EQUIPPING PARENTS TO SUPPORT THEIR CHILDREN'S EDUCATION: THE EFFECTS OF CHARLOTTE BILINGUAL PRESCHOOL'S FAMILY PROGRAM

by

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ABSTRACT

ANDREW PAUL GADAIRE. Equipping parents to support their children's education: The effects of Charlotte Bilingual Preschool's Family Program (Under the direction of DR. RYAN P. KILMER and DR. JAMES R. COOK)

Charlotte Bilingual Preschool's Family Program aims to equip parents to support their children's education at home and at school by increasing parents' educational engagement, promoting parenting best practices, developing families' social capital, and supporting families' mental health and well-being. This study aimed to evaluate 1) how the Family Program promotes growth in these areas for the families at the preschool, 2) the interconnections among parents' attitudes, behaviors, and supports, and 3) how parents' attitudes, behaviors, and supports relate to their children's functioning in preschool.

The analysis of survey data collected at the beginning and end of the 2019-20 school year uncovered little evidence that attendance at Family Program events (i.e., Family Cafes and Workshops) led to improvements in family or child outcomes, other than increased parent friendships and more connections in the preschool family network. The disruption of programming caused by the COVID-19 pandemic and the shift to remote instruction in March 2020, likely relate to the lack of findings in this area. Nonetheless, correlational and regression analyses did identify relationships among mothers' attitudes, perceptions of social support and social capital, and educational involvement behaviors. For instance, findings suggest that common good social capital (i.e., a positive, collaborative community atmosphere) may promote positive interactions with teachers and other parents, which could in turn, promote more positive educational involvement behaviors, including home-based involvement, ethnic identity parenting, and more positive behavior management practices. Additionally, analyses indicated that the positive relationship between maternal stress and negative behavior management

practices was attenuated when mothers perceive strong social support and social capital. While these positive outcomes did not relate to parents' attendance at Family Cafes and Workshops, they were associated with parents' self-reported school involvement, suggesting that parents' broader interactions with the Family Program (i.e., beyond attendance at Family Cafes and Workshops) may yield positive outcomes.

This study's findings support the approach of Charlotte Bilingual Preschool's Family Program, by connecting caregivers' attitudes, sense of support, and social capital (which are intermediate goals of the Family Program) to their educational involvement behaviors (the Family Program's primary goal). Theoretically, promoting positive family involvement should yield more positive developmental outcomes for children in the short- and long-term as well. This study provided some support for this hypothesis, by connecting parents' bonding and bridging social capital and their efforts to promote children's appreciation of their ethnic and cultural identities to children's social-emotional functioning and language skills. Furthermore, results suggested that when parents reported greater increases or improvements in several family-level variables, their children tended to show larger improvements in social-emotional protective factors and behavior. These findings indicate that the Family Program can have an important impact on children and families, especially by connecting socially isolated families with greater social support and social capital.

The COVID-19 pandemic and the preschool's shift to remote programming in March 2020 was a major limitation that disrupted programming and reduced this study's capacity to draw strong conclusions. However, the pandemic also provided an opportunity to examine the links between various forms of remote engagement and outcomes for children and families.

Despite the pandemic, this study's findings have important implications for Charlotte Bilingual

Preschool, as well as other stakeholders seeking to enhance two-generation approaches to early childhood education; especially those supporting Latino immigrant families and English language learners. Limitations, implications, and future directions are discussed.

DEDICATION

This work is dedicated to the parents, family members, caregivers, and teachers, who do everything in their power to create the best possible future for their children. In my case, I am especially grateful for my parents, my wife, my sisters, and my extended family members, who have supported me and made it possible for me to pursue my dreams.

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LIST OF ABBREVIATIONS

DECA Devereux Early Childhood Assessment

ELLs English Language Learners

FABS Survey Family Attitudes Behaviors and Supports Survey

FIQ-SF Family Involvement Questionnaire – Short Form

IGDIs Individual Growth and Development Indicators

OLS Ordinary Least Squares

RQ1 Research Question 1

RQ2 Research Question 2

RQ3 Research Question 3

RQ4 Research Question 4

SC Social Capital

SD Standard Deviation

TS Gold Teaching Strategies Gold

CHAPTER 1: INTRODUCTION

The mission of Charlotte Bilingual Preschool's Family Program is to "equip families to support their children's education at home and at school." To accomplish that goal, program leaders have identified several areas of focus believed to promote positive educational outcomes for preschool students, which include: increasing parents' engagement in their children's education; promoting parenting skills and knowledge of parenting best practices; developing families' social capital (i.e., the networks, relationships, or connections among people and the potential benefits that people can experience because of those ties, such as wellness, employment, and economic mobility [Abbott & Reilly, 2019; Abbott et al., 2019]); and supporting families' mental health and well-being. This study aimed to investigate how the Family Program promoted families' growth in each of these areas.

Furthermore, this effort sought to investigate how families' attitudes and experiences of support and social capital relate to their educational involvement. Additionally, this study assessed how families' attitudes, experiences, and behaviors affected their children's linguistic and social-emotional development. Through a participatory approach, this study (a) examined the relationships among family members' attitudes, behaviors, and experiences; (b) assessed how these family-level variables changed as a function of parents' participation in the Family Program's Family Cafes and Workshops; and (c) investigated whether the Family Program directly or indirectly affected child development in the 2019-20 school year. In doing so, this research aimed to support the development of Charlotte Bilingual Preschool's Family Program, while also contributing to the design of efficacious family programs to supplement early childhood education programs that serve traditionally marginalized children and families,

especially those from Latino and immigrant backgrounds.

Preparing Spanish-speaking children for school in the U.S.

School readiness refers to the extent to which children possess the competencies they need to be successful in elementary school, starting at kindergarten entry (Gadaire et al., 2018; Reardon & Portilla, 2016). To be ready for school, children should possess academic skills (i.e., early language, literacy, and mathematics skills) as well as social-emotional skills (i.e., self-regulation, appropriate behavior, and the ability to develop positive relationships with teachers and peers; Galindo & Fuller, 2010; Kuhns et al., 2018; Reardon & Padilla, 2016). Children who develop these skills prior to kindergarten entry are considered ready for school and are more likely to transition smoothly to kindergarten and achieve academic success in elementary school. Children who enter kindergarten with deficits in these areas frequently remain behind their peers, or fall farther behind, as they progress through elementary, middle, and high school (Duncan et al., 2007; Sonnenschein et al., 2010). As such, school readiness at kindergarten entry can serve as an important early indicator for children's educational trajectories and predict educational and social outcomes later in life (Duncan et al., 2007; Grissmer et al., 2010; Quirk et al. 2017; Stormont et al., 2017).

Research suggests that children from low-income, minority families are more likely to enter elementary school with lower school readiness than same-age peers from middle- to high-income White families and, therefore, are at greater risk of educational challenges and negative outcomes in school (Duncan & Murnane, 2014; Kingston et al., 2013; Quirk et al. 2013; Rumberger & Arellano, 2009). This is especially true for Latino students, who are frequently at risk of beginning school with deficits in pre-reading, pre-writing, and pre-math skills, which decreases their odds of graduating high school or enrolling in college in the long run (Gormley,

2008). In 2007, the National Center for Education Statistics (NCES) reported that only 15% of Latino children age 3-6 years (and not enrolled in kindergarten) could recognize all letters, compared to 38% of Black children and 36% of White children (O'Donnell & Mulligan, 2008). Similar trends were shown for counting and writing, as only 42% of Latino children in that age group could count to 20 or higher (compared to 69% of Black and White children) and only 50% could write their own names (compared to 58% of Black children and 64% of White children; O'Donnell & Mulligan, 2008). These findings are consistent with more recent data reported by the NCES (2019), which found that Latino children entering Kindergarten in 2010 scored significantly lower than Black, White, and Asian children on Kindergarten reading assessments.

In a similar vein, in their study of elementary school achievement gaps in California, Rumberger and Arellano (2009) found that, on average, Latino students began kindergarten .37 standard deviations behind White students in literacy and .48 of a standard deviation behind in math. Moreover, these gaps in school readiness identified at kindergarten entry grew by more than 25% by the end of first grade, such that Latino students were .48 standard deviations behind their white peers in reading and .63 standard deviations behind in math (Rumberger & Arellano, 2009).

In a separate study, Quirk and colleagues (2016) utilized kindergarten school readiness data to group students into five school readiness profiles based on their social-emotional and cognitive skills. Profiles grouped students scoring extremely low, low, moderate, or high in both areas of development; a fifth grouping included students who scored high in social-emotional development and low in cognitive development, reflecting mixed school readiness. Of the 1,253 Latino children included in this study, only 10% scored in the high school readiness range, while 30% scored in the extremely low range, and 29% scored in the low range (Quirk et al., 2016).

Furthermore, the students' kindergarten school readiness profiles were highly predictive of their language, literacy, and math skills throughout elementary school, such that students showing low, extremely low, or mixed social-emotional and cognitive school readiness in kindergarten were more likely to show poor academic performance in second through fifth grade (Quirk et al., 2016; Quirk et al., 2013). Taken together, these studies suggest that Latino children are more likely to start elementary school behind and stay behind, relative to children from other backgrounds.

Addressing this discrepancy is particularly salient because Latino youth represent one of the fastest growing segments of the youth population in the United States (Lopez et al., 2018). Nationally, Latino children made up 19% of the youth population (age 0-17 years) in 2003 and 23% in 2013, and they are projected to represent 27% of the youth population in 2023 (Federal Interagency Forum on Child and Family Statistics, 2013). In addition, approximately two-thirds of Latino children age 0-6 years live in low-income families (Addy et al., 2013). Latino youth also have higher dropout rates compared to other groups of students at 17.6% nationally, compared to 9.3% for Black youth and 5.2% for White youth; this risk is amplified when youth grow up in poverty (US Department of Education, 2011; Roy & Raver, 2014).

In the Charlotte public school system (Charlotte-Mecklenburg Schools; CMS), over a quarter (25-27%) of students entering kindergarten in 2018 and 2019 were identified as Latino (Charlotte Mecklenburg Schools, 2020). Of Latino kindergarten students in 2018, 51% were identified as English Language Learners (ELLs, indicating that students entered school with limited English language skills), and 65% attended high poverty elementary schools (Charlotte Mecklenburg Schools, 2020). Given the importance of school readiness for Latino students' academic trajectories, identifying and expanding methods for enhancing Latino children's early

education will not only benefit Latino children, but also their future teachers, principals, and the school system as a whole.

Factors that contribute to low school readiness in Latino students

There are several potential explanations for why Latino students are more likely to begin elementary school with low school readiness. To fully understand this phenomenon, it is important to recognize that the health and development of Latino children and families may be affected by multiple intersecting factors, including language, cultural differences, and the experience of immigration (Mendez et al., 2018). Furthermore, the challenges associated with these intersections frequently overlap with the effects of poverty and limited access to community supports and resources (Mendez et al., 2018). Rumberger and Arellano (2009) found that, on average, the family income of Latino kindergarten students was one standard deviation lower than that of White students, which accounted for much of the school readiness gap that they observed between Latino and White kindergarten students. Similarly, Quirk et al. (2016) found that controlling for family socioeconomic status (SES) significantly reduced differences in school readiness between Latino and non-Latino children. These findings align with several other studies, which suggest that experiencing poverty in early childhood has strong negative implications for children's school readiness and their future educational trajectories (e.g., Duncan et al., 2012; Herbers et al., 2012; O'Donnell & Mulligan, 2008).

The misalignment of languages spoken at home and at school (i.e., the language barrier) can also affect the school readiness of Latino children. The National Center for Education Statistics reported that children ages 3-6 years were much less likely to possess basic reading, writing, and math skills if neither of their parents spoke English (O'Donnell & Mulligan, 2008). Rumberger and Arellano (2009) reported similar findings, such that Latino students whose

families did not speak English at home were significantly less likely to possess school readiness competencies related to reading and math when they began kindergarten. These findings are consistent with trends from the NCES (2019), which suggest that children from households in which English was not the primary language scored significantly lower on kindergarten reading assessments compared to children from primarily English-speaking homes.

