caregivers regarding types of communication technology used.

**Types Not Being Used**

At the same time, there are several types of communication that parents and caregivers reported not using for school-home communication, with Facebook having the highest response rate for non-use by parents, and email reportedly least used by caregivers. Figure 2 (below) shows the response rates provided.
Figure 2   Types of Communication Not Used by Parents and Caregivers

*Note:* Response rates for parents and caregivers regarding types of communication technology not used.

**Individual Purposes of Communication**

Participants also acknowledged that different types of communication methods are used for individual purposes of communication. For example, when asked, “How has your child's teacher used technology as a tool for communication? What kind of messages and information do they send through what types of technology?”, parent responses included: “When he’s not feeling well, she communicates that…(with) text messaging or calling.” “The teacher will text us if they have a question about the child’s day or…they might send a picture or something that they did.” “I think she uses different methods depending on what families are able to use as well.” “Facebook messenger I’d say for private conversations but…Facebook group, class group for sharing pictures.” “Text messaging and then the emails that come through the center, like we get the newsletter that way.” In addition, other parents shared the caregivers: “…show me pictures of what they did the day before…she’ll text those or put them on Facebook”; “…their developmental checklists are sent on email…”; “communicates dates on stuff, skills that are being learned, what they’re learning (referring to Facebook).”
When caregivers were asked “How have you used technology for communication? What kind of messages and information do you send through what types of technology?” Caregiver responses included examples such as: “We email newsletters and calendars to their email addresses…and we have a private Facebook group that is just for parents and that’s where we post kids’ pictures and activities and things like that. And we use Remind (app) if we’re going to shoot a bulk message to everybody about…events…school picture day or something that everybody needs to know.” “I use Remind to just say (classroom event is happening) …and then I use our private Facebook page to post like all the pictures and videos because it’s strictly just for the parents and then like grandparents, nobody else can see it.”

**Research Question Two: Does the current method of communication being used by caregivers align with the parent’s preferred mode of communication?**

**Parents Have Not Been Asked/Feedback**

While no discussion occurred in the focus group sessions regarding if the parent was receiving information in their preferred method, there were mixed responses as to whether the parents had been asked what their preferred method is. Explained by one caregiver, “…when we send out emails through the…childcare system, everybody sees it no matter what. Whether they want to or not.” A few parents did respond that they were given an either/or option. “They did ask us, out of the ones that they did offer, what was our main preference.” However, this seemed to be on an individual basis (caregiver by caregiver), and not center-wide policy. One parent shared, “My teachers asked me specifically like, do you want to be emailed? Do you want to be texted?” while another parent stated, “…but like the center as a whole, they kind of just go with the default….”
Also echoed by a parent: “they never really asked us…for any feedback…but they did ask us out of the ones they did offer what was our main preference. For several of the app-based methods (specifically Remind101 and ClassDojo), parents also reported having to “opt-in” by accepting the caregiver or center’s invitation through the platform.

**Research Question Three: How are communication methods established between parents and caregivers?**

**Communication options addressed during the enrollment process**

Communication options were often addressed during the enrollment process. It was reported that facilities and caregivers communicate to parents about these “default” methods during the enrollment process. Responses indicated parents are asked to provide their contact information, including phone number and email address upon enrollment, and are then integrated into the facility’s and individual caregiver’s communication strategies. In other words, the methods are already established by the center or caregiver first, and then the parent is incorporated into the existing structure. One parent shared, “The teacher calls you a week ahead of time before school starts to let you know…this is my number and this is your number”, which they then use to text subsequently. Or, explained by a caregiver, “I told each parent whenever they wrote their phone number down…I’m going to start a group text. I added them that night and…made sure they have my phone number and then it just kind of went from there.”

**Research Question Four: What barriers do parents and caregivers report when utilizing technology to support communication?**

**When Communication is not Instantaneous**

One prominent topic on the theme of disadvantages of technology was what happens when the communication is not instantaneous. One parent shared an experience of using
technology where “it didn’t really help because they didn’t check it, they didn’t respond in a timely manner” and another discussed “miss(ing) out on that email” wherein they missed pertinent information about an event. Meanwhile, other caregivers mention the concern of a message getting “misread,” a concept explored later in this chapter.

**Technical Issues, Access, and Permission**

Parents and caregivers also offered caution about technical issues as potential barriers for communication technology. It could be that emails or phone numbers are changed. A parent speculated: “you send a message out and that person hasn’t updated their information”, they will miss out on pertinent information. Additionally, for several apps parents receive a code to sign up, and caregivers mentioned parents sometimes are unsure or unable to navigate the system to be fully accepted onto the platform. A parent shared along these same lines, “sometimes that might be an issue, just getting that information when you’re enrolling into a particular class or whatnot.” Alternatively, as shared by one parent, she had to have a caregiver approve her to join the app and was unable to do so promptly. Other caregivers also shared experiences with establishing a new form of technology (Instagram, ClassDojo, and Remind were named) but then stopped when the process became too difficult for them to get started. For example, one caregiver shared: “I don’t know what happened, but we tried to set up a Remind (101) and it just was, we ended up deleting it and just going back…to paper across the board.”

**Loss of Classroom Oversight**

One other concern discussed by the parents was regarding what is being sacrificed by the caregiver in order to use the technology in the classroom environment. For example, a parent shared, “If you’re using technology too much, you’re not paying attention to my child” and
another who agreed “if they (the caregiver) are using technology to communicate with us while they are caregiving…is the caregiving being sacrificed? Like are there, say, more accidents now because the teachers spend time on their cell phone, you know?” However, only parents expressed these concerns, no caregivers.

**Boundary Issues**

Boundary issues were shared as a concern by caregivers, with several sharing that parents have contacted them outside of school hours. While one indicated that they are okay with it and are open to the communication, others disagreed. One caregiver stated, “Please don’t call my phone ‘cause I’m thinking it’s an emergency. I answer and you just ask: so what did he do today?” While another explained, “It’s like, they (think) we’ve become friends. Like no, we’re still teacher and parent.” Several others discussed needing to balance their time with their own children and families stating, “I get where you’re coming from, but I also have my own life…that kind of boundary gets pushed a few times to the point where teachers didn’t feel comfortable using their phones anymore.”

When asked of parents if they had considered these boundaries: “As a parent I have not, but I could definitely see where, as a teacher you would have lots of them.” One parent revealed that the facility director “says in the meeting at the beginning of the year: do not text them if (it is within school hours) because they’re…with your child and they’re teaching.” Additionally, another parent considered boundaries, sharing awareness to “don’t communicate too often. Like every day you send them (caregivers) like a text message in the morning and in the afternoon, in the evening, it may make teachers view us as an annoyance or something like that.” This variation suggests that while some experience these issues, not all do.
Disadvantages of Social Media

While several parents and caregivers described the benefit of being connected on Facebook (explored in the next section), others disagreed. One parent suggested that when caregivers share memes about teaching or complain about their job on a post, the parent may take it personally offensive “like I could be who you’re talking about or are you miserable in your classroom.” A caregiver related to that as well, stating, “If you’re gonna have your parents, then don’t air your laundry. Don’t say, oh, today was a horrible day. I just wanted to come home and bang my head against the wall with these kids.” Some caregivers shared that they are cognizant about their online presence and intentionally do not send or accept friend requests from parents of the children in their care. One caregiver spoke of an example from a colleague that, outside of teaching, “she rapped and she traveled and worked in midnight clubs and that was on her social media.” In this case, she intentionally did not accept friend requests, which upset the parents who tried to add her.

In addition, several other caregivers discussed not wanting to add parents on Facebook too, explaining: “with some of our parents, you know, we see them on social media and they’re not in the best condition sometimes…some things, you know, as a teacher, I don’t need to see…” The caregiver explained that it puts them in an awkward position, considering they are a mandated reporter who is required by law to report any concerns for child wellbeing.

Responses suggest that Facebook also presents its own unique challenge of privacy concerns regarding photo and information sharing. While several caregivers stated they created closed groups for family members, both parents and caregivers stated that privacy concerns were one aspect they considered. One parent explained, “I’m just kind of leery of Facebook because I think anybody could find those pictures and if you have confidentiality issues then it’s kind of
hard to beat that on Facebook.” Caregivers appeared to have safeguards in place to protect confidentiality as well. Several indicated that they have permission forms to fill out to “put things on social media or if they don’t allow it, then we have to make sure those children are not in the picture or on social media or whatever. We do have to have parent consent for all of that.”

**Research Question Five: What benefits do parents and caregivers report when utilizing technology to support communication?**

**Quick, Efficient, Convenient**

The fourth research question, benefits of technology used for communication, received a myriad of responses, all indicating the positive benefits that it can have for communication and promoting the relationship quality between the parent and caregiver. Several responses cite the benefit of “quick” communication. For example, one parent shared that: “It’s really easy for them to reach me over social media or over text message a lot quicker than me having to call the center and get to the teacher or the teacher have, you know, call a home phone or work number or anything like that to get ahold of me. She can shoot me a message over Facebook or text me and man it’s a lot quicker.” Another parent echoed the same: “It’s the quickest way to reach me versus sending home a paper.” Caregivers agreed: “It seems to work much more quicker…than getting it out (on paper or verbally) cause everyone has their phones so it’s quicker to get information out that way and they respond quicker…” Another parent also explained: “(It’s a) better response. Faster response. They’ll respond back quicker to a text.”

As far as efficiency, a parent shared: “It’s so much more easier to send a text or send an email or send a pic or something through tech…it’s way more easier and effective than the paper way.” Echoed by a caregiver: “…I can reach out to all the parents and let them know what’s going on…”
Convenience also played a large role in using communication technology. Several parents agreed, sharing: “A face-to-face meeting is not practical…for timewise. I just, I love the ease, the convenience, the instant gratification.” “With the skills checklist being emailed to me I can look at it whenever.” “Whenever I need to, whenever it comes up, if there’s a certain skill I want to look at it’s just right there on my phone. It’s easy to access and I don’t lose it.” “It’s just so much more convenient, it’s way more convenient. I’m never really going….to put my phone down.” “With my job I have my email pulled up pretty much all of the time.” Caregivers claimed this as well, explaining: “At the end of the day, I may not remember to tell the parent, so I’ll just right then…shoot them a message…” “They’re (We’re) able to send messages and pictures as a whole or just to the individual without having to give out their (our) phone number.”

**Two-Way Communication and Immediate Connection**

Communication technology allows for two-way communication because, as a caregiver shared, “If the parent has questions about the situation, they could easily ask the teachers during the day. They can ask the teacher right away at that incident rather than…several hours later (or) getting lost in the backpack.” Parents also indicated that it helps them to immediately connect with the child’s teacher. A parent shared: “That’s nice to be able to communicate in real time with his teachers or just the director herself.” While another parent adds: “It is comforting to know that if I did need to contact the teacher, there would be avenues that I could do that.” Also sharing, “You could quickly communicate to your child’s teacher or caregiver like, hey we had a rough morning this morning. I’m sorry if, you know, Susie’s in a bad mood this morning we had a rough….go.” While another parent describes dropping off an upset child and the parent can check in with the teacher later to see how she’s doing. The parent then shares the teacher will
“…send me a picture of her like smiling and playing just to make me happy, that I’m not worried”

**Usefulness for Safety Considerations**

Along the same lines, communication technology serves as an essential safety aspect for children, as indicated by participant responses. Several instances were shared where childcare facilities had to close due to incidents (construction, broken water or gas line, severe weather). A caregiver who also acts as assistant director shared that she is able to communicate with families remotely using communication technology. She described how, before implementing the Remind101 app, if there was inclement weather “I used to have to travel back up here to do all the calls to call the parents…and let them know we’re closed.” With technology, she can “blast text” all parents without having to be at the facility, “that way I can reach out to all the parents and let them know what’s going on.”

Additionally, caregiver responses indicated that pictures could be shared of accidents and injuries for parents to make their self-assessment on the need for extra formalized medical intervention or not. “If somebody gets hurt and it’s…you know not fell down and scraped their knee, but like somehow smacked her head on a table or somebody who has a big knot, not good. Some picture, like this is what happened…this is what it looks like now.” This enables the parent to view the injury firsthand and make decisions about what they’d like to do to address it medically.

**Confirmation of Communication**

Responses also indicated that communication technology provides an extra layer of confirmation of communication as well as providing textual evidence. For example, one
caregiver shared that “Through some of the messenger apps…you can actually tell when a parent has read it so you know that they’ve seen it” indicating it serves as “backup” and “proof” to where “when it comes back that they didn’t get it, we can say, yes you did. We even sent it in the (text) group and you all responded that you seen it.” Caregivers suggested that this is helpful for parents who claim to have not received some communication; they can use the read indicators as evidence.

**Records of Written Communication**

Additionally, caregiver responses indicate communication technology can provide “more or less a record of it (communication)…I can go back and if there’s emails and I can file all those emails away in a certain folder and I can reference what was said.” Caregivers shared that “a lot of people just want it in writing” and doing so “(be)cause words can get twisted so easy…keeping everything clear and not having any chance of saying, well that’s not really what happened.”

**Elimination of Paper Waste**

Similarly, while “traditional” methods of communication typically involved printed/paper materials, technology can perhaps eliminate some of the paper use, while at the same time improving communication. Several instances were shared of the parent receiving some type of communication on paper, and then proceeding to take a picture of it “because I’m not going to keep up with that paper.” Paper, from the perspective of caregivers, is ill-suited for communication. Indicating “the papers ended up on the floorboard of the vehicle or in the garbage” and “they don’t read or see notes, but they will pick up and look at an email.” One caregiver shared the experience of a parent saying to her, “I don’t be looking at those papers y’all
sending home” followed by “…so it (technology) helps us with getting information to them because they’ll pick up the phone before they’ll pick up the paper.”

**Ability to Communicate with Multiple Family Members**

One final subtheme that emerged from the broad umbrella of overall benefits of technology is the ability to communicate with multiple family members. A parent shared, “It goes to both parents…if I pick up something out of his mailbox or his cubby and I look at it and read it and then I lose it or throw it away…like, it’s gone to my husband’s email as well and so he’s aware of it when I might not have remembered to tell him. And so, both parents, no matter who picks up, if they’re relying on whoever picks up to relay it, it’s gone to the parents' email.”

**Direct Communication with Parents**

Additional caregiver comments were shared regarding how grandparents or other non-parental caregivers pick up frequently. They suggest that using communication technology ensures that the message gets directly to the parents, so it does not get lost in translation from third parties picking up or dropping off for the day. One caregiver stated it “bridges the gap” for communication efforts.

**Picture and Video Sharing**

With communication technology, particularly text messages and app platforms, participants indicated a benefit was the ability to share pictures and videos of the child throughout the day. Several parents shared that they liked having the “access” to the child’s day. Caregivers also agree they like picture sharing so parents can “actually see what’s going on in the classroom,” sharing that “it makes parents feel like you’re actually doing things” and “we’re
Many caregivers also share pictures and video capturing milestones (first steps, first time rolling over, singing the alphabet), helping the parent to feel more involved in their child’s life. One caregiver stated, “experiences can’t go home in cubbies.” One caregiver even uses photo-sharing as a parent education outlet. By posting the photo and describing what the children are working on, she provides dialogue to the parents on essential developmental practices and ways to support their learning at home.

Caregivers also indicate using photos to provide a sense of comfort and ease for the parent. One caregiver stated, “Picture text has been great for peace of mind for the parent because they will drop their child off and, you know, you’ll tell them the longer you stay, the harder it is. If you’ll just drop them and go. It’s become easier for them to drop and go if you can send them a picture showing that five minutes later, they are happy.” Shared by another caregiver who does the same, “…that’s hard for mama to drop off babies when they’re not happy. So we just let them know that they’re doing a good job and having a good time.”

**Facebook**

Considering Facebook was the most often-cited social media platform used by parents and caregivers, it warrants particular attention for its unique benefits. One parent stated, “I’ve also found that just technology helped me and my husband get to know the parents of the kids” sharing that “…they’re (the children) not old enough where we have friend birthday parties yet so…we don’t have that connection.” The same parent also explained that through the use of private classroom Facebook groups, “they (the caregiver) facilitated this group for us to be able to get to know and interact with the other parents.” Caregivers also discussed parents being able to connect with others through Facebook. Sharing that “now (they) have…playdates like out of the blue…because now they see that they’re bonding in the classroom” and “watching them (the
parents) interact with each other, cause most of my parents they are tagging the friend or parent in there because the children are holding hands or they’re being sweet to each other, so just seeing the parents interact with one another it’s an advantage.”

Additionally, Facebook was noted to facilitate the parent and caregiver relationship in unique ways. For example, one caregiver shared that “I love the parents’ responses…they’ll tell you…I love the pictures and they comment on them and they complement the classroom and what you’re doing in there.” While another shared, “it’s fun for us, for them, like it’s enjoyment for the parents.”

Considering the benefits of Facebook, both parents and caregivers alike commented on the aspect of “friending” the other. Parents cited the advantage of “get(ing) insight of the teacher’s life outside of here (the childcare facility) and inside.” Both populations noted being able to “comment on each other’s pictures” and being able to stay in contact with those that move away. Caregivers also suggested being able to see the child’s milestones experienced with their family as an added benefit.

**Research Question Six: How does technology contribute to parent-caregiver relationship quality in the early childhood setting?**

**More Access and More Connection Felt**

As defined in chapter two, communication is one of the foundational principles of parent-caregiver relationship wellbeing (Epstein, 2010). One parent stated that “it (communication technology) gives you a little more access to the teacher than you would have just in the few minutes for drop-off or pickup” and helps to “foster the relationship.” Another parent also shared that they “definitely feel more connected and more informed,” while another suggested she “want(s) that personal relationship.” Many stated the connection was felt, with one parent
stating, “You feel that connection and that connection is a powerful thing when someone has your child.”

**Ability to Build a Better Personal Relationship**

Similar to the parents, caregivers also seemed to view communication technology as contributing to positive parent-caregiver relationship quality. Many respondents stated the importance of building a better personal relationship, and that technology can “help everybody communicate a little better.” Sharing that, when using these methods (particularly texting), it “gets to be more personal” and they can get closer to the parents and build the relationship quality better. One caregiver explained, “(it makes parents) feel like you actually care…makes them feel secure.”