The benefits of high-quality early childhood education

One encouraging intervention that can help prepare children from disadvantaged backgrounds for more positive academic trajectories is high-quality early childhood education, which has been shown to help children develop early language, math, and social-emotional skills (Gormley, 2008; Heckman et al., 2010; Weiland & Yoshikawa, 2013; Yoshikawa et al., 2016). Children who participate in high quality early childhood programs are more likely to have the skills they need to succeed in elementary school and, thus, are more likely to experience positive outcomes in the future, such as high school graduation, employment, higher income, and reduced criminal activity (Campbell et al., 2002; Deming, 2009; Heckman et al., 2013; Reynolds et al., 2011).

Several research efforts have shown the benefit of high-quality early childhood education for Latino students in particular. For instance, in a study of 45,000 Spanish-speaking dual language learners in California, Holod and colleagues (2018) found that those who participated in a high-quality, public pre-kindergarten program were significantly more proficient in English and possessed stronger language, literacy, and math skills upon kindergarten entry relative to a comparison group. A nationwide study (using data from the Early Childhood Longitudinal Study -Kindergarten 2011 cohort) conducted by Padilla and Ryan (2018) also found that Latino students from immigrant and native-born families showed significantly stronger math skills,

language skills, and attitudes towards learning if they attended high-quality early childhood education centers rather than lower quality early childhood programs or no pre-kindergarten program. These findings are consistent with other research that highlights the benefits of high-quality early childhood education for Latino students from diverse linguistic and socioeconomic backgrounds (Bumgarner & Brooks-Gunn, 2015; Gormley, 2008).

Additional research suggests that while high quality early childhood education can benefit all students, it is especially impactful for Latino children and children from economically disadvantaged families (Gormley, 2008; Puma et al., 2005; Weiland & Yoshikawa, 2013). This research indicates that high quality early childhood education has strong potential to reduce short- and long-term achievement gaps associated with race, ethnicity, and SES (Gormley, 2008; Weiland & Yoshikawa, 2013; Yoshikawa, 2016). As such, enhancing the systems that support Latino children's early education can promote a more socially just and equitable society.

The influence of family characteristics and practices on child development and school readiness

While participation in a high-quality early childhood education program (i.e., preschool) may facilitate the development of important early childhood competencies, children's experiences in school are not the only factors related to school readiness. From a bioecological perspective, children's experiences at home, at school, in their neighborhoods, and in their communities interact to influence children's school readiness, and more broadly, their development (Bronfenbrenner & Morris, 1998; Mashburn & Pianta, 2006; Padilla & Ryan, 2018; Sheridan et al., 2010). As such, home and early education environments are highly influential contexts for learning, where children's interactions with parents, family members, peers, teachers, and neighbors can affect their academic and social outcomes (Fantuzzo et al., 2004;

Mashburn & Pianta, 2006; Sheridan et al., 2010). Notably, Padilla and Ryan (2018) demonstrated that interactions within each of these microsystems (i.e., proximal environments in which the child experiences developmental and learning opportunities via direct engagement with people and settings) are predictive of school readiness outcomes for children from Latino immigrant and non-immigrant families. Furthermore, multiple researchers have identified the home environment as the primary socialization context for young children, which highly influences their ability to develop the cognitive and social skills they will need to succeed in school (Kuhns et al. 2018; Sheridan et al., 2010).

The home environment is clearly salient for the development of young children. In research on the relationship between the early childhood home environment and children's development and education, family involvement refers to the behaviors and practices of family members that promote the positive development and education of children. However, family involvement has been studied in multiple ways, and several types of family involvement have been associated with school readiness. For instance, Kuhns and colleagues (2018) emphasize family involvement at home, which can include general parenting behaviors (e.g., warmth, discipline, routines) and specific educational practices or interactions (e.g., reading, storytelling, teaching basic math skills). Other researchers focus on family involvement at school, which can be separated into two categories: general school involvement (e.g., attending school events, volunteering at school) and home-school conferencing, which involves child-focused communication with teachers and school staff (e.g., talking to teachers about children's strengths, needs, and routines; Fantuzzo et al., 2000). In order to promote Latino children's preparation for school and address the achievement gap affecting these children, it is important to acknowledge how specific family involvement behaviors relate to children's academic

achievement and school readiness (McWayne et al., 2015).

Figure 1 illustrates the conceptualization of family involvement employed for the purposes of the present study. It includes four types of family involvement: general parenting practices, educational interactions outside of school, general school involvement, and homeschool conferencing. The figure also reflects examples of the practices and interactions that fall within each type of family involvement.

The sections that follow provide a brief overview of research connecting these four forms of family involvement to children's development of academic and social-emotional competencies. In this discussion, it is important to acknowledge that each of these forms of family involvement are influenced by environmental factors, such as parental employment, income, education, and stress levels, as well as their access to social support and community resources (Kuhns et al., 2018). The effects of these environmental factors on family educational involvement are discussed further in the subsequent section ("Barriers affecting Latino families' educational involvement").

How general parenting practices relate to school readiness. General parenting practices refer to parent-child interactions that are not specifically related to academic or cognitive development. Instead, this category includes the responsiveness, sensitivity, encouragement, positivity, and warmth with which parents interact with their children. These qualities have been related to positive development outcomes, particularly in relation to children's social-emotional development (Girard et al., 2017; Landry et al., 2008; Mokrova et al., 2012). As one example, in a sample of 231 3-year-old children, Mokrova and associates (2012) found that children showed greater persistence in completing a challenging task when their mothers provided more encouragement and praise, promoted children's autonomous problem-solving, and displayed

fewer negative emotions.

Behavior management practices, or discipline behaviors, represent another important aspect of parenting that affects school readiness. For instance, corporal punishment, such as spanking, or other forms of aggressive discipline (e.g., yelling, threatening, etc.) have been shown to have negative short- and long-term consequences for children's behavior, such as increased externalizing and internalizing behavior, aggression, and mental health challenges (Ferguson 2013; Gershoff et al., 2018; Gershoff & Grogan-Kaylor, 2016; Mendez et al., 2016). In addition to behavioral consequences, negative behavior management practices have been linked to deficits in early childhood language development, including early vocabulary (Mackenzie et al., 2015).

While negative discipline behaviors have been related to developmental challenges, positive behavior management behaviors can yield important benefits for children, better preparing them for success in school (Gardner et al., 2007; McEachern et al., 2012). Research suggests that children show fewer behavior concerns at age 5 when their parents engage in proactive parenting behaviors (e.g., anticipating and preventing challenges, offering clear choices, preparing children for transitions) and set and enforce reasonable limits (e.g., sticking to rules, explaining what to do rather than solely what not to do, speaking calmly; McEachern et al., 2012). Related to family behavior management practices, the extent to which caregivers encourage their children to follow established routines has also been connected to social-emotional and cognitive school readiness, especially for children from marginalized family backgrounds exposed to domestic or community violence (David et al., 2015).

Educational interactions at home and other non-school settings. According to the accumulated advantages hypothesis, children are likely to experience the most positive school

readiness outcomes when they are able to have high quality learning experiences both at home and at school (Coleman, 1990; Padilla & Ryan 2018). In support of this notion, Padilla and Ryan (2018) found that children of Latino, native-born parents (i.e., parents born in the USA) showed the strongest literacy skills when they experienced high-quality learning environments both at home and at school, rather than only one or the other.

Furthermore, educational interactions (e.g., reading, conversation, imaginative play) with parents can buffer the effects of other risk factors on children's school readiness. For instance, in their study of 122 Latino students and families participating in a Head Start Program, Farver and associates (2006) found that parents' engagement in literacy-related activities at home was related to children's linguistic and social-emotional school readiness skills, in spite of various family risk factors (i.e., SES, family size, maternal stress).

There are various types of educational interactions outside of school that can influence children's early cognitive development. In its simplest form, these educational interactions can include exposing children to a high quantity of language, conversation, and vocabulary, which has been related to positive language development (Brooks-Gunn & Markman, 2005). More formal approaches to educational parent-child interactions may involve scaffolding, which refers to the sensitive guidance of children's learning based on their developmental capabilities (Prendergast & MacPhee, 2018). Several studies have demonstrated that scaffolding behaviors, such as structuring, guidance, and support, positively relate to early cognitive and social-emotional development, including language and reading abilities, problem-solving skills, executive function, self-regulation, persistence, and social skills (Connor & Cross, 2003; Denham et al., 1991; Hammond et al., 2012; Lincoln et al., 2016; Merz et al., 2016; Prendergast & MacPhee, 2018; Tramonte et al., 2015).

Other researchers have focused on the extent to which parents and caregivers provide cognitive stimulation at home or in the community (McWayne et al., 2015). For instance, Fantuzzo and colleagues (2000) assessed these educational parent-child interactions based on parents' efforts to create a positive learning environment in the home, the frequency at which parents practiced reading and math with their young children, how often they created educational experiences for their children in the community, and whether they modeled and encouraged positive educational attitudes. Fantuzzo et al. (2000) labeled the construct made up of these educational interactions as "home-based involvement." Others have studied the effect of educational parent-child interactions in early childhood by examining the frequency and quality of educational interactions that occur in the context of everyday activities, such as cooking or grocery shopping (Leyva & Skorb, 2017). Notably, while the specific definitions may vary, when Latino parents engage in more of the behaviors described here (e.g., reading, playing, teaching new concepts), their children tend to show more positive functioning in language, math, and social-emotional development (Fantuzzo et al., 2004; Leyva & Skorb, 2017; Leyva et al., 2018; Padilla & Ryan, 2018).

Family engagement at school and child outcomes. Family school involvement refers to collaboration among parents and school staff to support the learning, development, and health of children (Centers for Disease Control [CDC], 2019). Furthermore, the American Psychological Association (2020) and the CDC (2019) suggest that family engagement is the shared responsibility of school staff and family members, such that school staff are responsible for seeking parent engagement, and parents should be dedicated to supporting their children's education by conferencing with teachers and engaging in school activities. Notably, positive relationships between parents and their children's schools can contribute to positive health and

education opportunities and outcomes at home, at school, and in the community (CDC, 2019).

Family involvement at school can have a positive effect on children's academic performance throughout their education and may be especially beneficial for children from disadvantaged (i.e., low SES) backgrounds (Benner et al., 2016). For Latino immigrant families, interactions with their children's preschool can be important for multiple reasons. First, interactions among family members, teachers, and school staff can help socialize parents to the types of school involvement (e.g., frequency, interaction styles) that will be regarded positively by their children's future teachers (Ansari & Crosnoe, 2015). As family-school involvement may occur differently in parents' home cultures, the opportunity to engage with teachers and staff (especially in a safe, welcoming environment) and experience the benefits of school involvement at their child's preschool may increase the likelihood that parents continue to be engaged with the schools their child attends in the future. Furthermore, school involvement can provide an opportunity for immigrant families to learn about evidence-based parenting strategies that help their children develop skills that are highly valued in United States schools (Ansari & Crosnoe, 2015). Of particular relevance, learning about positive parenting behaviors when their children are young can help parents address their children's needs early and apply positive parenting behaviors moving forward (Crosnoe et al., 2012; McCartney et al., 2007). Finally, school involvement provides an opportunity for immigrant families to form peer relationships and develop a sense of community in their new environment, which can have important benefits for their families' health (Bathum & Baumann, 2007).

Some researchers have distinguished between two unique types of family involvement at school. School-based involvement refers to parents' behaviors that aim to benefit the school, and thus, benefit their children, such as volunteering inside or outside of the classroom, supervising

field trips, and attending meetings with other parents (Fantuzzo et al., 2000; McWayne et al., 2015). Home-school communication, on the other hand, refers to interactions among family members, teachers, and other school staff, with the child's educational progress as the focal point of discussion (Fantuzzo et al., 2000; McWayne et al., 2015). This may include discussing children's challenges and accomplishments and identifying strategies to enhance children's learning at home (Fantuzzo et al., 2000; McWayne et al., 2015). From an ecological perspective, home-school communication occurs at the mesosystem level (see, e.g., Bronfenbrenner & Morris, 1998; Bradley, 2010), such that interactions between the home and school microsystems can engender a collective understanding of a child's strengths and needs and promote behaviors within each microsystem (i.e., at home and at school) that facilitate positive child development.