**Summary**

This chapter provided data findings arranged by the six research questions. The research questions were explored using thematic analysis to draw out the major themes in the data. Data indicated that communication technology plays a significant role in the daily interactions between the caregiver and the parent. Additionally, parents and caregivers alike agree that communication technology is beneficial, provides for efficiency with communication, and can positively contribute to relationship quality. Lastly, the data indicated that while there were numerous benefits to using technology for communication, there were, indeed, disadvantages. The following chapter will present a discussion of these findings.
CHAPTER V
DISCUSSION

Introduction

Although leading theorists in the field emphasize the importance of quality interactions between parents and caregivers (Bronfenbrenner, 1975), and the act of communication to promote the relationship quality (Epstein, 1995), literature on the current use of communication technology and how it may promote the parent-caregiver relationship quality is limited. The current study aimed to add to the current literature by exploring the use of communication technology and its perceived contribution to promoting the parent-caregiver relationship quality in the early childhood setting. The purpose of this chapter is to discuss the data explored in chapter four which will add to the growing literature on communication, technology, and the parent-caregiver relationship quality. This chapter is organized into four sections: 1) Implications of findings, 2) Limitations, 3) Recommendations for future research, and 4) Conclusion.

Implications of Findings

Six research questions guided this study, and chapter four revealed the major findings guided by the research questions. Implications of the findings, organized by the research questions, along with implications for practice and connections to prior literature and theoretical frameworks, are provided below.
Research Question One: How is technology being used by caregivers regarding home to school and school to home communication?

Responses indicated that parents and caregivers are using a variety of communication technology methods, such as text, Facebook, email, apps, and Instagram. It appears that caregivers will use different types of communication methods for individual purposes for communication. For the most part, center-wide communication occurred through email, classroom-wide communication through Facebook or apps, and individual communication about a particular child through messenger or text.

As indicated, parents and caregivers widely used communication technology as a means of information exchange. While reported methods included texting, the social media platform Facebook, and commercial apps designed for such purposes, it appears that less frequently used was the more "traditional" method, email, contradicting Thompson and associate’s (2015) finding that email was the most preferred method, followed by text messaging. However, this current finding aligns well with the same study that indicated ready access to smartphones increases the convenience of use for multiple modes of communication technology (Thompson et al., 2015), thus improving the efficiency and flexibility with communication between caregivers and parents (Yost & Fan, 2014).

Caregivers seem to evaluate what content needs to be shared and then use a communication method appropriate for the content. Newsletters and center-wide information were typically done by email, whereas information regarding individual classrooms or children was sent through text, messenger, or apps. It seems that for individual classroom use, caregivers rely more heavily on the instantaneous connection like texting and apps to communicate, again a finding similar to that of Thompson and associates (2015).
This finding can be understood through the Media Richness Theory, which proposes that when communicators choose a mode that aligns with the content of information needing to be communicated as well as the complexity of the task, the communicator can avoid vagueness and subsequent conflicting interpretations (Daft & Lengel, 1986). The same authors suggest that "richness" of a medium is determined by 1) capability for immediate feedback, 2) capacity for auditory and visual cues and physical presence, 3) level of language that is needed to explain an idea, and 4) ability to personalize a message. For example, complicated or difficult topics are considered "rich" and more likely to need face-to-face communication. In contrast, less complex topics are considered "lean" and can be conveyed with delayed feedback and limited nonverbal cues (Daft & Lengel, 1986). For this research, caregivers appeared to evaluate what they needed to communicate and then chose a method that aligned with the “richness” needed for effective communication.

To better understand the salience of all the factors that accompany the use of communication technology and its perceived contribution to parent and caregiver relationship quality, Bronfenbrenner’s ecological systems theory and Epstein’s spheres of influence theory were used as a conceptual lens for the study. Using an ecological lens, we can see how diverse communication technology platforms enhance collaboration, within the context of the mesosystem, between the caregivers and parents, thus creating more positive relationships. Additionally, Joyce Epstein’s overlapping spheres of influence theory can be used to describe how diverse communication technology platforms assist in creating relationships between caregivers and parents and establishing a supportive, caring community. These findings align well with Epstein’s theory as both parents and caregivers alike credit communication technology as an important factor in the parent-caregiver relationship.
Research Question Two: Does the current method of communication being used by caregivers align with the parent’s preferred mode of communication?

These findings revealed a mixed response as to whether parents were asked for their preference. While no parent indicated they were particularly displeased with any specific method of communication, findings revealed that they were also not explicitly asked if it aligned with their preferences. Instead, upon initial enrollment, parents were either told what was being used currently or asked to choose from several options (typically whatever was in use already at the center) and integrated into that existing process, a finding that may contrast Olmstead’s (2013) and Blackwell and colleagues’ (2013) recommendation for caregivers to choose the right method to deliver information to parents. A task made more complex by Thompson and associate’s (2015) finding that some parents prefer synchronous communication while others prefer asynchronous.

Findings also revealed that no parent or caregiver reported asking, or being asked, for feedback regarding the methods used, which could cause a misalliance between the parents’ needs and the communication approach of the caregiver, again contrasting both Olmstead (2013) and Blackwell and colleagues (2013). Halsey (2005) indicated a process that does not include choice for parents may lead to difficulty in promoting strong relationships and discourage both parents and caregivers. Similarly, Barnes and associates (2016) indicated it is important to identify how the parent receives the communication, again emphasizing the importance of alignment between parent preferences and methods used. This finding also aligns with Forry and associate’s (2012) literature review concerning the constructs of “knowledge” (the specific information providers have about the families they serve) and “practices” (the providers’ interactions and engagement with families in the early childhood setting). When using a
perspective of family sensitive caregiving, the research demonstrates that these constructs can influence quality in the parent-caregiver relationship.

As caregivers need to consider parent preferences, it is also essential to consider the type of content needing communicated as well. Seen through the Media Richness Theory lens, it could be that, even if there is a method of communication a parent prefers, it may not necessarily align with the media richness needed for effective communication. For example, if a parent prefers texting throughout the day (lean method) but an incident occurred that needs a higher ability to use information cues such as body language and tone of voice, the caregiver would need to take this under consideration when choosing a communication method. While a method may or may not align with parent preferences, it is also important to consider the content needing communicated and ensuring that the method aligns in order for the most effective communication. This finding is supported by the Daft and Lengel’s Media Richness Theory (1986) described earlier.

Considering Bronfenbrenner’s ecological model (1979), and Coleman’s interpretation of the model suggesting that “Children’s development and education are supported best when there are frequent and strong linkages among their microsystems” (Coleman, 2013, p. 50), it could be interpreted that this misalliance would limit the parent-caregiver relationship, thus having a significant negative impact on the child’s wellbeing. Additionally, Epstein (2010) suggests the external model and internal model, describing the spheres of influence (family, school, and community) that may impact a child. With a misalliance between parent preferences and modes being used, this external model (the three primary contexts of family, school, and community) can be pushed apart, again negatively influencing the child’s learning and development. We see, as well, the internal model which recognizes the complexity of interpersonal relations. It could
be interpreted that by not aligning mode and preference, parents and caregivers can become discouraged, thus weakening the interpersonal relationships required in the early childhood setting.

**Research Question Three: How are communication methods established between parents and caregivers?**

As indicated in research question two, findings revealed that methods were typically established at initial enrollment. Parents were usually either told what was currently being used or asked to choose from several options (typically whatever was in use already at the center) and integrated into that existing process. This one-way method of establishing communication methods contradicts Epstein’s (2010) and Barnes and colleagues’ (2016) suggestion of considering parent preferences when establishing communication technology, which also aligns with Halsey’s (2005) findings that the modalities used by teachers may not necessarily align with parent preferences. Thompson and Mazer’s (2012) research found that parents use a combination of modes to communicate with teachers, yet this current research found that these methods were relegated to only those established by the caregiver. Ertmer (1999) also suggests that teaching beliefs, comfort with technology, and perceived values of technology play a role in the adoption and use of technology, therefore impacting what methods are available for parents. These findings suggest a further need to develop programmatic practices in relation to Barnes and colleagues’ (2016) call to provide more literature regarding preference and effectiveness of different modes of communication technology used by parents and caregivers.

Considered alongside Barnes and colleagues’ (2016) call for research on preference and effectiveness of different modes of communication, the Media Richness Theory is considered through this research as well. As methods are decided on and developed by the facility,
caregivers and administrators must take into consideration the types of messages that will be distributed and, subsequently, the methods that align with their richness. While much of the content would be relatively “lean” in content (day-to-day happenings, typical growth and development, reminders of events), there will also be times that caregivers will need to communicate more complex, equivocal content. As the methods are developed, it is important for caregivers and administrators to consider the Media Richness Theory. Specifically, what type of content will be communicated and how it aligns with leaner or richer mediums, thus, how it can be done effectively.

Seen through Bronfenbrenner's (1979) theoretical framework, we can see that while parents and caregivers are using communication technology to engage each other, the establishment of such methods may not always be bi-directional, which can create problems within the dyad. This, in turn, can negatively impact the child. However, if what is used already does conceptually align with parent preference, then there would be no cause for concern. It would be essential to consider Bronfenbrenner's (1979) heavy focus on the number and quality of connections between parents and caregivers when considering how methods are established and subsequently used.

Similarly, Epstein's (2010) theory suggests the importance of interrelationships between parent and caregiver as well, viewed as an essential "partnership" between the two. As practices conducted by schools and families draw each closer together, this further aligns with best practice and support for the child. When, in this case, methods for communication are established that work well for both the parent and caregiver, relationships can continue to grow and develop, positively affecting the child. However, when these methods are not established
satisfactorily, this may continue to negatively impact the relationships, thus pushing the spheres of influence apart and negatively impacting the child.

**Research Question Four: What barriers do parents and caregivers report when utilizing technology to support communication?**

While it does appear that benefits abound, communication technology also possesses some drawbacks. Interestingly enough, what was discussed as one of the most prevalent benefits, was also one of the most discussed disadvantages. If a caregiver did not check their email right away, or if there was a delay in a message getting to a parent, it raised cause for concern. It appears that, considering the heavy reliance on the instantaneousness of communication technology, if this does not occur every time it poses as a drawback. The perception here is when communication platforms are used to share information/experiences, the expectations are responses should be quick.

This aligns with Nejja’s (2012) finding demonstrating how technology has revolutionized communication and the dissemination of information. As individuals can be easily and instantly connected, it allows caregivers to be more accessible and communication more convenient, a finding of Jennings and colleagues (2004) that leads to reported increases in parent-caregiver communication. However, as Barnes and colleagues (2016) found, when communication is lacking, the connectedness felt between parents and caregivers is lost, which decreases relationship quality. This research aligns with Jennings and colleagues’ (2004) aforementioned research indicating that, when communication is not as expected, parents may feel “let down” and less likely to view the relationship as positive.

Other drawbacks included technical issues, problems gaining access, and needing permission to access several of the app-based platforms, concerns shared more often by parents
than caregivers. While less commonly occurring, these concerns warrant paying particular
attention to the ease and accessibility of the chosen method, aligning with recent research by
Blackwell, Wartella, Lauricella, and Robb (2015). They found that that while caregivers
frequently have positive attitudes towards technology, few receive training or support to use
them effectively, and felt they had no support in understanding how to integrate technology in
appropriate ways. Additionally, Mitchell, Foulger, and Wetzel (2009) suggest that when
caregivers or programs integrate technology, it can produce an unintended communication gap
when families are unable to work the technology effectively. The authors suggest providing
opportunities for caregivers to demonstrate how to use the available platforms and provide
information on how to navigate these technical systems from the start, reducing the possibility
for technical problems to occur. When weighing the pros and cons of implementing certain
methods, it is essential to examine these considerations, an implication that warrants
consideration as childcare facilities introduce these apps to parents. Aligning with literature
from Parette and Petch-Hogan (2000), programs should think beyond a “one size fits all”
approach and consider the unique individual needs of families, particularly from culturally and
linguistically diverse backgrounds.

While not directly experienced by the research participants, another potential barrier
suggested was the availability of high-speed internet access. Additionally, parents may not have
essential technology components such as smartphones, laptops, or valid email addresses. Parents
speculated how, if a family did not have access to high-speed internet access or the "right"
technology that aligned with caregiver efforts, they might have difficulty accessing the
communication sent. This aligns with findings indicating that while 70% of early childhood
educators own a desktop computer and more than 60% own a laptop (Wartella et al., 2010),
computer access is not as universal as once thought (Blackwell et al., 2013). Also of note, Mississippi, and the south in general, has a lower rate of computer and broadband internet access than the national average (U.S. Census Bureau, 2017a). This implies that while technology may be believed to be widespread and readily available to all, this may not necessarily be the case, and should be considered when investigating implementing or continuing to use technology for communication.

Additionally, increasing the use of communication technology also merits supervision concerns. As caregivers have more access to technology within the classroom, it runs the risk of becoming a "distraction" and moving the focus from the supervision of children to their screens. Lack of supervision by a caregiver poses a safety risk, aligning with national standards for practice in childcare explaining that “supervision is basic to safety and the prevention of injury” (American Academy of Pediatrics, 2019, p. 68). Furthermore, supervision by the caregiver protects children from social harm (teasing, bullying, or inappropriate behavior), thus maintaining the quality of the childcare facility (American Academy of Pediatrics, 2019). The same standards also indicate that active and positive supervision includes being aware of and scanning for potential safety hazards as well as scanning play activities and circulating around the areas children are playing in (American Academy of Pediatrics, 2019), activities that cannot be successfully done if the caregiver is distracted by a screen on a device.

A disadvantage of technology revealed through the findings is the concept of boundary issues, a topic not yet addressed in the relevant literature. Caregivers must balance home and work life, and the inclusion of technology creates a path for caregivers to be accessible at all hours. This could create cause for concern, considering some parents may not think about this when contacting a caregiver after hours. By implementing technology, caregivers may no longer
have the "8-5", being accessible outside of the typical workday as well. This lack of boundaries
could create a particular strain on a caregiver as he or she may want to be responsive to parents
who have concerns or questions, but feeling obligated to respond outside of business hours may
infringe on the caregiver’s own personal responsibilities and family life. Towers, Duxbury,
Higgins, and Thomas (2006) suggest that, in other vocations such as business professionals, this
is a double-edged sword, explaining that increased accessibility allows for flexibility and makes
it easier to accommodate both work and family, but also increases expectations: employees are
expected to be almost always available, making it easier to infringe on family time. While this
concept may help to build the relationship of parents and caregivers beyond the facility, it can
also negatively impact the caregiver’s home life.

Although technology, particularly Facebook, possesses many unique benefits, both
parents and caregivers had cause for concern regarding when information or pictures are posted
from, or about, a facility. Considering the rapid spread of information on social media, when
something is posted on the platform, this can get out of hand quickly. A parent complaint,
concerns of illness, or disgruntled employees all pose a risk to the facade displayed for the
public's eye, aligning with Treadway and Smith (2010) indication that once information is out on
the Internet, particularly Facebook, it cannot be easily contained. This puts potentially sensitive
information out in the open and largely visible for other people to see. Oftentimes, this has a
tremendous impact on the opinion of others (Treadway & Smith, 2010), an important
consideration for this field.

In addition, the concept of "friending" one another may not always be as welcome as
once thought. As caregivers must separate their personal and professional lives, they may not be
as open to parents seeing their personal pages, aligning with Owen and Zwahr-Castro’s (2007)
finding that professional objectivity can be affected when professional and personal information are combined. Caregivers, too, discussed not wanting to add parents of the children in their care, indicating the importance of keeping professional and private lives separate, a contrast to benefits stated earlier of "friending" one another. The literature reflects this gray area, as Petronio (2002) argues that this line is hard to determine, as boundaries can vary based on the relationship and the information being disseminated. While not yet explicitly studied at the early childhood level, McEwan (2012) asserts that social media may make it difficult to maintain strict, thick boundaries around personal information, which may help understand the mixed responses of “friending” implicated in this research. Additional work by Ashton (2016) suggests that it is important to recognize the ethical and legal reasons for maintaining professional boundaries. While Ashton’s work is explicitly written for nurses, these causes for concern can easily be carried over into the early childhood field as well.

Along the same lines, parents frequently cited privacy concerns when considering the use of Facebook or other platforms to share media digitally, similar to a finding by Yost and Fan (2004). While several caregivers stated that they have private or closed groups, it is important to consider privacy issues, aligning with work by Mitchell and colleagues (2009). They suggest that caregivers give consideration to the confidentiality of the platform, taking care to choose photos that do not show children’s faces or names, yet caregivers in this research only address creating closed groups.

The use of technology for communication presents many barriers. While Halgunseth and colleagues (2009) suggest it is important to be continually looking for ways to improve communication, technology warrants its own consideration for its unique dynamics. It is imperative that when using technology, efforts continue to align with positive standards of
practice. This aligns with findings from Thompson and associates (2015) recognizing the usefulness of technology but citing additional need to analyze further how it is used as well.

When seen through the scope of the Media Richness Theory, it would be important to consider the barriers experienced by both parents and caregivers. Communication efforts should be based on the ability to efficiently disseminate information, a major pillar in the Media Richness Theory (Daft & Lengel, 1986). As such, caregivers must remain cognizant of the many barriers facing parents as they select methods to use and their alignment to the content needing addressed.

Similar to research question two, when viewing this finding through the theoretical lenses of Bronfenbrenner (1979) and Epstein (2010), the barriers may negatively impact or damage the relationship between parent and caregiver. For example, in the mesosystem level of Bronfenbrenner’s (1979) ecological model, the more distant the relationship between parent and caregiver, the more negatively affected the child. Similarly, in Epstein’s (2010) model, the more “pushed apart” the external model is, the more damage to the relationship. Through both of these models, when communication is disrupted or limited, it can negatively impact the relationship and, in turn, the child.

**Research Question Five: What benefits do parents and caregivers report when utilizing technology to support communication?**

The findings revealed the advantages far outweigh the disadvantages (102 versus 41 pieces of data) when considering the use of communication technology in the early childhood environment. While there were a considerable number of themes revealed and explored in chapter four, the ability to have "instant communication" and the ongoing availability of both parents and caregivers were ongoing themes, a finding similar to that of Thompson and
colleagues’ (2015) advantages of “immediate” and “convenient” regarding communication technology. The current research revealed communication technology was cited often as quick, efficient, and convenient, a growing need for new generations in a technology-driven world also identified by Nejjai (2012). This result is similar to Jennings and colleagues’ (2004) finding that technology has allowed caregivers to be more accessible and made communication more convenient, leading to reported increases in parent-caregiver communication. This, coupled with Thompson and associates’ (2015) finding demonstrating the growing use of technology in the field as well as Smith’s (2015) additional findings demonstrating a majority of parents of young children and caregivers have smartphones, suggests an ever-growing trend that should be followed closely, which was an implication from Barnes and colleagues’ (2016) research.