Studies have shown that when parents of young children engage in more positive behaviors related to school-based involvement and home-school communication, children evidence more positive emotional and behavioral adjustment, fewer conduct problems, improved learning behaviors, and improved vocabulary skills (Fantuzzo et al., 2004; Fantuzzo et al., 2002; Kingston et al., 2013; McWayne et al., 2015; Nokali et al., 2010). Taken together, the research described in this section and in previous sections suggests that promoting positive parenting and parental engagement behaviors in early childhood, both at home and at school, is a promising strategy for (a) boosting school readiness for Latino children and their families and (b) increasing the likelihood that children experience more positive educational outcomes (Kuhns et al. 2018; McWayne et al., 2015; Padilla & Ryan, 2018; Sheridan et al., 2010).

Barriers affecting Latino families' educational involvement

Multiple studies have indicated that Latino parents and immigrant parents prioritize their children's educational success and value their children's school experiences at similar levels as

White and U.S.-born parents (Ansari & Crosnoe, 2015; Suarez-Orozco & Suarez-Orozco, 2001). However, research also suggests that Latino and immigrant parents are less likely to engage in the educational practices related to school readiness (Ansari & Crosnoe, 2015; Suarez-Orozco & Suarez-Orozco, 2001). For example, in a study using data from the Early Childhood Longitudinal Study-Kindergarten cohort, Crosnoe (2010) found that immigrant Latino parents were less likely to engage in learning activities at home (e.g., reading) and school involvement activities compared to White parents or native-born Latino parents. The discrepancy between educational values and family involvement practices may result from the intersecting challenges that Latino families frequently face. The effects of these challenges on families and family involvement are discussed in this section.

Unique cultural approaches to early education. Several researchers studying school readiness in diverse populations have highlighted that the construct of school readiness is largely based on White, middle-class, United States norms (Ansari & Crosnoe, 2015; Padilla & Ryan, 2018). Furthermore, parenting behaviors that stress early academic development are frequently encouraged and rewarded by teachers and school systems that are informed by those traditionally White, middle-class perspectives (Ansari & Crosnoe, 2015; Lee & Bowen, 2006). Lee and Bowen (2006) illustrated this phenomenon in their study of diverse family involvement patterns in relation to the academic achievement of 3rd through 5th grade students. They found that parents from unique demographic backgrounds engaged in diverse forms of family involvement, but the involvement behaviors of parents from the dominant culture (i.e., White, middle-class) were most strongly related to children's academic outcomes (Lee & Bowen, 2006). Additionally, Farver and colleagues (2006) found a positive correlation between family reading behaviors and years in the United States for Latino immigrant parents, suggesting that parents may be more

likely to engage in the educational behaviors emphasized by American culture as they spend more time in the country and become more familiar with the culture.

Culture can also influence family involvement in other ways. For instance, Mena (2011) found that less acculturated Latino parents may feel less confident that they can positively affect their children's academic performance because of a lack of familiarity with the US education system. Other researchers have suggested that Latino parents may be less involved in their children's education because of a pervasive cultural belief that academic teaching is the responsibility of the teacher, while the parent's role is to teach moral lessons, such as respect for authority, obedience, and hard work (Crosnoe, 2010; Walker et al., 2011). Qualitative research has found the Latino parents frequently view their role in their children's education as making sure their children are prepared for and value school, ensuring that they behave in school, and supervising their completion of homework (later in their children's schooling), rather than providing assistance with homework, communicating with teachers, or confronting issues with school staff (Smith et al., 2008). As such, cultural differences can impact Latino parents' educational involvement at home and at school in both positive and negative ways.

The language barrier. Many Latino immigrant parents have limited English language skills, which can affect educational involvement in several ways. First, the language barrier can discourage or inhibit effective communication with children's teachers, making school-based involvement more difficult (Bhargava et al. 2017; Smith et al., 2008). Similarly, parents may feel less comfortable seeking out community resources to support their children's development because of the language barrier (Simpkins et al., 2013). The language barrier can also inhibit home-based involvement as parents may feel less able to assist their children with their homework (Bhargava et al., 2017; McLaughlin et al., 2002). Finally, in early childhood, non-

English speaking parents may be hesitant to engage in cognitively-stimulating activities with their children (e.g., reading), because of concerns that educational activities that occur in Spanish will confuse or negatively impact their children's development of English skills (Mohr et al., 2018).

SES and family educational involvement. Parents in low-SES families may experience challenges supporting young children's school readiness as well. First, low-SES parents may be unable to provide educational materials and safe learning environments that promote cognitive development (Buckingham et al. 2014). Furthermore, parents in low-income families may be less likely to engage in interactions that promote cognitive stimulation, early language and literacy skills, or social skills (Crosnoe et al., 2010). There is also some evidence that parents raising children in the context of economic disadvantage are less likely to provide positive emotional support to young children or encourage their independent problem-solving, while they are more likely to express negative emotions (Mokrava et al., 2012).

Several factors co-occur with low family income that could explain these findings, such as limited availability (i.e., due to employment schedules), high stress, and low parental education (Bhargava et al., 2017; Smith et al., 2008). As one example, Mistry and associates (2008) found that parents with more education were likely to spend more time and resources supporting their children's education while also engaging in more cognitively and socially stimulating behaviors. These findings are consistent with those reported via other efforts (e.g., Davis-Kean, 2005; Duncan et al., 2012).

Collective impact of multiple barriers. It is important to acknowledge that many families (including those at Charlotte Bilingual Preschool, the setting for the present work) are frequently affected by multiple barriers to family involvement. For example, in addition to experiencing

cultural differences, a language barrier, and low SES, Latino immigrant families may also struggle to navigate a complex school system or access resources in the broader social system (Ansari & Crosnoe, 2015). Furthermore, changing immigration policies can raise concern about whether friends, family members, and parents themselves will be allowed to remain in the United States. Recent policies, such as the "public charge" ruling – i.e., that undocumented and temporary residents can be deemed likely to become a public charge if they have used public services in the past, decreasing the likelihood that they will be granted legal status (e.g., citizenship; extension of legal residence) – can decrease willingness to seek help from social programs for fear that their participation will make them targets for deportation or prohibit them from being eligible for citizenship in the future (Batalova at al., 2018). In sum, marginalized families such as those participating in programs at Charlotte Bilingual Preschool face several complex challenges that can negatively affect their families' health as well as their children's education.

The positive side: Common strengths related to family involvement

While much of this review has focused on the barriers and challenges that decrease educational involvement in Latino families, it is important to recognize the common strengths of Latino and Latino immigrant families as well (Padilla & Ryan, 2018). Notably, Latino parents are more likely than parents from other ethnic backgrounds to emphasize the importance of education (Crosnoe, 2010; Goldenberg et al., 2001). Consistent with those findings, some research has also shown that Latino immigrant parents express strong motivation to create economic and educational futures for their children that are better than what they experienced (Perreira et al., 2006). Latino families are also likely to promote strong family cohesion and family values, which can engender a supportive environment for children (Leidy et al., 2010).

Furthermore, maintaining close relationships with extended family, which is common in Latino cultures, can yield benefits such as low-cost child care and exposure to other caring individuals, such as aunts, uncles, and grandparents. Finally, there is some research suggesting that Latino parents and extended family members are more likely to emphasize respect and obedience, which can increase the likelihood that Latino children demonstrate social-emotional competencies, such as positive behavior, self-regulation, and cooperation with teachers and peers when they enter school (Galindo & Fuller, 2010; Li-Grining, 2012). Given the strong role that family members play as the child's principal source of love, support, and caregiving, these characteristics that are commonly observed in Latino families are important assets that can promote positive developmental outcomes for children and youth (Cabrera et al., 2013; Roosa et al., 2011; Taylor et al., 2012). It is in the context of these unique strengths and challenges that early childhood programs seek to enhance family involvement and support school readiness for Latino children and families.

Building family capacity to support children's early education

The research summarized in the previous sections highlights the importance of family involvement in relation to children's school readiness and the strengths and challenges that may influence family involvement in Latino families. According to Crosnoe and colleagues (2010), early childhood interventions that enhance educational experiences for young children across multiple settings (i.e., targeting both home and preschool or child care environments) will likely be more effective than policies or interventions that only enhance the child's experiences in one setting. Brooks-Gunn and Markman (2005) argue a similar point, suggesting that supplementing an early childhood education center with a parenting component (specifically, focusing on nurturance, discipline, and literacy behaviors) can enhance children's social and cognitive school

readiness. Furthermore, Landry and colleagues (2017) found that providing an effective parent program was a promising strategy for increasing the school readiness of children from low-SES families. As such, supporting parents while also providing high-quality early education to children from marginalized backgrounds can increase the likelihood that they will experience positive educational outcomes (as well as more positive social and economic outcomes) in the future (Crosnoe, 2010).

A two-generation approach to early education, which provides supports and services for children and their caregivers, can be particularly beneficial for immigrant parents (and therefore, their children), who frequently have limited English skills and limited experience with local school systems, community resources, or the home-based involvement practices encouraged by many teachers in the U.S. (Suarez-Orozco and Suarez-Orozco, 2001). However, there are multiple approaches that early childhood programs can take to support immigrant families, such as offering targeted information on positive parenting behaviors, helping parents navigate local social structures, and building families' social capital. The section that follows summarizes these approaches to enhancing young children's education and development by providing education and support for families.

Promoting positive parenting behaviors. According to Halle and associates (2015), an effective parenting intervention should promote parenting behaviors related to nurturing, discipline, teaching, language use, monitoring, and/or management. Many family involvement programs that are associated with early childhood education programs and serve Latino families focus on literacy and the development of school readiness skills (Crosnoe, 2010). To promote positive family engagement, some programs, such as Abriendo Puertas (Abriendo Puertas, n.d.), encourage Latino parents to embrace the role of being their child's first and most important

teacher and provide lessons for creating an educational home environment. Other programs, such as Home Instruction for Parents of Preschool Youngsters (HIPPY; Baker et al., 1999), aim to bridge the gap between home and school by helping parents understand what teachers expect from them and helping them feel comfortable communicating with teachers (Crosnoe, 2010). Finally, some programs, such as Food For Thought (Leyva & Skorb, 2017; Leyva et al., 2018) teach parents to incorporate learning opportunities in everyday activities, such as cooking and grocery shopping.

Evaluations of these programs have shown mixed results. For instance, an evaluation of Abriendo Puertas in Los Angeles found that the program had strong effects on parenting knowledge, educational activities at home, and reading behaviors, but limited effects on parent-reported advocacy (on behalf of their children) at school or in other settings (i.e., doctor's office, social services; Moore et al., 2014). One evaluation of HIPPY in New York revealed positive effects on children's adjustment and cognitive skills in elementary school (Baker et al., 1999). However, these results were not replicated in a second evaluation in New York, nor a similar evaluation in Arkansas (Baker et al., 1999). Food For Thought showed a significant effect on children's vocabulary in kindergarten, but did not seem to influence other language skills, such as decoding or early writing (Leyva & Skorb, 2017). Despite mixed results, working with parents of young children to enhance their educational involvement outside of school is widely regarded as a promising strategy to support children's early education in school.

Supporting families through community resources and social capital. While many family involvement programs seek to promote positive parent-child interactions, some employ a more holistic approach, aiming to address the socioeconomic and language barriers that may impede family involvement for immigrant families (Crosnoe, 2010). Such strategies can include

offering continuing education classes, partnering with workforce development agencies, and connecting parents with community organizations. By helping parents identify and utilize the resources available to them, programs can increase families' capacity to address the underlying challenges that may hinder family involvement, and therefore, have indirect effects on family involvement and children's school readiness (Crosnoe, 2010).