This research revealed communication technology also serves as an essential health and safety tool used by caregivers and parents. Caregivers could alert parents to various safety concerns (broken gas lines, severe weather, construction), and parents were able to receive the information instantaneously and act quickly to ensure the safety of their children. Additionally, picture sharing is used for parents to visually see any pertinent accidents or injuries incurred by children, suggested by the American Academy of Pediatrics (2019) as an essential feature for child wellbeing. Considering Hazinski and colleagues’ (2004) assertion that school staff are responsible for the physical well-being of a large number of children for the majority of the hours in the day, it is essential that caregivers are able to quickly and effectively communicate with parents of the children in their care. It also aligns with the call for all school facilities to have an emergency response plan that includes effective and efficient communication (Hazinski et al., 2004)
As an added benefit, an important finding is the ability to confirm receipt of communication as well as creating records of communication. By adding this extra layer, caregivers can ensure that the parent received the disseminated information, as well as have a built-in "record-keeping" system for parents and caregivers alike to track meaningful dialogue between the two. This record allows both groups to refer back to the written material as needed, a concept suggested by Mitchell and colleagues (2009), and also supported by *Caring for our Children (CFOC)* (American Academy of Pediatrics, 2019), a resource guide containing performance standards for early care and education programs. The CFOC document states that records should be kept for all children enrolled in the facility, to ensure “that there is consistency over time and across staff and an understanding between parents/guardians and caregivers/teachers about concerns for, and attention to, the safety of children” (American Academy of Pediatrics, 2019, p. 408). Considering the necessity of documentation and records in the modern age, this concept, while not explicitly researched yet, warrants attention as it shows to be a useful tool for parents and caregivers alike.

Shifting efforts for distributing information to a technology-based platform also seems to affect resource conservation efforts. Both caregivers and parents reported technology-based efforts as more conducive to communication, which means that traditional paper-based efforts may become a thing of the past. This exemplifies guidelines from the Northeast Recycling Council’s (NERC) 2011 publication regarding paper use reduction in schools. This document shares guidelines such as promoting the use of electronic media and communicating through online methods to eliminate paper waste, as well as creating and distributing publications, reports, and memos electronically. NERC reports measures of success for this concept as decreased paper purchasing and waste generation, reduced material and labor costs, as well as increased
staff satisfaction and reduced printer wear and tear. The report also cites significant environmental measures, leading to saving energy and landfill space and reducing greenhouse gas emissions, benefits affecting the entire world.

An additional benefit to using communication technology, as discussed by parents and caregivers, is the ability to expand communication to all pertinent individuals. When giving consideration to trends showing single parents and split-family households are on the rise, statistics show that the number of children living with an unmarried parent has more than doubled since 1968 (Livingston, 2018). This, coupled with the decline in marriages and prevalent divorce statistics, means that children may not have as consistent pick-up and drop-offs as in the past. Other family members, friends, or babysitters could be relied on, reflecting Gonzalez’s (2017) statement that the one-size-fits-all approach to communicating with families is not enough. In modern families, the caregiver may not be able to see the parent face-to-face as frequently. By using communication technology, caregivers can communicate to both parents simultaneously if the child lives in more than one household, or directly with parents if other individuals handle drop-off and pick-up. This finding aligns with suggestions by Konen (2019) to use an app that communicates information to all involved parties and putting relevant documents on a cloud platform so, again, it can be accessed by relevant individuals. Gonzalez (2017) also suggests discussing preferences and needs of both homes, ascertaining the best way to communicate with each household and who the primary contacts are, a concept highlighted by the current research.

Picture and video sharing were also frequently cited as benefits to communication technology, a finding similar to that of Thompson and associates (2015). Perhaps most resounding was a comment shared by a caregiver: "experiences can't go home in cubbies."
Picture and video sharing enable caregivers to provide glimpses into the child's classroom life, helping parents to understand the learning activities and engagement the child participated in, a concept addressed by Mitchell and colleagues (2009) to promote family involvement. Much like similar literature by Bronfenbrenner (1979), NAEYC (2017), Olmstead (2013), and Sheridan and associates (2012), increasing parent engagement in school environments provides numerous benefits. With more opportunities to share the child’s experiences, the parents are drawn into the lived experiences of the child through the technology of live video streaming and captioned pictures, thus increasing the parent’s opportunities for engagement.

As a unique attribute to communication technology, the social media platform Facebook presented its own unique set of benefits. Allowing opportunities for parents to connect with other parents, expanding the parent-caregiver relationship, and providing the ability to connect outside of the facility, all provide unexpected benefits used to develop the parent-caregiver relationship beyond typical methods. This finding adds to the growing body of research on trends in using social media, such as Mazer, Murphy, and Simonds’ (2007) finding that increased teacher self-disclosure via Facebook positively influences students’ motivation to learn and higher degrees of liking, as well as Thompson and Mazer’s (2009) finding that Facebook plays a role in student academic support. While not directly linked with the parent-caregiver relationship, this finding further develops the potential uses and benefits of social media.

Additionally, the findings regarding the benefits of Facebook aligns with Forry and associates’ (2012) literature review revealing the many inter-related constructs of both parent and caregiver that impacts the parent-caregiver relationship. For example, Forry and colleagues (2012) suggest that parent characteristics such as level of education, personality, attitudes, and expectations, as well as provider/program characteristics such as personal and professional
characteristics of the caregiver, values and expectations, and resources of a provider can all affect the motivation, confidence, capacity, willingness, and effectiveness of engaging one another. Facebook can be used as a method to help parent and caregiver characteristics align, by being able to connect with one another on a more personal level.

Media Richness Theory can be used to understand the benefits cited by parents and caregivers. As discussed, communication technology allows for quick, convenient communication, particularly for content that is more straightforward and can easily be distributed through leaner mediums. Parents and caregivers alike can easily communicate with each other about routine, everyday content that needs shared between the two through the use of communication technology. Considering the low level of complexity for this type of message, leaner methods such as text messaging or email can be used effectively within the dyad, as demonstrated through the Media Richness Theory (Daft & Lengel, 1986).

In contrast to the barriers associated with communication technology, the benefits seen through the lenses of both Bronfenbrenner's (1979) and Epstein's (2010) theories highlight the many positive attributes of using communication technology. Just as barriers negatively impact the relationship, the benefits of ongoing interactions and positive communication can help to draw the parent and caregiver dyad closer together, highlighting the “ideal” situation for both theories. Bronfenbrenner (1979), who indicated that when different parts of the microsystem work together (in this case parent and caregiver), the child is positively affected. As the relationship quality of the dyad benefits from communication technology, the child continues to be positively impacted. Additionally, the benefits explored through this study envelope Epstein’s two of the three primary contexts in which the student learns and grows: the family and the school. As Epstein (2010) shared, practices conducted by the schools, families, and
communities can be conducted separately or jointly to influence the child’s learning and
development. By continuing to develop communication patterns and, consequently,
relationships, this external model can be moved closer together, thus becoming more intertwined
and likely to have a positive impact on the child.

As such, the individual and institutional level of relationship development, suggested by
Epstein’s (2010) theory, can be seen in the findings of this study. Not only do we acknowledge
relationships develop at the individual level through the use of technology, we also note policy
implications and guidelines that can be effective at the institutional level. Additionally, we
acknowledge the impact that communication technology can have on several of Epstein’s (2010)
six types of parenting involvement. This can include parenting (e.g. assisting parents with child
development knowledge), communicating (e.g. increased availability and timeliness), learning at
home (e.g. distributing information and ideas to families about helping children at home), and
decision-making (e.g. involving parents in facility activities) (Epstein, 2010), all done through
the use of technology.

**Research Question Six: How does technology contribute to parent-caregiver relationship
quality in the early childhood setting?**

Both parents and caregivers expressed feeling that they had a good relationship with the
other. While many responses shared positive descriptors of the relationship, findings indicated
that both parents and caregivers alike credit communication technology as one decisive
mitigating factor in parent-caregiver relationship dynamics. Similar to Yost and Fan’s (2014) and
Thompson and colleagues’ (2015) descriptors of efficiency, convenience, and flexibility,
participants expressed that having the open, bi-directional, and immediate access to technology
has vastly impacted communication methods, which, in turn, positively impacts the relationship

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quality. This highlights Halgunseth and colleagues’ (2009) implication of improving communication to increase parent connectedness and involvement with their child’s caregiver, while also aligning with Blackwell and associates’ (2013) finding that shows both parents and caregivers perceive technology to be a useful tool to promote parent engagement. In contrast, only one parent revealed displeasure with the relationship with their child's caregiver, citing a lack of communication as the primary concern. This, perhaps, shows the substantial impact that the act of communication can have on relationship quality well-being. However, more fully explored in the limitations section of this chapter, this response may be limited due to the focus group introduction discussing the concept of communication and relationship wellbeing with the participants.

Considered alongside Halgunseth and colleagues’ (2009) emphasis on the quality of communication to promote the parent and caregiver relationship, the Media Richness Theory can be a useful lens to view these findings through. As seen in the research, it is not just the quantity of information being sent and received, but it is the effectiveness as well. As parents and caregivers alike discussed the need to have face-to-face communication (high in richness), but also welcome communication technology such as texting (low in richness), the impact on the relationship rests on the effectiveness of these methods. When communication aligns with the parent and caregiver wants and needs, the relationship builds. This relationship, however, can be damaged when the alignment of the method used and the content that needs addressing is misaligned. Thus, parents and caregivers alike must consider the content addressed and the richness of media used, in order to effectively communicate and, subsequently, build the relationship.
Considering that Bronfenbrenner’s (1979) and Epstein’s (2010) theoretical frameworks were developed before the onset (Bronfenbrenner) or rapid development (Epstein) of communication technology, this research provides for a unique scope to be seen through both theories. As demonstrated, communication technology can be a useful tool to improve relationship quality between parents and caregivers. As Bronfenbrenner’s mesosystem continues to look at the interactions between components of the microsystem, and as Epstein’s model pulls the spheres of influence closer together, communication technology plays a significant role in that process. While initially only represented by both theorists as “relationships” or “communication”, the concept and revolution of technology for communication and subsequent relationship development offer unique attributes to both theoretical views.

**Framework of Findings**

Considering the vast amount of findings from this research and the pertinent connections to the three identified theories, Table 5 (below) provides insight for alignment of the research question, take-away message, and connection to the theoretical frameworks.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Take-Away</th>
<th>Connection to Bronfenbrenner and Epstein</th>
<th>Connection to MRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How is technology being used by caregivers regarding home to school and school to home communication?</td>
<td>Many types of technologies are being used by parents and caregivers to communicate. Different methods are used for different purposes.</td>
<td>Diverse communication platforms can aid in enhancing the frequent and strong linkages in the mesosystem as well as assist in creating positive communication within the parent and caregiver relationship.</td>
<td>Caregivers must give consideration to choosing methods that align with the richness of content to be communicated.</td>
</tr>
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Table 5 (continued)

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Take-Away</th>
<th>Connection to Bronfenbrenner and Epstein</th>
<th>Connection to MRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Does the current method of communication being used by caregivers align with the parent’s preferred mode of communication?</td>
<td>Parents are not necessarily directly asked (mixed responses), but no parent was particularly displeased.</td>
<td>The potential misalliance for preference and method used can cause disruption to the parent-caregiver dyad, thus negatively influencing the relationship quality and, in turn, child wellbeing.</td>
<td>Parent preferences may not align with the media richness needed for effective consideration. Further support for caregivers to consider content needing communicated.</td>
</tr>
<tr>
<td>3. How are communication methods established between parents and caregivers?</td>
<td>At time of enrollment, the parent is integrated into existing methods already being used by the facility.</td>
<td>If the existing methods work well for the parent, it is beneficial for the dyad. If there are problems between preference and what is used, it could create a misalliance and negatively impact the relationship quality.</td>
<td>As methods are developed by the facility, consideration must be given to the types of messages that will need to be addressed and how they align with the media’s richness.</td>
</tr>
<tr>
<td>4. What barriers to parents and caregivers report when utilizing technology to support communication?</td>
<td>Several barriers including lack of quick responses, technical issues, problems gaining access/permission, lack of high-speed internet access, essential technology components, lowered supervision, boundary issues, disadvantages unique to Facebook platform.</td>
<td>Barriers or problems with communication can cause disruption in the relationship quality of the parent-caregiver dyad, resulting in distance within the relationship and, in turn, negatively impacting the child.</td>
<td>Consider barriers faced when choosing methods based on richness.</td>
</tr>
</tbody>
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Table 5 (continued)

| Research Questions                                                                 | Take-Away                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Connection to Bronfenbrenner and Epstein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Connection to MRT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | “Lean” methods can be quickly and efficiently used, which is useful in the early childhood setting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 5. What benefits do parents and caregivers report when utilizing technology to support communication? | Many benefits including quick, efficient, convenient; useful as a health and safety tool; allows for receipt of communication; resource conservation efforts; expansion of communication to all pertinent individuals; picture and video sharing; advantages unique to the Facebook platform. | When communication is positively accomplished, it aids in creating frequent and strong linkages within the microsystem and draws the spheres of influence closer together, thus positively impact the parent-caregiver relationship quality and, in turn, the child. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 6. How does technology contribute to the parent-caregiver relationship quality in the early childhood setting? | Relationship quality is positively promoted by good communication, and communication technology can play a significant role in what this looks like. Technology can be used to promote the relationship quality, but it should be used with caution. | Technology is a useful tool for increasing opportunities for positive communication practices. | It is not just about quantity, but effectiveness too. Caregivers should take caution to ensure alignment of the method used and the content needing addressed. |

**Implications for Practice**

These findings are important to the field of early childhood because it prompts practitioners to stay engaged with communication technology options available, aligning with recommendations from Nejjai (2012). In addition, it provides findings related to determining
preferences of parents, aligning with findings by Barnes and colleagues (2016). Research and theory continually drive the field of early childhood education, especially relating to the development of programmatic practices such as school to home communication. When considered alongside Thompson and associates’ (2015) research showing that the use of communication technology is a growing trend in this field, more research is needed to define programmatic practices further. Findings from this study suggest that, while the use of technology can support the parent-caregiver relationship quality, we have yet to see one ultimate recommendation for “best practice.” Instead, each situation is unique, and thus recommendations for what is ideal can vary from one setting to another.

Current findings revealed that communication technology can be used efficiently for quick, bi-directional communication that is welcomed by both parents and caregivers. Additional concepts like picture sharing, connecting on social media platforms, and direct communication to relevant people expand the benefits for this approach as well. However, industry leaders must consider additional concerns of lowered supervision, boundary issues, and the parent-caregiver professional relationship, among others.

Thus, administrative personnel of childcare facilities should consider these results when considering policy development. For example, since the loss of caregiver supervision was shared as a concern, administrators need to address the issue of when and how to use technology within the context of the classroom with caregivers. By addressing this issue, it may impact the safety of the children enrolled at the facility. This finding suggests childcare facilities should ask parents early in the relationship what type of communication technology is preferred, and what situations are appropriate for sharing information through these methods. Even with its benefits, communication technology should be addressed within staff and parent handbooks to outline
appropriate use. As noted in the discussion, professional boundaries can be blurred when using some technology platforms. This study offers guidance for administrators to clearly outline use and expectations in both oral and written formats.

In addition to boundary issues, guidance should be provided to both staff and parents for what situations or events that lend to the use of technology for sharing information. As noted, some situations or information may be best shared in a face-to-face meeting offering both the caregivers and parents opportunities to discuss sensitive situations. This study provides guidance that outlines best practice for the use of communication technology for all programs that choose to use these platforms as a means to share information.

**Limitations of the Study**

While chapter three addressed some of the more generic methodology limitations, this section also addresses additional limitations post data collection. First, although the original research intended to adhere to strictly using online focus group protocol, recruitment efforts for these populations proved more difficult than anticipated, and the researcher was unable to attain enough parent and caregiver participants to accomplish data saturation with online methods alone. Despite this, it was important to present the voices of these participants, as community-based programs are currently underrepresented in literature. Thus, the protocol had to be shifted from online-only to some face-to-face sessions as well. This shift led to a reduction in the capacity to recruit participants throughout the entire state of Mississippi. Despite this, the researcher did make every effort possible to recruit throughout the state, expanding the participant population to reach as far as possible.

Second, participants were recruited based on actively using communication technology already, meaning that those who were not, were not included. This may prevent generalizability
to the entire population, as it leaves out a sample of non-technology users. However, unlike quantitative studies that hinge on generalization of findings, qualitative research is designed to provide a more in-depth look at phenomena thus providing explanations and meanings rather than generalizing findings. Considering this research is geared toward the use of technology, not its potential use, warrants some consideration.

Third, participant demographics, particularly considering race, were limited. For example, in the state of Mississippi, 59.1% of the population is White, 37.8% Black or African-American, and 1.1% Asian (U.S. Census Bureau, 2018). Parent participants reported as 88% white, 8% Black or African-American, 4% Asian. The caregiver population was more on par with typical racial makeup, with 52% of participants reporting as White, and 48% Black or African-American and 0% Asian. Although data saturation occurred, future studies should conduct additional focus groups to increase sample size to produce more participants to align with state-specific demographics.

Fourth, the types of childcare facilities represented may impact the results. While efforts were made to recruit from a wide variety of types of facilities, it is not a representative sample. Parent participants represented nine different facilities, eight as community-based centers and one university lab-school, while caregiver participants represented thirteen different facilities, four different Head Starts and nine different community-based centers. This research does not give consideration to the differences in type of childcare facilities available.

Fifth, socioeconomic status of the parents and caregivers may not accurately represent the general population. The demographic data reported in chapter three reveals 17 out of 24 parents and nine out of 23 caregivers reported a household income of $50,000 and higher, while the state average for Mississippi is $43,567 (U.S Census Bureau, 2018). Differences in socioeconomic
status may impact the type of facility used for childcare and technologies available for use. This research does not necessarily contain participants for an adequately represented sample per socioeconomic status.