In addition to connecting families to community resources, some research suggests that family social capital positively relates to family involvement, which in turn, has a positive effect on children's school readiness. As defined earlier, social capital refers to the networks, relationships, or connections among people and the potential benefits that people can experience because of those ties, such as wellness, employment, and economic mobility (Abbott & Reilly, 2019; Abbott et al., 2019). Social capital can connect families to community resources, while also enabling family members to give and receive support. For instance, the Community Action Project of Tulsa County (CAP Tulsa) structures family education activities intentionally to facilitate the development of relationships among families (Research Triangle Institute [RTI] & UNC School of Government, 2019). Specifically, CAP Tulsa focuses on promoting bonding relationships (i.e., relationships within social groups); these connections create opportunities for emotional support as well as more concrete support, such as a ride to school (RTI & UNC School of Government, 2019). CAP Tulsa also seeks to promote bridging relationships (i.e., relationships across social groups) and linking relationships (i.e., relationships with people in positions of power, such as employers).

Evaluations of CAP Tulsa show that the program significantly increases the likelihood that parents attained a "career certificate" (an educational acknowledgement demonstrating increased parent education and likelihood of upward social mobility), while also improving

educational outcomes for children, such as improved math scores and reduced absenteeism in middle school (Phillips et al., 2016). Similar programs, such as the Houston Parent Child Development Center Project (Johnson, 2008), have shown promising effects of promoting educational family involvement, while simultaneously connecting economically marginalized Mexican-American families to support services in a culturally sensitive way. Evaluations of the Houston Parent Child Development Center Project demonstrated that supporting families in these ways when their children were 1 to 3 years old contributed to fewer behavior concerns and strong school performance 5 to 8 years later (Johnson, 2008).

Based on the hypothesis that children are more likely to succeed when their parents succeed, it can be beneficial for early childhood education programs to support parents beyond simply promoting educational involvement (National Association of Community Action Agencies, 2016). Furthermore, it is possible that broadly supporting families, rather than narrowly focusing on educational involvement, can increase their opportunities for economic security, which can have prolonged effects on the developmental trajectories of their children (National Association of Community Action Agencies, 2016).

The leadership and staff of Charlotte Bilingual Preschool, the context of the proposed work, recognize the value of engaging families in young children's education while also building families' social capital and their capacity to utilize support services to address their needs. The following section describes Charlotte Bilingual Preschool's approach to promoting positive developmental and educational outcomes for Latino children and families.

Context of the present study: Charlotte Bilingual Preschool

Charlotte Bilingual Preschool is a nonprofit 501(c)(3) organization with the mission to "prepare Spanish-speaking children for success in school and life by providing superior dual-

language early childhood education. The preschool supports students' families with parenting, life skills, and English-language classes, enabling them to sustain and nurture their children's educational and emotional development' (Charlotte Bilingual Preschool, 2020).

The preschool utilizes a Reggio Emelia approach (i.e., a child-led, project-based approach to early education; see Edwards et al., 2011) and the Creative Curriculum (Dodge et al., 2002) to carry out this mission in four half-day classrooms (8:30 to 12:00 am and 1:00 to 4:30 pm) serving 3-year-olds and four full-day classrooms (8:00 am to 2:30 pm) serving 4-year-old students. The preschool has consistently maintained a 5-star rating from the North Carolina Division of Child Development (Charlotte Bilingual Preschool, 2020).

In addition to providing high-quality early education, Charlotte Bilingual Preschool recognizes the benefits of a two-generation approach – involving children and their caregivers – to prepare children for success in elementary school and beyond. Especially given the complex factors affecting students' families (e.g., language barrier, poverty, immigration, etc.), building family members' capacity to support their children's education at home and at school is a crucial component of the preschool's approach to achieving its mission. Furthermore, the preschool's Family Program seeks to grow family members' social capital and access to community resources to address the underlying factors that might inhibit family members' involvement in their children's education.

Charlotte Bilingual Preschool's Family Program

Prior to the 2018-2019 school year, the Family Program used a lecture-based approach to teach a pre-specified curriculum to parents of 3- and 4-year-old students. Although staff urged parents to attend, attendance was very low for most of the year. In the 2018-19 school year, preschool leadership worked with staff and families to redesign the Family Program, hoping to

facilitate discussion-based learning opportunities that built on family members' strengths rather than making assumptions about their deficits. By making activities more engaging, the preschool hoped to facilitate mutual learning among family members and make the program more enjoyable so that participation would increase. The program also employed a data-driven approach which involved repeatedly collecting information from participants in order to adapt the program to family members' needs and concerns as they arose. Altogether, this approach is consistent with the outline of effective parent education programs provided by Halle and colleagues (2015), which suggests engaging participants to identify key areas of need and collecting data throughout the program to support decision-making and program improvement.

Throughout the 2018-19 school year, the Family Program was adjusted through an iterative process that involved program leaders meeting several times to discuss specific goals of the program and ensure its alignment with the broader goals of the preschool. Table 1 summarizes the specific goals that were developed through this process. Engagement in children's education at home and at school were deemed the most important goals because they were viewed as relating directly to the preschool's mission of educating Spanish-speaking children and preparing them for success in elementary school. Addressing basic needs and building social capital were identified as secondary goals that relate indirectly (and sometimes directly) to child development during and after their enrollment at Charlotte Bilingual Preschool. However, these goals were still highly valued because of the presumed ongoing benefits for children and families of social capital and the ability to address basic needs.

Notably, when defining social capital for the purposes of the Family Program, program leaders believed it was important to differentiate between two unique forms of social capital, which they referred to as internal and external social capital. As described in Table 1, internal

social capital refers to the relationships formed among families at the preschool, which allow for psychological and instrumental (i.e., concrete or tangible forms of support or assistance, such as giving a ride, babysitting, or providing necessities) support. Furthermore, internal social capital in the context of the preschool contributes to a strong sense of community and facilitates communication across families, which creates opportunities for parents to learn from one another and identify solutions to common parenting challenges. External social capital refers to relationships that parents develop with individuals from diverse socioeconomic backgrounds (i.e., language, income; whether within or outside of the preschool), which may help connect them with community resources.

During the 2018-19 and 2019-20 school years, the Family Program implemented four primary components (summarized in Table 2) to address these goals. Family Cafes were added in the 2018-19 school year as part of the Family Program redesign effort. Adapted from the Strengthening Families model (Kumpfer et al., 2007), Family Cafes facilitate discussion among parents to address topics related to their interests and encourage parents to develop their own solutions to common challenges before providing evidence-based information on the topic.

Beginning of year Family Cafes invited parents to share their strengths as well as the challenges they have experienced and the types of support they would like to receive from the preschool. This feedback served as a guide for future Family Program events and informed the topics for future cafes. Topics identified by family members and addressed in cafes during both the 2018-19 and 2019-20 school years included behavior management, routines and transitions, literacy development, stress management, and communication with teachers and family members.

Family Workshops adhere to a more traditional parent education approach, in which facilitators or experts from outside the preschool address important aspects of parenting. For

instance, one Family Workshop explained the process of enrolling children in Charlotte-Mecklenburg Schools. Other Family Workshops may focus on the importance of certain parenting behaviors for child development, such as active reading or eating behaviors. While parents are encouraged to share their own expertise in Family Cafes, the facilitator is the expert in Family Workshops, providing evidence-based information to help parents support their children. Nonetheless, Family Workshops are still designed to be interactive and engaging, so that parents can ask questions related to their specific experiences.

English as a Second Language (ESL) classes are provided by a certified ESL teacher from Central Piedmont Community College, a valued community partner. Family members and outside community members can enroll in a morning or afternoon course, which meets three times per week. In addition to promoting English language learning, ESL classes provide an opportunity for parents to build relationships, learn together, and demonstrate the value of learning to their children.

Community-building events aim to bring families together to celebrate diverse aspects of Latino culture. As these events invite children as well as adults, they provide an opportunity to teach children about their own culture as well as the cultural backgrounds of their diverse peers. Additionally, these events aim to promote positive interactions among Charlotte Bilingual Preschool families, build a positive sense of community, and promote social capital. As one example, "Cookies with Santa" invited children and families to make traditional cookies from South and Central America, drink traditional atól (a warm chocolate milk and rice-based drink), and take pictures with Santa. As another example, the Family Program hosted "The Great Tamale Cookoff," in the fall of 2019, around the time of Thanksgiving (a holiday not traditionally celebrated in Latin American countries). This event invited family, staff, and

members of the Preschool's Board of Directors to cook tamales (or the cultural equivalent from their home country) based on their unique family recipes and enter them into a competition.

Individuals and families from within and outside of the preschool community ate tamales, voted for their favorite, and spent time with one another. Through these events, the Family Program aims to promote a positive sense of community, demonstrate ethnic pride, and create opportunities for parents to develop internal and external social capital.

Research and evaluation at Charlotte Bilingual Preschool

Charlotte Bilingual Preschool collects substantial data to understand how students grow during the school year. Specifically, the preschool uses Teaching Strategies Gold (TS Gold; Heroman et al., 2010; Lambert et al., 2014), Individual Growth and Development Indicators (IGDIs; McConnell et al., 2002), and the Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999) to assess students' development of early language, literacy, mathematics, and social-emotional skills. Notably, children's language and literacy skills are assessed in both English and Spanish through the TS Gold assessments. Evaluations of the preschool from the 2016-17, 2017-18, and 2018-19 school years suggest that preschool students show significant gains in most of these areas over the course of the year.

While previous evaluations suggest that Charlotte Bilingual School has a positive effect on student growth, there has been limited research on the effectiveness of the Family Program. In the 2018-19 school year, the Family Program was evaluated using a Parent Questionnaire that assessed parenting behaviors, parental engagement in their children's education, stress management, social capital, and parenting efficacy. A Family Program Participation Survey was administered and a focus group was facilitated at the end of the year that included families who did and did not participate in the Family Program.

Responses to the Family Program Participation Survey suggested that respondents found Family Cafes to be fairly helpful (average helpfulness rating was 4.3 out of 5). Parents also indicated that they chose to attend cafes because 1) they found the topics interesting, 2) they felt the information provided would help them become better parents, and 3) they enjoyed learning from other parents. One open-ended response to that survey exemplifies the benefits of social support and parent-led discussion that are intentionally incorporated into Family Cafes: "I like hearing the experiences of others and knowing that I am not alone" ("Me gusta escuchar las experiencias de los otros y saber que no estoy sola"). Another section of the Family Program Participation Survey asked parents about their interactions with other families at the preschool. Notably, parents who attended three or more cafes were significantly more likely than parents who attended 2 cafes or less to discuss concerns about their children's development, parenting behaviors, personal issues, and issues related to the preschool with other parents.

In the end-of-year family focus group, parents who had participated in the Family Program indicated that the program had helped them improve their parenting practices and enhance their children's education. One parent noted that "(the program) helps us be the guide for our children and practice what we learn" ("Nos ayuda ser el guia para nuestros hijos y practicar lo que aprendemos"). Participants also reiterated how the Family Program had helped them develop friendships with one another and learn from one another. However, the parents who attended more events rarely mentioned that the Family Program helped connect them to helpful resources in the community. Parents who had not participated in the Family Program identified common barriers to participation, such as employment and limited availability. Findings regarding parents' attitudes, behaviors, and supports collected through the Parent Questionnaire were largely inconclusive, such that there was no evidence that participation in

Family Cafes and Family Workshops led to greater growth in family or student outcomes.

While some of these results are promising, they reflect the impact of a Family Program that was administered while simultaneously being redesigned, which added complexity for evaluation and may have restricted the program's impact. Additionally, low rates of survey participation limited the potential to draw conclusions that reflected the full impact of the program. In the 2019-20 school year, there were clearer expectations for the goals and activities of each component of the Family Program. Furthermore, Family Program staff aimed to implement programming (i.e., cafes, workshops, family events) in a logical progression such that the topics for cafes and workshops responded to the interests and needs that families expressed in prior cafes. Family Program administrators also worked with teachers to increase alignment between education in the classroom and education at home. For instance, teachers facilitated multiple cafes that presented strategies for enhancing linguistic, social-emotional, and motor development in the classroom, which could be adapted to the home context. Finally, in planning for the 2019-20 Family Program, staff sought to address the findings from the previous year's evaluation efforts by building on strengths and addressing areas for improvement identified by families, such as inviting more outside experts (e.g., teachers, psychologists, Charlotte-Mecklenburg Schools [CMS] representatives), facilitating more connections to community resources, and helping participants develop stronger relationships with teachers. For these reasons, the 2019-20 Family Program was expected to have a stronger effect on participating family members, and therefore, have a larger impact on students' development.