Finally, the fifth limitation of this study pertains to the unique nature of focus groups and participant responses. While focus group data provides a unique opportunity to present interaction among participants (Hennink, 2014), interaction data is often underused and under-reported in research (Duggleby, 2005). In this case, the only data analyzed was actual dialogue from participants. So, if a participant agreed or had similar experiences but did not necessarily say aloud "me too" or the like, that data was not recorded. This lack of dialogue is of particular concern when research aims to explore current uses and trends, similar to research question one: "How is technology being used by caregivers regarding home to school and school to home communication?" In this instance, while participants experienced similar methods, they were less likely to say so if another participant had already described it in the group. This results in underrepresentation of the data, a topic addressed in the recommendations for future research.

**Recommendations for Future Research**

Although this research makes a significant contribution to the field, there are still many questions that remain to be answered to improve policy and practice. The researcher makes the following recommendations for further research:

Since the sample was relatively small (parents, 24 and caregivers, 23) and because each facility possessed its own particular type and style of communication methods, further research on this topic is warranted. It would be helpful to conduct additional focus groups to know if these views are similar across more facilities, expanding into a nationwide scale. Although
saturation was reached, additional data to further explore the frequency and depth of the identified subthemes would be valuable data.

Additionally, a quantitative approach, thus the development of a quantitative measure, may more accurately answer the call from Thompson and colleagues (2015) to identify current use and trends in communication technology. Thus, this researcher suggests additional quantitative studies to more fully explore what technologies are being used to share information between school and home.

Finally, research could further evaluate how communication technologies used align with parent preferences. While no parent notably indicated the current method used was not preferable, a scaled response, broken down by type of communication, could be helpful. This additional data would provide a more authentic reflection of how accurately the technology aligns with preference. Also, additional data could provide pros and cons for each type of communication technology (email, text, messenger, apps, and the like), which would provide further guidance in decision-making for caregivers and industry leaders alike.

**Conclusion**

Despite study limitations, this research helps to fill gaps in the current literature (Barnes et al., 2016; Thompson et al., 2015) regarding communication technology and the parent-caregiver relationship quality. Communication technology is here to stay, and continues to expand in style and use. Practitioners, administrators, and theorists alike must continue to stay abreast of this dynamic impacting the parent-caregiver relationship quality. Considering the paucity in relevant research, this study begins to scratch the surface of this concept. The themes, subthemes, and concepts identified here will add to the growing literature of best practice for early childhood environments and act as a springboard for further exploration in this area.
REFERENCES


Ashton, K. S. (2016). Teaching nursing students about terminating professional relationships, boundaries, and social media. Nurse Education Today, 37, 170-172. DOI:


Child Care Aware of America (2020).


APPENDIX A

RECRUITMENT ASSISTANCE REQUEST LETTER
The following script was used to email childcare facilities from the Department of Health licensure database.

Good morning/afternoon,

My name is Stephanie Haney and I am a Ph.D. student at Mississippi State University working on my dissertation that explores the use of communication technology in the parent-caregiver relationship. As part of my research, I am conducting online focus groups with parents and caregivers at licensed early childhood facilities. I am writing to see if you would be able to pass along a flyer (attached) to parents and caregivers at your facility, in order to help me recruit research participants. This flyer explains my research focus, provides a consent form, and gives contact information if they would be willing to participate in the focus group. I am conducting the focus group online, so participants would be able to access the meeting remotely. Would you be willing to help me out?

Sincerely,

Stephanie Haney
APPENDIX B

INVITATION FOR FOCUS GROUP AND SOCIAL MEDIA POST
Focus group participants sought for early childhood research

Dear early childhood program parents and caregivers,

I am a Ph.D. student at Mississippi State University attempting to conduct original research on using communication technology and its impact on the parent-caregiver relationship in the early childhood setting.

I am looking for a few participants to take part in an online focus group meeting. You will only need basic streaming internet and a working web browser to participate. You also have the option to “dial in” like a regular phone call. This meeting should last no longer than 1 ½ hours and consists of semi-structured interview questions. I will share all data analysis with you before being published to make sure your ideas are represented accurately. As a thank you for your time, you will receive a $15 Walmart gift card after the focus group has ended.

Please consider participating in this focus group. All information will be kept confidential by utilizing pseudonyms for center and participant names. If you would like to participate, please complete the following survey. This consists of the consent form, a few demographic questions, and asks for contact information in order to register you for a preferred time for the focus group meeting.

If you have any further questions, please do not hesitate to email me at sh2365@msstate.edu or call me at 785-787-5517.

https://www.surveymonkey.com/r/RD2R2SH

Sincerely,

Stephanie Haney
Doctoral Candidate
Mississippi State University

Figure 3  Flyer Used for Invitation for Focus Group

Note. Graphic image of the flyer distributed to childcare directors and staff as an invitation to participate in focus groups.
Figure 4  Social Media Post Used on Facebook

Note: Graphic image of the social media post the researcher used on her own personal Facebook page to recruit participants.
APPENDIX C

CONSENT FORMS WITH IRB APPROVAL AND DEMOGRAPHIC SURVEY
Online Option

The following consent form was provided on the online survey link through SurveyMonkey:

**Mississippi State University**

**Informed Consent Form for Participation in Research**

**IRB Approval Number:** IRB-18-476

**Title of Research Study:** Communication Technology and Parent-Caregiver Relationships in Early Childhood

**Study Site:** Online: web-based conferencing platform *Zoom.*

**Researchers:** Stephanie Haney, Mississippi State University
Advisor: Dr. Julie Parker, Mississippi State University

**Purpose**
The purpose of this qualitative study is to explore parent and caregiver perspectives on the use of communication technology as it relates to parent-caregiver relationship quality.

**Procedures**
If you agree to take part in this study, you will be asked to first complete a short demographic survey online that will also ask for your informed consent to participate in this research. Then, you will be asked to participate in a roundtable-type discussion with other participants. You will be asked open-ended questions that relate to communication practices between yourself and the caregiver/parent. You will be encouraged to provide dialogue that can later be transcribed and analyzed.

**Risks or Discomforts**
There are no known risks associated with this research study; however, a possible inconvenience may be the time it takes to complete the study or sitting for a prolonged period (1 ½ hour). However, the focus group will be held remotely, so you are able to participate in the comfort of your own home.

**Benefits**
Participants may not directly benefit from this research; however, I hope that your participation in the study may provide data to further develop quality practice for the field of early childhood in a way that can benefit the caregiver and parent in mutually beneficial ways.

**Confidentiality**
The researcher will record the session using the Zoom software and on a password protected iPad which will be kept in a locked cabinet until the data can be transcribed. Please note that both recordings will have both auditory and visual content. Once transcribed, the data will be stored on a password protected computer, with a master key that links names and codes maintained in a separate and secure location. The audio recordings, transcription, and master
key will be destroyed 3 years after the close of the study. At the conclusion of this study, the researcher will publish the findings. Study data will be published through Mississippi State University’s dissertation publishing resource, ProQuest. Information will be presented in summary format and you will not be identified in any publications or presentations.

Please be advised that although the researcher will take every precaution to maintain confidentiality of the data, the nature of focus groups prevents the researcher from guaranteeing confidentiality. The researcher would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the focus group to others.

Please note that these records will be held by a state entity and therefore are subject to disclosure if required by law. Research information may be shared with the MSU Institutional Review Board (IRB) and the Office for Human Research Protections (OHRP) and others who are responsible for ensuring compliance with laws and regulations related to research. The information from the research may be published for scientific purposes; however, your identity will not be given out.

Thank you for agreeing to participate in our research. Before you begin, please note that the data you provide may be collected and used by Amazon as per its privacy agreement. Additionally, this research is for residents of the United States over the age of 18; if you are not a resident of the United States and/or under the age of 18, please do not complete this survey.

Note that Amazon Mechanical Turk, Qualtrics, and Inquisit have specific privacy policies of their own. You should be aware that these web services may be able to link your responses to your ID in ways that are not bound by this consent form and the data confidentiality procedures used in this study. If you have concerns you should consult these services directly.

**Questions**
If you have any questions about this research project or want to provide input, please feel free to contact Stephanie Haney at 785-787-5517 or faculty advisor Julie Parker at 662-325-0828. For questions regarding your rights as a research participant or to request information, please feel free to contact the MSU Human Research Protection Program (HRPP) by e-mail at irb@research.msstate.edu, or visit our participant page on the website at http://orc.msstate.edu/humansubjects/participant/.

To report problems, concerns, or complaints pertaining to your involvement in this research study, you may do so anonymously by contacting the MSU Ethics Line at http://www.msstate.ethicspoint.com/.

**Voluntary Participation**
Please understand that your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue your participation at any time without penalty or loss of benefits.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study.
If you agree to participate in this research study, please click “Next” below. Please keep this form for your records.

Face-to-Face Option

The following consent form was provided as a hard copy and distributed before the focus group began. The researcher collected all consent forms and demographic surveys and confirmed a signature was provided before beginning the focus group.

The Influence of Communication Technology on the Parent-Caregiver Relationship

Introduction: Thank you for taking the time to participate in this focus group research. Please read the following information very carefully regarding your informed consent. There is also a short demographic survey at the end.

IRB Approval Number: IRB-18-476

Title of Research Study: The Influence of Communication Technology on Parent-Caregiver Relationships in Early Childhood

Study Site: Online: web-based conferencing platform Zoom. Face-to-face options as well.