The benefits of a participatory approach to research and evaluation

As illustrated in the previous section, Charlotte Bilingual Preschool aims to utilize data and incorporate multiple perspectives (e.g., parents, teachers) into the design and ongoing

improvement of its programs. The participatory approach to research and evaluation employed during the 2018-19 and 2019-20 school years yielded important benefits for both the development of the preschool's Family Program, research and evaluation efforts at the Preschool, and the study described here. This approach involved multiple meetings with Charlotte Bilingual Preschool staff to: 1) discuss and define the goals of the Family Program; 2) design Family Program activities that would address the program's primary goals; 3) develop surveys and data collection procedures that would demonstrate the impact of the Family Program and provide useful information to guide program development; and 4) discuss strategies for utilizing data to enhance the support provided to children and families.

For Charlotte Bilingual Preschool, this approach facilitated a common understanding among staff and program leaders of the goals of the Family Program (see Table 1) as well as the desired approach to achieving those goals. Further collaboration helped the Family Program respond to families' strengths, needs, and interests by sharing information in these areas (collected through initial Family Cafes and Family Café surveys) with program administrators in order to guide topic selection and facilitation strategies for future Family Program events. These discussions also uncovered additional questions of interest to Family Program staff. Research and evaluation strategies were then employed to answer those questions and continue informing staff members' work. Through this process, the researcher (the author of this work) helped increase alignment between the goals of the Family Program and the program's implementation and build the Family Program's capacity to respond to families' strengths, needs, and interests.

In addition to benefiting the preschool, the participatory approach described here was crucial to the effectiveness of research and evaluation efforts at the school as well as the design of the present study. As noted by several prominent community psychologists, the active

participation of community and organizational stakeholders is vital for community research to be effective (Dalton et al., 2013; Kloos et al., 2012). In the context of the present work, developing a common understanding of the Family Program's goals produced definitions of key evaluation constructs and provided a foundation for the development of this study's primary research questions. Further collaboration informed the selection of scales that would accurately assess family outcomes based on the construct definitions put forth by program leadership and demonstrate whether the program was having its intended effect. Finally, Family Program staff were highly involved in the development and implementation of data collection procedures and the broader study processes, including offering crucial support in designing and distributing surveys and encouraging participation. Altogether, active collaboration and communication among several stakeholders increased the alignment between research processes and leadership's questions of interest, likely enhanced the quality and quantity of information received from families, and made it possible to address the primary aims of the study, which are discussed in further detail in the following section.

Aims of the present study

The primary goals of this study were to 1) better understand the effectiveness of Charlotte Bilingual Preschool's Family Program in the 2019-20 school year and 2) provide information that will support the Family Program's continued improvement. To achieve these goals, this study addressed the following research questions:

- 1. To what extent do parents' ratings of internal and external social capital, parenting efficacy, parenting stress, and kinship relate to family involvement behaviors at home and at school?
- 2. To what extent do families report improvement in internal and external social capital,

- parenting efficacy, mental health, and family involvement behaviors over the course of the school year?
- 3. To what extent does change in these areas vary as a function of parents' participation in Family Program events, such as Family Cafes and Family Workshops?
 - a. In the unexpected and evolving context of the COVID-19 pandemic (see "evolving context" section below), how do parents' remote interactions with teachers and Family Program staff relate to their ratings of internal and external social capital, parenting efficacy, parenting stress, and family involvement behaviors?
 - b. How do parental participation in Family Program events (both in-person and remotely) and remote interactions with teachers relate to their sense of kinship and support?
- 4. How and to what extent does parents' participation in Family Program events relate to child functioning and child growth in preschool?
 - a. How do parents' attitudes, behaviors, and supports relate to child functioning and child growth in preschool?
 - b. Are the relationships between parents' participation in Family Program events and child functioning and growth mediated by the family involvement behaviors and/or other areas targeted by the Family Program?

Figure 2 represents a broad framework of multiple relationships that could potentially connect Family Program participation to family and student outcomes. The present study examines specific relationships (and sets of relationships) depicted in this framework in order to provide a more comprehensive understanding of the effects of Charlotte Bilingual Preschool's

Family Program. The steps taken to explore unique dimensions of this framework are described further in the Method section (see Analytic Approach). Through the processes outlined in that section, this study addressed these research questions, with the objectives of helping Charlotte Bilingual Preschool leadership and staff understand the impact of the Family Program and providing recommendations for enhancing Family Program activities. In doing so, this study can have important implications for Charlotte Bilingual Preschool's Family Program as well as family programs at other schools serving young children and Latino families.

Evolving study context: COVID-19 and school closures

On Friday, March 13th, 2020, the Charlotte-Mecklenburg Board of Education announced that schools would be closed for two weeks starting the following Monday (March 16th) due to concerns about the spread of COVID-19, a potentially deadly virus that had already spread around most of the globe (World Health Organization, 2020). In the face of this pandemic, on March 23rd, North Carolina governor Roy Cooper issued an executive order closing all schools in the state until May 15th (Ma, 2020). Near the end of April, the governor announced that schools would stay closed for the remainder of the academic year (Ma, 2020).

In response to those decisions, teachers and staff at Charlotte Bilingual Preschool worked quickly to develop systems to 1) support Charlotte Bilingual Preschool families and 2) continue children's education at home through remote instruction. To support families, Family Program staff members identified several resources to address various family needs that may arise (e.g., food, crisis assistance, health, etc.) and built a referral system through which teachers could refer families to the Family Program, which could then work with family members and community resources to address their needs. During the ongoing uncertainty tied to the pandemic and the need for remote instruction, this response system aimed to address core goals of the Family

Program by ensuring that families were supported and that they could access community resources to meet their needs.

The Family Program also provided virtual Family Cafes and Family Workshops through Zoom (a video conference call application). Virtual Family Cafes and Workshops followed a similar plan to what was implemented at the beginning of the school year by encouraging feedback from families regarding their family and parenting needs during the pandemic. Cafes and Workshops were then designed to provide helpful information in response to families' needs and encourage continued communication and support across families.

To facilitate students' continued learning, teachers developed detailed remote instruction plans that included electronic packets of information and activities for parents to do at home with their children. Moreover, teachers sent information and communicated with parents at least 3 times per week to see how activities were going and provide additional feedback. A remote instruction tracking form was developed for teachers to log their interactions with families, including the number of messages they sent to families, the number of times they called each family, and the number of activities that families reported completing with their children.

Teachers also encouraged parents to send them pictures of their children completing activities in order to document their continued progress.

After the onset of the COVID-19 crisis, promoting family involvement and supporting families became even more important for the education and development of young children, especially those from marginalized family backgrounds. In addition to demonstrating the value of teachers' and staff members' commitment to students and their families, studying these efforts can help Charlotte Bilingual Preschool identify strategies for supporting families and encouraging educational involvement in the future. Thus, although the preschool's practices have

changed during this time, monitoring and evaluating the effects of family support and family involvement efforts remain crucial. However, the shift to remote instruction and the continued uncertainty of the crisis had implications for practices implemented by Charlotte Bilingual Preschool (as described above) as well as the present study's evaluation efforts. The research methods employed to study these phenomena through the unique span of time that included the initial phases of the COVID-19 pandemic are described further in the Method section.

CHAPTER 2: METHOD

The present study grows out of a broader evaluation effort conducted with Charlotte Bilingual Preschool. All data collected for this study supported the design, evaluation, and improvement of Charlotte Bilingual Preschool programs.

Participants

In the 2019-20 school year, 150 children were enrolled at Charlotte Bilingual Preschool. Of those, 77 students participated in a 3-year-old classroom, and 73 participated in a 4-year-old classroom. All students and parents of students who were enrolled in Charlotte Bilingual Preschool for both assessment time points (i.e., fall and winter) were eligible to participate in this study. However, data were only utilized in analyses if parents or caregivers provided informed consent (see Appendix C) and completed the measures applicable to each research question.

Based on these criteria, 67 children and their mothers were eligible for this study. Of these students, 38 were enrolled in the 3-year-old classrooms and 29 were enrolled in the 4-year-old classrooms. The sample was 51% male with a racial and ethnic make-up of 94% Latino and 6% Black, non-Latino. These sample characteristics roughly align with the characteristics of the broader Charlotte Bilingual Preschool student population in the 2019-20 school year, which was 52% male, with a racial and ethnic make-up of 90% Latino, 4% Black, non-Latino, 4% White, non-Latino children and 2% other (including Middle-Eastern and Asian). Based on enrollment data, 10% of students were described by their parents as speaking English as their first language, and 90% were described as speaking Spanish as their first language. The proportion of students in the sample described as speaking English as a first language was slightly lower than in the

total population, for which that percentage was 15%. However, students in each of these categories showed varying degrees of bilingualism at the beginning of the school year; only 6% of students in the research sample and total population were identified as *only* speaking English at the beginning of the school year. Of the 29 students from 4-year-old classrooms, 75% had attended Charlotte Bilingual Preschool as 3-year-olds. All 3-year-old students were in their first year at Charlotte Bilingual Preschool.

The ethnic make-up of eligible parents and caregivers was similar to that of children, and 90% of families reported speaking Spanish at home, with 10% reporting that they speak English at home. Again, it is important to note that many parents may show varying degrees of bilingualism. Based on available family income data, average yearly income among families in the research sample was approximately \$29,124 (SD = \$9,784) compared to an average of \$28,911 (SD = \$11,956) in the total preschool population. On average, there were 4 (M = 4.27; SD = 1.06 in the research sample; M = 4.34; SD = 1.08 in the preschool population) people living in the home, 2 (M = 2.15; SD = .50; M = 2.22; SD = .90) of whom were children. For reference, the federal poverty line for a family of 4 in 2019 was \$25,750 (US Department of Health and Human Services).

Measures

This study's measures reflect two categories: family measures and student indicators of functioning. Family measures included two surveys. Family participation in Family Program activities was tracked throughout the school year. Student indicators of functioning included assessments conducted by the preschool as part of their standard operating procedures.

Family Measures: The Family Attitude, Behavior, and Support Survey

The Family Attitude, Behavior, and Support (FABS) survey was administered at the

beginning of the 2019-20 school year (i.e., in late September and early October of 2019) and again at the end of the school year (May, 2020). The FABS survey was designed to assess family growth in the primary areas of focus defined by the Family Program. The survey included multiple empirically-validated surveys, as well as scales developed specifically for the purposes of this evaluation. All scales included in the FABS survey were discussed and selected in collaboration with Charlotte Bilingual Preschool leadership. The full FABS survey (111 items) is provided in Appendix A. The scales in the FABS survey include the following:

The Family Involvement Questionnaire – Short Form (FIQ-SF; Fantuzzo et al., 2013). The FIQ-SF includes 21 items that assess three domains of family educational involvement in early childhood. The home-based involvement scale (7 items) assesses the extent to which parents engage their children in educational activities outside of school, such as taking them to educational places in the community, encouraging positive attitudes toward learning, bringing educational materials home, and spending time with their children working on academic skills, such as reading, writing, and creativity. On the school-based involvement scale (7 items), parents report how often they participate in activities at their child's school, such as volunteering, planning activities, attending workshops, or attending field trips. Finally, on the 7-item homeschool communication subscale, parents rate how often they talk to their child's teacher about their child's education and development. For instance, items on this scale assess how often parents attend conferences with their child's teacher and ask the teacher about their child's routines, behaviors, and difficulties at school. This scale also assesses how often parents ask teachers what they can do at home to support their child's learning.

For each of these scales, respondents rate the frequency at which they engage in the suggested behavior on a scale from 1 to 4, such that 1 suggests that they "never" engage in the

activity, and 4 suggests that they "frequently" engage in the activity. The FIQ-SF has shown strong construct validity, convergent validity, and reliability (Cronbach's alpha ranged from .83 to .91; Fantuzzo et al., 2013). Based on data collected for the present study in both the fall and spring, the three scales of the FIQ-SF showed good reliability, with Cronbach's alpha ranging from .80 to .88 for the subscales at both time points, with the exception of the home-based involvement subscale during the spring administration. The reliability for that subscale dropped to .72 in the spring; that alpha is acceptable, and a significant, positive correlation between home-based involvement in the spring and the number of activities completed during remote instruction (r = .38; p = .026) provides some support for the validity of the home-based involvement subscale.

Supplemental Education. The supplemental education subscale was developed for the specific purposes of this study and assessed the frequency at which parents read or tell stories with their child, involve their child in everyday home activities (such as cooking and cleaning), and play with their child. Similar to the FIQ-SF, respondents rate the frequency at which they engage in a given behavior on a scale from 1 to 4. Analysis of Time 1 data suggest the supplemental education scale had adequate reliability ($\alpha = .72$). However, due to high correlations between the supplemental education subscale and the FIQ home-based involvement scale and low variability and reliability in the spring ($\alpha = .42$), the supplemental education scale was not used in analyses.

Behavior Management. The FABS survey included three scales assessing family behavior management practices, i.e., negative behavior management, proactive parenting, and setting limits. For each scale, respondents indicated how often they engaged in certain behaviors on a scale from 1 (never) to 7 (most of the time).

The negative behavior management scale includes four items adapted from a parenting questionnaire utilized by Zero to Three (2016), a research organization dedicated to enhancing early childhood education. Items assessed the frequency at which parents use physical punishment, raise their voices, lose their tempers, or struggle to maintain patience. Cronbach's alpha for this scale was .67 in the fall and the spring.

Positive behavior management practices were assessed by two scales from the Parenting Young Children measure (PARYC; McEachern et al., 2012). The Setting Limits scale (7 items) assessed the extent to which parents set rules that they can enforce and stick to their rules, while the Proactive Parenting scale (7 items) assessed how often parents engaged in behaviors to avoid potential behavior challenges. McEachern and colleagues (2012) report that these two scales show strong construct validity, convergent validity, and reliability, finding a Cronbach's alpha of .79 for the Setting Limits scale and .85 for the Proactive Parenting scale. Based on data collected for this study, reliabilities were slightly lower than the alphas found by McEachern et al. (2012), with $\alpha s = .74$ for Setting Limits in the fall and spring and $\alpha s = .77$ and .83 for Proactive Parenting in the fall and spring, respectively. Because these two scales were highly correlated at the beginning and end of the year (rs = .79 and .80 in the fall and spring, respectively; ps < .01), measure a common underlying construct (i.e., positive behavior management practices), and use the same response metric, scores on these scales were added together to create a composite positive behavior management score.

Parenting Self-Efficacy. The Parent Self-Assessment (15 items; Shepard, 2012) was included in the FABS survey to assess parenting self-efficacy. Items assessed parents' confidence that they knew what to do to keep their children safe, keep their children on the right path, and prepare their children for school. Participants rated their level of agreement with each

item on a 1 to 4 scale (strongly disagree to strongly agree). The Parent Self-Assessment showed adequate variance and reliability at both time points (α s = .82 and .84 in the fall and spring, respectively).

Parenting Stress. Parenting stress was assessed by the maternal parenting stress items utilized by Martin and colleagues (2013; 4 items), on which parents report about their feelings of burnout, frustration, and freedom in relation to parenting. All items were rated on a scale from 1 to 4, with responses ranging from strongly disagree to strongly agree. Martin and colleagues (2013) found that the measure showed adequate variability despite low reliability ($\alpha = .59$). At Time 1 of the present evaluation, reliability of these 4 items was slightly higher, at .67; however, this figure dropped to .56 in the spring. Notably, items are relevant to fathers as well as mothers, but no fathers were in the present study's research sample.

Social Capital. The FABS survey included multiple measures that assessed unique forms of social capital. First, to assess perceived capital at the community level, Looman's (2006) common good (7 items) social capital subscale was adapted to fit the context of the preschool. Items from this subscale were answered on a 4-point scale (strongly disagree to strongly agree). Looman (2006) reported that this scale had strong construct validity and reliability ($\alpha = .78$). Reliabilities for the common good subscale were similar in this study (α s = .74 and .83 in the fall and spring, respectively).

The bonding and bridging social capital subscales (Williams, 2006), part of the Internet Social Capital Scales, were adapted to the context of the preschool to assess the extent to which family members developed in-group relationships (i.e., bonding relationships or relationships with others perceived as being similar to the rater) and out-group relationships (i.e., bridging relationships or relationships with others perceived as being different from the rater). For

example, one item on the bonding social capital subscale asked participants to indicate the extent to which they agreed with the statement: *I know several people who I trust to help solve my problems*. On the other hand, *the people I interact with make me interested in what people unlike me are thinking* is an example item from the bridging social capital subscale.

Similar to the common good subscale, participants responded to these items on a 4-point scale, ranging from strongly disagree to strongly agree. Williams (2006) found that these scales showed adequate validity and reliability independently (α = .89 for both), but also suggested they could be aggregated to provide a composite social capital score. Furthermore, Williams (2006) found similar results when revising the measure to assess "offline" social capital, supporting its utility in other contexts. Data collected for this study suggest strong reliability and variability for both subscales (α s = .86 and .84 for bonding social capital; α s = .91 and .93 for bridging social capital). Because the bonding social capital and bridging social capital subscales were highly correlated (r = .88 in the fall and r = .81 in the spring), scores on these two subscales were summed to form a composite bonding and bridging social capital score.

Additional scales were developed to assess perceived social capital and social support for the purposes of this evaluation. First, a 3-item access to community help scale was created to assess the extent to which parents felt that they could identify and utilize community resources and supports to address their families' needs. For example, one item asked whether participants agreed or disagreed with the statement: When my family has problems, I know where to go for help. The three items on the access to community help scale were answered on a 4-point scale from strongly disagree to strongly agree. Furthermore, the access to community help scale showed adequate reliability (α s = .80 and .79 in the fall and spring, respectively).

A single item was used to assess whether parents felt they had sufficient support to deal

with the stress their family faced. This item asked parents to think about times when they felt overwhelmed or stressed about being a parent of a 3-5 year old and indicate whether they "receive the help or support they need," "receive some help of support, but would like to receive more," "receive just a little help or support and feel the need for a lot more," or "do not receive any help or support." Two additional items assessed the frequency at which parents received support from other family members at the preschool to help them manage stress or care for their child. These items were answered on a 5-point scale on which participants rated the frequency of receiving support, ranging from never to all of the time. Because these two items were correlated at .87 in the fall and .73 in the spring (ps < .01), they were averaged to make a composite score for preschool peer support. Finally, two items assessed whether family members felt comfortable discussing their children's needs and family challenges with teachers or staff members at Charlotte Bilingual Preschool. The correlation between these two items was moderate (rs = .46and .66 in the fall and spring, respectively), but given the common underlying construct being examined, items were summed to form a composite variable assessing comfort with preschool staff.

Social Networks. Social network analysis is another method of assessing social capital that provides a depiction of interpersonal ties in a community that may allow for the exchange of resources (e.g., knowledge, support; Lawler & Neal, 2016). Parents were asked to provide information about their networks and connections. Specifically, to make social network analysis possible, parents were asked to list the names of up to 5 parents who they consider to be friends. In addition, respondents reported the number of other parents at the preschool that they knew by name.

Importance of Parenting, Ethnic Identity, and Parent School Readiness. Three other

brief scales (2-3 items each) were created for the purposes of this evaluation to assess variables of interest to preschool leaders. These scales assessed parents' perspectives regarding the importance of parenting (3 items), ethnic identity teaching (3 items), and their preparedness to support their child's education in elementary school (i.e., parents' kindergarten readiness; 2 items). Alphas (or the correlation for the 2-item kindergarten readiness scale) for these scales generally ranged from .70 to .86; the alpha for the importance of parenting subscale in the spring was the lone exception at .61.

Family Measures: The Kinship Survey

The Kinship Survey (30 items; Appendix B) was developed in collaboration with preschool leadership to provide a more in-depth understanding of the relationships that families develop at the preschool. This survey was only administered at the end of the school year. The survey included 13 items that addressed the frequency at which parents engaged in specific interactions or discussed certain topics with other family members or preschool staff. For instance, these items asked how often a parent discussed family issues with other parents at the preschool or how often they get together with other parents to do something fun. These items are rated on a 5-point scale, from "never" to "very frequently." Notably, parents were instructed to answer these items based on their experiences before the preschool closed due to the COVID-19 pandemic.

Five additional items were added to the survey to assess parents' interactions and perspectives while the preschool was closed. Specifically, these items assessed whether parents had interacted with other family members or school staff (over the phone), parents' perceptions of the support offered by the preschool for families, and parents' perceptions of how the preschool had supported their children's education remotely.

The Kinship Survey also included 8 items assessing whether parents felt valued and supported and whether knowledge transfer had occurred as a result of their relationships with peers, teachers, and staff at the preschool. For these items, respondents were asked to indicate the extent to which they agreed or disagreed with statements on a scale from 1 to 4, with 1 indicating "strong disagreement" and 4 indicating "strong agreement." Of these 8 items, scores from the three items assessing parents' relationships with other parents (i.e., items 14, 16, and 18) were averaged to create a composite score for parents' sense of kinship with other families, and scores from the other 5 items were averaged to create composite scores for parents' sense of kinship with school staff. Reliabilities for both of these scales were adequate ($\alpha = .80$ for parents' sense of kinship with other families; $\alpha = .85$ for parents' sense of kinship with school staff).

Finally, the survey included 4 open-ended questions that provide an opportunity for participants to explain 1) what makes them feel that they are or are not an important part of the Charlotte Bilingual Preschool community; 2) what makes them feel that they are or are not supported; 3) the perceived benefits of the Family Program; and 4) what could be done to enhance the Charlotte Bilingual Preschool community. For the purposes of this study, only parents' sense of kinship with other parents, sense of kinship with school staff, and sense of support in the first few months of the COVID-19 pandemic (two items that assessed support for the family and for children's education, respectively) were included in analyses.

Student Outcomes

Students' educational outcomes are assessed by three measurement systems: Teaching Strategies Gold (TS Gold; Heroman et al., 2010; Lambert et al., 2014), the Individual Growth and Development Indicators (IGDIs; McConnell et al., 2002), and the Devereux Early Childhood Assessment – 2nd Edition (DECA; LeBuffe & Naglieri, 1999).

Teaching Strategies Gold (TS Gold). TS Gold (Heroman et al., 2010; Lambert et al., 2014) is an evaluation tool used to assess children's ongoing development from birth to kindergarten. Ratings are based on teachers' observations of children's behaviors in relation to normed developmental milestones and provide information on 38 research-based learning objectives, which are organized into 8 domains (Kim et al., 2013). Domains include social-emotional development, physical development, English language skills, Spanish language skills, cognitive development, English literacy skills, Spanish literacy skills, and mathematics skills (Heroman et al., 2010). The tool allows teachers to monitor children's strengths and challenges in each area over time and identify areas of focus to guide their instruction (Lopez et al., 2005). Psychometric studies suggest the TS Gold assessment system has adequate validity and reliability (Lambert et al., 2015). Furthermore, research suggests that the tool is valid and effective for English language learners (ELLs; Kim et al., 2013).

For the purposes of this effort, continuous scores will be calculated to represent the percentage of competencies within each domain that a child possesses. For instance, if there are 10 social-emotional competencies assessed, and a child meets age-based expectations on seven of them, her "percentage of competencies" score would be 70%. Using this method increases our capacity to assess change over time beyond simply monitoring whether a child is below, meeting, or exceeding expectations, as a child may improve from 70% competencies in a given area in the fall to 80% competencies in the spring, but score "below expectations" at both time points. Therefore, each child's percentage of competencies was tracked for each domain at each time point (fall, winter, and spring).

Individual Growth and Development Indicators – Early Literacy (IGDIs). The IGDIs (McConnell et al., 2002) includes five scales that assess four domains of early literacy

development, including oral language (assessed by a picture naming task), phonological awareness (assessed by rhyming and alliteration tasks), alphabet knowledge (assessed by a sound identification task), and comprehension (assessed by a "Which One Doesn't Belong" task). These tasks are administered directly to the child by a trained administrator in the fall, winter, and spring. However, both the tasks and the norms for each task vary across time points to correspond with children's growth. Therefore, if a child remains in the same category at each time point, they may be actually be showing developmentally appropriate progress.