Researchers: Stephanie Haney, Mississippi State University.
Advisor: Dr. Julie Parker, Mississippi State University

Purpose: The purpose of this qualitative study is to identify how current practices in communication technology influence the quality of the parent-caregiver relationship.

Procedures: If you agree to take part in this study, you will provide a signature at the end of this document indicating you agree to participate. Then, you will be asked to first complete a short demographic survey. Immediately following completion of paperwork, the focus group will begin. The researcher will ask open-ended questions and prompts about the research topic, and you will be encouraged to respond as much as you feel comfortable. The focus group session will be audio recorded. Your responses will later be transcribed and analyzed, then sent to participants for a final review before publishing.

Risks or Discomforts: There are no known risks associated with this research study; however, a possible inconvenience may be the time it takes to complete the study or sitting for a prolonged period (1 ½ hour).

Benefits: Participants may not directly benefit from this research; however, I hope that your participation in the study may provide data to further develop quality practice for the field of early childhood in a way that can benefit the caregiver and parent in mutually beneficial ways.
Confidentiality: Questionnaires and answers recorded will be stored on password protected computers and transcriptions in a locked cabinet. Coding sheets that link names and codes will be maintained in a separate and secure location. The audio recordings, transcription, and code sheet will be destroyed 3 years after the close of the study. At the conclusion of this study and after all analyses have been performed, the researcher will submit for publication and presentations at professional conferences. The identity of participants in this study will be withheld in academic publications and presentations at professional meetings. All participants will only be identified by an assigned number. Only the investigator and her supervisor will have access to these materials. Any information about you obtained as a result of your participation in this research will be kept confidential.

Please be advised that although the researcher will take every precaution to maintain confidentiality of the data, the nature of focus groups prevents the researcher from guaranteeing confidentiality. The researcher would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the focus group to others.

Please note that these records will be held by a state entity and therefore are subject to disclosure if required by law. Research information may be shared with the MSU Institutional Review Board (IRB) and the Office for Human Research Protections (OHRP) and others who are responsible for ensuring compliance with laws and regulations related to research. The information from the research may be published for scientific purposes; however, your identity will not be given out.

Thank you for agreeing to participate in our research. Before you begin, please note that the data you provide may be collected and used by Amazon as per its privacy agreement. Additionally, this research is for residents of the United States over the age of 18; if you are not a resident of the United States and/or under the age of 18, please do not complete this survey.

Note that Amazon Mechanical Turk, Qualtrics, and Inquisit have specific privacy policies of their own. You should be aware that these web services may be able to link your responses to your ID in ways that are not bound by this consent form and the data confidentiality procedures used in this study. If you have concerns you should consult these services directly.

Questions: If you have any questions about this research project or want to provide input, please feel free to contact Stephanie Haney at 785-787-5517 or faculty advisor Julie Parker at 662-325-0828.

For questions regarding your rights as a research participant or to request information, please feel free to contact the MSU Human Research Protection Program (HRPP) by e-mail at irb@research.msstate.edu, or visit our participant page on the website at http://orc.msstate.edu/humansubjects/participant/.
To report problems, concerns, or complaints pertaining to your involvement in this research study, you may do so anonymously by contacting the MSU Ethics Line at http://www.msstate.ethicspoint.com/.

**Voluntary Participation:** Please understand that your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue your participation at any time without penalty or loss of benefits.

Please sign below indicating you have read and agree to participate in this study. A copy will be scanned and provided to you:

Signature:____________________________________  Date:______________________
Demographic Survey

The following demographic survey questions were asked of both online and face-to-face focus group participants.

The following requests basic information regarding your demographics, for research purposes:

1. Are you completing this survey as a parent or a caregiver affiliated with a Mississippi early childhood program?
   - Parent
   - Caregiver

1a. If a parent, how old is your child? Please list all ages if multiple children are enrolled.  
1a. If a caregiver, what age group do you primarily work with?

2. What is your gender?
   - Female
   - Male
   - Other (specify) ________________

3. Which category below includes your age?
   - 19 or younger
   - 20-29
   - 30-39
   - 40-49
   - 50-59
   - 60 or older

4. What is the highest level of school you have completed or the highest degree you have received?
   - Less than a high school degree
   - High school degree or equivalent (e.g., GED)
   - Some college but no degree
   - Associate’s degree
   - Bachelor’s degree
   - Graduate degree

5. How much total combined money did all members of your household earn last year?
   - $0 to $9,999
   - $10,000 to $24,999
   - $25,000 to $49,999
   - $50,000 to $74,999
   - $75,000 to $99,999
   - $100,000 and up
6. What is your race?
   - White
   - Black or African-American
   - American Indian or Alaskan Native
   - Asian
   - Native Hawaiian or other Pacific Islander
   - Other (please specify)____________
APPENDIX D

FOCUS GROUP SCRIPTS
Parent Focus Group Script

**Opening** (5 minutes):
Introduction of the research including purpose of the study. Establish homogeneity.

**Ground rules:**

- Please only use first names and don’t identify the name of your facility. This is being recorded but all identifying information, if shared, will be removed
- All information shared here stays confidential. Please do not repeat anything that was shared outside of this group
- Be respectful of others’ thoughts and ideas, allow them to express them freely and fully
- We want to allow everyone to participate
- There are no right or wrong answers, we want to hear a wide range of opinions

**Participation encouragement**
Participants are asked to say their first name and the age(s) of their children.

**Introductory** (15 minutes):
Describe your relationship with your child’s lead teacher.

How does the act of communication, specifically using communication technology like email, text messaging, social media, etc., impact this relationship?

**Key** (50 minutes):
1. How do you feel about using technology (email, text messaging, FaceTime, etc.) to communicate in the early childhood setting?
   1. Do you feel that these methods are effective? Why/why not?
2. How has your child’s teacher used technology as a tool for communication? What kind of messages and information do they send through what types of technology?
3. How was this methodology established?
4. Have you ever been asked what type of communication method you prefer? How did the caregiver ask?
5. Do you enjoy sharing information using technology? Why/why not?
6. What are some of the advantages for using communication technology?
7. What are some experiences that you’ve had where technology did NOT help your communication with your child’s caregiver?
8. Have you ever experienced boundary issues when using technology?
   a. How did you handle that?
9. Have you ever had difficulty accessing or using a method of technology that your child’s caregiver attempted to use to communicate with you? Tell me about it.
10. Do you have any types of communication technology that you don’t use to communicate? Why?
11. In what ways do you think the use of technology for communication can hinder or prevent the growth of the parent-caregiver relationship?
12. In what ways do you think the use of technology for communication can support the parent-caregiver relationship?

Summary (5 minutes): After the researcher/moderator gives a short oral summary (2-3 minutes) of the key questions and big ideas that emerged from the focus group, the moderator should ask: “Is this an adequate summary?”

Final (5 minutes): The researcher will ask “Is there anything that we should have talked about, but didn’t? If you were to see more research on this topic, what would you like to see explored further?”

Closing (1 minute): Thank the participants for their time and remind them that the researcher will get in contact with them shortly to review the response analysis for accuracy.
Caregiver Focus Group Script

Opening (5 minutes):
Introduction of the research including purpose of the study. Establish homogeneity.

Ground rules:

- Please only use first names and don’t identify the name of your facility. This is being recorded but all identifying information, if shared, will be removed
- All information shared here stays confidential. Please do not repeat anything that was shared outside of this group
- Be respectful of others’ thoughts and ideas, allow them to express them freely and fully
- We want to allow everyone to participate
- There are no right or wrong answers, we want to hear a wide range of opinions

Participation encouragement
Participants are asked to say their first name and what age they work with. How long they have been teaching.

Introductory (15 minutes):
Describe your relationships with the parents of the children in your care.

How does the act of communication, specifically using communication technology like email, text messaging, social media, etc. impact these relationships?

Key (50 minutes):

1. How do you feel about using technology (email, text messaging, FaceTime, etc.) to communicate in the early childhood setting?
   a. Do you feel that your methods are effective? Why/why not?
2. How have you used technology as a tool for communication? What kind of messages and information do you send through what types of technology?

3. How was this methodology established?

4. Have you ever asked the parents of the children in your care what type of communication method they prefer? How did you ask?

5. Do you enjoy sharing information using technology? Why/why not?

6. What are some of the advantages for using communication technology?

7. What are some experiences that you’ve had where technology did NOT help your communication with the parent?

8. Have you ever experienced boundary issues when using technology?
   a. How did you handle that?

9. Have you ever had difficulty accessing or using a method of technology that a child’s parents attempted to use to communicate with you? Tell me about it.

10. Do you have any types of communication technology that you don’t use to communicate? Why?

11. In what ways do you think the use of technology for communication can hinder or prevent the growth of the parent-caregiver relationship?

12. In what ways do you think the use of technology for communication can support the parent-caregiver relationship?

**Summary** (5 minutes): After the researcher/moderator gives a short oral summary (2-3 minutes) of the key questions and big ideas that emerged from the focus group, the moderator should ask: “Is this an adequate summary?”
**Final** (5 minutes): The researcher will ask “Is there anything that we should have talked about, but didn’t? If you were to see more research on this topic, what would you like to see explored further?”

**Closing** (1 minute): Thank the participants for their time and remind them that the researcher will get in contact with them shortly to review the response analysis for accuracy.