Furthermore, different versions of the IGDIs early literacy assessments are administered to children who are two years from entering kindergarten (i.e., children in the 3-year-old classrooms) and children who are one year from entering kindergarten (i.e., children in the 4-year-old classrooms). In a typical year, 3-year-old children only complete the picture naming, sound identification, and rhyming tasks. However, due to the COVID-19 pandemic, 3-year-olds only completed the picture naming and sound identification tasks. The rhyming and comprehension scales were only completed by 4-year-olds, which led to a sample size of 26 children for these scales, compared to 56 for the picture naming and sound identification scales. Because the samples for rhyming and comprehension reflected only a small subset of students (and excluded 3-year-olds), these scales were not included in this study's analyses.

Table 3 displays the sequences for the administrations of the various assessments for 3and 4-year-old children in the 2019-20 school year. As shown in Table 3, the sound
identification task was only completed by students in the 3-year-old classroom in the winter (i.e.,
not in the fall). Therefore, analyses including fall sound identification scores and change in
sound identification scores from fall to winter only include 4-year-old students (n = 26 for fall
analyses; n = 25 for analyses assessing change). The sound identification task was completed by

3- and 4-year-old students in the winter (n = 57). Picture naming was conducted with all students in both the fall and winter. The IGDIs scales have shown adequate convergent validity and test-retest reliability in other studies (Greenwood et al., 2011; Misall et al., 2004).

Devereux Early Childhood Assessment – 2^{nd} Edition (DECA) for Preschoolers. The DECA (LeBuffe & Naglieri, 1999) is a strength-based measure that assesses early childhood social-emotional development, including positive behaviors and resources as well as behavioral concerns. Specifically, subscales assess child functioning in relation to three protective factors: initiative, self-regulation, and attachment/relationships. The measure also provides a cumulative total protective factors score (based on the 3 protective factor subscales) and a behavior concerns score. To complete the DECA, teachers rate the frequency at which they observe the DECA's 38 items on a 5-point scale, ranging from zero (never) to four (very frequently). Scores for all subscales are on a t-score metric ranging from 28 to 72, with a population mean of 50 and SD of 10 (Fleming & LeBuffe, 2014). In general, studies have shown that the DECA has sufficient reliability ($\alpha > .93$ for each scale) and validity (Barbu et al., 2013; Bulotsky-Shearer et al., 2013; LeBuffe & Shapiro, 2004; Lien & Carlson, 2009). Only total protective factors (TPF) and behavior concerns (BC) were used in this effort and both scales showed adequate to excellent reliability ($\alpha s = .95$ and .96 for total protective factors in the fall and spring, respectively; $\alpha s =$.84 and .78 for behavior concerns in the fall and spring, respectively).

Procedure

This section describes the processes for collecting data using the measures described above. All procedures described here were developed through extensive collaboration with preschool leadership.

The FABS Survey. The FABS survey was distributed at the beginning of the school year.

Parents had a three-week window to complete the survey between September 17th and October 4th, with the option of completing the survey in English or Spanish. They also had the option to complete the measure electronically, via Qualtrics, or on paper. Links to the survey in Qualtrics were distributed via Remind101, a family-school communication application that all parents were asked to download at the beginning of the school year. Twice during the fall assessment window (Monday, September 23rd and Wednesday, October 2nd), the author and a Family Program staff member set up a table in the lobby to discuss the survey with parents before or after they dropped off their children. During that time, we explained the purpose of the survey, handed out paper versions of the survey, informed parents that they could complete the survey online, and reminded parents that they would be entered into a drawing for one of 15 \$20 gift cards if they completed the survey.

A similar procedure was utilized to administer the survey at the end of the school year, between Monday, May 18th and Friday June 5th. However, due to the closure of the preschool, it was not possible to distribute the surveys in person. Instead, multiple reminders were sent via Remind101 to ask parents to complete the survey electronically. As in the fall, parents who completed the survey were eligible for a gift card drawing. However, due to the closure of the preschool and the increased challenges encouraging participation, a larger number of incentives were provided – 25 \$20 gift cards were drawn and distributed to parents who completed the FABS survey.

The Kinship Survey. The Kinship Survey was distributed electronically via Google Forms and Remind101 near the end of the school year in the first half of May (before the FABS survey window). This survey was distributed separately to avoid adding additional length to the FABS survey. Parents had 2 weeks to complete the survey, and those who completed the survey

were entered into a drawing to win one of 10 \$20 gift cards.

Student Outcome Measures. Student data were collected through standard preschool assessment procedures. For TS Gold assessments, teachers tracked students' development, reported progress, and uploaded evidence of growth (i.e., pictures, videos, explanations) on an on-going basis in fall and winter assessment windows. TS Gold assessments could not be completed in the spring due the shift to remote instruction. At the end of each assessment window (November 29th and February 14th), students' scores were finalized and shared with the coordinator of research and evaluation.

The IGDIs assessments are typically administered directly to students by trained administrators during fall (October 1st through October 11th), winter (January 22nd through February 17th), and spring windows (April 20th through May 14th). However, due to the closure of the preschool, IGDIs testing was not possible in the spring window. Therefore, winter IGDIs data were considered "end-of-year" data. Of note, while most students were tested during the suggested window in the fall, some (approximately 29%) 4-year-old students were not tested until the first week of December (i.e., between December 3rd and December 6th) due to scheduling difficulties. To complete the assessments, students were pulled out of the classroom into a quiet space where they could complete the assessment with limited distraction. The full assessment typically took 5 to 20 minutes depending on the child's attention span, competence, and age (i.e., the number of assessments being administered).

Teachers completed the DECA electronically or on paper between October 1st and October 31st. Teachers were instructed to work together with their co-teacher to complete the DECA for each child. Thus, teachers discussed and agreed upon responses for each of the DECA's 38 items for each child. Shortly after the preschool closed due to COVID-19, teachers

were asked to complete the DECA based on their students' social-emotional functioning before the school closed. Teachers completed the DECA between April 1 and April 15 and rated their students' social-emotional functioning based on their interactions with students before the school closed (prior to March 16). The data provided during this window replaced the end-of-year DECA data that typically would have been collected in May.

Family Participation Tracking. Attendance at Family Program events was logged in a Family Program Participation Microsoft Excel spreadsheet. Updates to the spreadsheet were made following each Family Café, Family Workshop, or other event. While the preschool was closed due to COVID-19, teachers logged their interactions with their students' families, noting the type of interaction (i.e., phone call, video call, text message, Remind101 message), the topic or activity discussed, and the parent's level of engagement in their conversation. However, due to a lack of variability in parents' level of engagement in remote activities (as reported by teachers), this variable could not be used in analyses. Family members also shared with their teachers the number of activities that their child completed each week.

Analytical Approach

This section describes the analyses used to address each research question. Figures are provided for each research question to illustrate the variables and the paths that were initially intended to be assessed by the analyses discussed for each research question.

Research Question 1 (RQ1): To what extent do parents' ratings of internal and external social capital, parenting efficacy, parenting stress, and kinship relate to family involvement behaviors at home and at school.

Correlation analysis, ordinary least squares (OLS) multiple regression, mediation, and moderation analyses were run to assess the relationships among parents' attitudes (e.g., parenting

efficacy, parenting stress, importance of parenting) supports (e.g., social capital, support to manage stress, access to community help), and behaviors (e.g., home-school conferencing, home-based involvement, behavior management practices). The variables and paths relevant to this research question, which were tested by these analyses, are shown in Figure 3. For multiple regression, mediation, and moderation analyses, family involvement behaviors (including home-based involvement, school-based involvement, home-school conferencing, supplemental education, positive behavior management, and negative behavior management) were dependent variables. Parents' scores related to their attitudes and supports, as assessed by other scales of the FABS survey (e.g., bonding social capital, parenting self-efficacy, parenting stress, etc.) and the kinship survey, were entered as independent variables.

Based on results of correlational analyses and multiple regressions, mediation and moderation models were examined. This included mediation models assessing the extent to which the relationships between common good social capital and family involvement behaviors were mediated by bonding and bridging social capital or home-school conferencing. Additional mediation models assessed whether the relationships between access to community help and family involvement behaviors were mediated by parenting self-efficacy. Finally, a third mediation model assessed whether the relationships between bonding and bridging social capital and family involvement behaviors were mediated by access to community help. These analyses allowed for the examination of both the direct and indirect relationships involving social capital, access to community resources, and family home involvement. Direct effects were estimated by the standardized regression coefficients for access to community help and bonding or bridging social capital predicting family home involvement, controlling for the other variables in the model (in this case, participants' scores on the parenting self-efficacy scale and the access to

community help scale, respectively).

Standardized regression coefficients were also calculated for each unique segment in the hypothesized model. For the first mediation model, this included the relationship between access to community help and parenting self-efficacy, and the relationship between parenting self-efficacy and family involvement behaviors. For the second model, the segments of the indirect path between bonding and bridging social capital and family involvement behaviors included the relationship between bonding or bridging social capital and access to community resources and the relationship between access to community resources and family involvement behaviors.

Indirect effects for each path were then calculated by multiplying the standardized regression coefficients for each unique segment of the path. The sum of direct and indirect effects then provided an estimate of the total magnitude of the relationship.

Two moderation models also assessed the extent to which the relationship between parenting stress and negative behavior management practices was moderated by bonding and bridging social capital and social support. For these models, an interaction term was calculated as the product of parents' parenting stress scores and their bonding and bridging social capital or social support scores. The interaction term was then included as an independent variable in the multiple regression along with parenting stress, social support, and control variables. The size and significance of the interaction term demonstrated whether moderation was present. A simple slopes plot was also created to examine how the relationship between parenting stress and behavior management practices varies when bonding and bridging social capital and social support were low (i.e., one standard deviation below the mean), medium (i.e., at the mean), and high (i.e., one standard deviation above the mean). It was hypothesized that there would be a strong positive relationship between parenting stress and negative behavior management

practices when bonding and bridging social capital or social support were low, but only a weak relationship when bonding and bridging social capital or social support were high.

Additional follow up analyses were also conducted based on relationships detected through preliminary analyses. These analyses are described further in the Results section. All quantitative analyses described for this research question and the following research questions were conducted in SPSS 26 (other than social network analysis, which was conducted in R Studio). More specifically, mediation and moderation analyses were conducted through Process (see Hayes, 2017), an SPSS add-on specifically designed for mediation and moderation analyses. In addition, the analyses for RQ1 were conducted with data from Time 1 and repeated with data from Time 2, based on the assumption that strong relationships among family attitudes, supports, and behaviors would be detected at both timepoints.

Research Question 2 (RQ2): To what extent do families report improvement in internal and external social capital, parenting efficacy, mental health, and family involvement behaviors over the course of the school year?

Within-samples *t*-tests were conducted for each family variable to assess the differences between parents' ratings for each variable at the beginning and end of the school year, and the extent to which change occurred. In addition to those analyses, social network analysis was conducted (in R Studio using the igraph package) using data from the FABS survey at both time points as means of assessing changes in the nature of parents' relationships. That allowed for the comparison of properties of the family network figures across the two timepoints, which provided a more detailed understanding of potential changes in parents' connections with other preschool families and, potentially, the Family Program's effect on social capital. For instance, improvements in network density, the number of nodes (i.e., the number of parents identified in a

given network), and the number of edges (i.e., the number of connections in the network) could suggest the development of a stronger community (Neal, 2020). The degree centrality (or number of connections that each parent has with other parents in the network; Kornbluh & Neal, 2015) of individual nodes (i.e., parents) could serve as another indicator of social capital such that increases in degree centrality would indicate a positive change over time. Figure 4 demonstrates the variables for which change over the school year were assessed.

These analyses were designed to indicate where and to what extent change occurred over the school year. While these analyses did not (and cannot) demonstrate whether observed changes specifically relate to Family Program activities, the findings associated with this research question laid the foundation for the analyses conducted for Research Question 3, which investigated the extent to which observed changes were directly associated with participation in Family Cafes and Workshops.

Research Question 3 (RQ3): To what extent does change in these areas vary as a function of parents' participation in Family Program events, such as Family Cafes and Family Workshops?

For each family variable (e.g., bonding relationships, home-based involvement, parenting self-efficacy, etc.), separate OLS multiple regressions assessed the extent to which changes in family attitudes, experiences, and behaviors over the school year related to parents' participation in Family Cafes and Workshops. Figure 5 provides an overview of these analyses. For each regression, end-of year scores were entered as the dependent variable, and beginning-of-year scores were entered an independent (i.e., control) variable. The number of Family Cafes and Workshops attended (including virtual cafes and workshops during the COVID-19 school closure) was also entered as an independent variable as was family per person income. A similar

OLS multiple regression assessed the effects of Family Program participation on parents' sense of kinship. However, since beginning of year data from the kinship survey were not available, these regressions only demonstrate the relationship between Family Program participation and parents' sense of kinship at the end of the year, rather than change over time. Additional analyses assessed how the number of Family Cafes and Workshops attended related to the number of remote activities that family members completed with their children during the remote instruction window at the end of the school year.

Additional multiple regressions were run for each dependent variable, including indicators of families' inclusion in remote instruction practices (while the preschool was closed due to COVID-19) as predictor variables. For these analyses, independent variables included the number of texts/Remind101 messages sent to each family and the number of phone/video calls with each family. This set of regressions demonstrated the unique effects of parental participation in Family Cafes and Workshops as well as the effects of remote instruction practices on parents' experiences and behaviors.

Research Question 4 (RQ4): How and to what extent does parents' participation in Family Program events relate to child growth in preschool?

Multiple steps were taken to answer RQ4. First, correlation analyses were conducted to assess the relationships between parent participation in Family Cafes and Workshops and students' growth in language and social-emotional functioning over the course of the school year. Next, additional correlation analyses assessed the extent to which student growth in language and social-emotional functioning were influenced by family attitudes, behaviors, and supports (i.e., the metrics assessing the goals of the family program).

Findings from those analyses were then examined in relation to findings from RQ1, RQ2,

and RQ3 to assess the extent to which families' attitudes, supports, and behaviors seem to connect participation in Family Cafes and Workshops and children's development. As one example, if the findings from RQ1, RQ2, and RQ3 indicated that family program participation related to increased bonding social capital, which directly or indirectly related to increased family home involvement, which in turn, related to stronger language skills for children at the end of the school year, a path model could be created and examined further. The process of developing and testing path models, or other hypothetical models that arose from the data, was designed to enhance our understanding of the direct and indirect effects of parents' participation in the family program on student growth over the school year. A simplified illustration of these mediation analyses is presented in Figure 6.

CHAPTER 3: RESULTS

This section describes the results of analyses conducted for each primary research question in turn.

Research Question 1 (RQ1): To what extent do parents' ratings of internal and external social capital, parenting efficacy, parenting stress, and kinship relate to family involvement behaviors at home and at school.

Correlational analyses were conducted with data collected through the FABS Survey in both the fall and the spring. Descriptive statistics for these family-level variables are shown in Table 4. Data collected through the Kinship Survey were included in correlational analyses using spring data. Correlations among family attitudes, experiences, and supports (not including behavioral indicators) in the fall and spring are shown in Table 5.

Several correlations are important to point out. First, the correlation between access to community help and parenting self-efficacy (r = .79 in the fall, p < .01; r = .68 in the spring, p < .01) suggests that greater access to resources and supports in the community may relate to greater confidence in one's capacity to parent effectively and navigate challenges. It is also important to note that bonding and bridging social capital scores were strongly and positively related to access to community help (rs = .66 and .59, ps < .01), parenting self-efficacy (rs = .51 and .50, ps < .01), common good social capital (rs = .55 and .63, ps < .01), and support received from preschool staff (rs = .47 and .63, ps < .01) in both the fall and the spring. Furthermore, bonding and bridging social capital positively related to caregivers' experiences of receiving support from other families at the preschool in the fall (r = .39, p < .01), and caregiver-rated support when

stressed (r = .53, p < .01) in the spring. Additionally, bonding and bridging social capital weakly related to ratings of kinship with other family members (r = .31, p = .085) in the spring, but did not relate to kinship with preschool teachers and staff.

Support received from preschool staff related to access to community help (rs = .56 and .50, ps < .01), parenting self-efficacy (rs = .46 and .34, ps < .01), and importance of parenting (rs = .39 and .30, ps = .013 and .018), in addition to the aforementioned relationship with bonding and bridging social capital, which may suggest that positive interactions with preschool staff could support access to community resources and yield other benefits for families. Alternatively, this finding could also suggest that parents with higher efficacy feel more comfortable developing relationships with preschool staff.

Finally, the number of other parents at the preschool who participants reported knowing by name did not relate to any other variable in the fall, but significantly related to access to community help (r = .30, p = .033) and support received from other families at the preschool (r = .55, p > .01) in the spring. Notably, although not shown in Table 5, there was also a significant positive correlation between change in other parents known by name and increased access to community help over the course of the year (r = .44, p = .013). These findings suggest that familiarity with other caregivers at the preschool may eventually lead to the receipt of support once those relationships have a chance to grow over the year.

The correlations in Table 6 show how family attitudes, experiences, and supports relate to family educational involvement behaviors in the fall and spring. Again, there are several noteworthy relations in Table 6. First, parenting self-efficacy significantly related to educational involvement at home, family kindergarten readiness, and positive behavior management practices in both the fall and spring. Access to community help related to caregivers' perceived

kindergarten readiness and positive behavior management practices. Supportive relationships with preschool teachers and staff and common good social capital related to kindergarten readiness, as well as positive and negative behavior management practices at both time points. Additionally, these variables related to home-school conferencing in the spring.

Greater bonding and bridging social capital related to greater home involvement, higher kindergarten readiness, more positive behavior management practices, and fewer negative behavior management practices in both the fall and spring, although the relation with negative behavior management practices was not statistically significant in the fall. Parents who received greater support to deal with stress reported engaging in fewer negative behavior management practices in the fall and more positive behavior management practices in the spring. Families who reported a stronger sense of kinship with other families at the end of the year also reported more positive behavior management practices. Finally, caregivers who reported greater school involvement and more home-school conferencing reported knowing more parents at the preschool by name in the spring and receiving more support from other parents in both the fall and spring. Greater home-school conferencing was also associated with receiving greater support from preschool staff.

Taken together, these tables suggest that social capital, access to resources in the community and social support at the preschool relate to educational involvement behaviors. Additional analyses were conducted to parse out how those relationships occurred. First, OLS multiple regressions were conducted to assess the extent to which parenting self-efficacy, importance of parenting, common good social capital, and bonding and bridging social capital predicted school involvement and home-school conferencing in the fall and spring. Results indicated that common good social capital significantly predicted school involvement (B = .40, p

= .02) and home-school conferencing (B = .38, p = .02) in the spring, controlling for parenting self-efficacy, importance of parenting, and bonding and bridging relationships. In other words, caregivers who perceived that others at the preschool were committed to working together, making positive contributions to the preschool, and supporting their children reported greater involvement at school and more child-focused interactions with teachers at the end of the school year even when parenting self-efficacy, importance of parenting, and bonding and bridging relationships remained constant.

Based on this finding, mediation models were assessed to explore whether the associations observed between common good social capital and family involvement behaviors were mediated by bonding and bridging relationships or home-school conferencing. That is, these models examined whether creating a positive community at the preschool, where caregivers felt they could work with others to support one another's children, contributed to greater bonding and bridging social capital or increased child-focused communication with teachers, which in turn, promoted more positive involvement behaviors. These models are depicted in Figures 7 and 8 and the standardized regression coefficients corresponding with each path are shown in Tables 7 and 8.

Results suggested that the effects of common good social capital on home-based involvement, ethnic identity parenting, kindergarten readiness, and positive and negative behavior management practices were partially mediated by bonding and bridging social capital. Home-school conferencing seemed to mediate the effects of common good social capital on school involvement, home-based involvement, ethnic identity parenting and negative behaviors management practices in the spring, but less so in the fall. Taken together, these findings suggest that promoting common good social capital and creating a positive community atmosphere may

promote positive interactions with teachers and relationships with other parents, which could in turn promote more positive family involvement.

As a next step, mediation analyses assessed whether the relationships between access to community help and parenting behaviors were mediated by parenting self-efficacy. This mediation model is shown in Figure 9, and corresponding standardized regression coefficients for each path in the model are shown in Table 9. Results indicate that the relationship between access to community help and caregivers' self-reported readiness to support their children in elementary school was partially mediated by parenting self-efficacy in both the fall and the spring. However, the indirect effects of access to community help were not significant for the other behavioral outcomes related to parenting, except for ethnic identity parenting in the spring. This indicates that in general, the association between access to community help and parenting self-efficacy did not explain the relationship between access to community help and educational involvement behaviors. In addition, the direct effects of access to community help on parenting behaviors were much larger in the fall than in the spring, when parenting self-efficacy seemed to have a larger effect. This may have resulted from high shared variance between access to community help and parenting self-efficacy, which led to multicollinearity and reduced effects when the variables were entered in a model simultaneously.

Additional analyses were conducted to investigate whether and how bonding and bridging relationships should be considered when predicting parenting behaviors. Because of the multicollinearity observed in the previous analyses, only access to community help was included as a mediator (i.e., rather than including both access to community help and parenting self-efficacy; access to community help was chosen because the variable was a more proximate goal of the Family Program) in analyses connecting bonding and bridging social capital to family

involvement behaviors. Figure 10 illustrates this mediation model and Table 10 shows the standardized regression coefficients for each path in the model. Results showed a similar trend as the previous set of analyses such that access to community help was a stronger predicter of parenting behaviors in the fall than in the spring. Bonding and bridging relationships showed larger direct effects on parenting behaviors in the spring and significantly predicted parents' kindergarten readiness, negative behavior management behaviors, and positive behavior management behaviors, even when controlling for access to community help.

Furthermore, in the spring, findings suggested a significant direct relationship between bonding and bridging social capital and home-school conferencing, school involvement, and ethnic identity parenting and a nearly significant relationship with home involvement. The effects of bonding and bridging social capital on kindergarten readiness were partially mediated by access to community help in the fall and spring. Additionally, the relationships between bonding and bridging relationships, positive behavior management practices, and home involvement were partially mediated by access to community help in the fall, but not the spring. These trends indicate that 1) bonding and bridging social capital is a significant predictor of family educational involvement, and 2) access to community help may mediate the relationship between bonding and bridging social capital and certain types of educational involvement, including behavior management practices, home involvement, and parents' self-reported readiness to support their children's education in kindergarten.

Based on the finding that greater bonding and bridging social capital was strongly associated with fewer negative behavior management behaviors, analyses were conducted to assess whether the relationship between maternal stress and negative behavior management practices was moderated by bonding and bridging social capital. As shown in Table 11, the

interaction term approached significance in the fall, but not in the spring, likely because maternal stress related to negative behavior management practices more strongly in the fall. Nonetheless, greater bonding and bridging social capital significantly related to less frequent negative behavior management practices in the spring, which may highlight the importance of social capital during the COVID-19 pandemic.

An additional follow-up analysis included support when stressed as a moderator of the relationship between maternal stress and negative behavior management. This interaction was significant in the fall, such that greater maternal stress related to more negative behavior management behaviors when mothers reported less support to manage their stress. However, when mothers reported receiving greater support, the relationship between stress and negative behavior management behaviors dissipated. Standardized coefficients for these analyses are shown in Table 12 and reflect that the interaction was significant in the fall, but not the spring. Figure 11 shows the simple slopes plot for this interaction in the fall and demonstrates how the relation between maternal stress and negative behavior management practices varied based on mothers' access to social support.

The various analyses for RQ1 yielded the following key findings:

- Bonding and bridging social capital, common good social capital, and support received from preschool staff were associated with parenting efficacy, perceived importance of parenting, and access to community help.
- 2. Bonding and bridging social capital, common good social capital, support to manage stress, support from preschool staff, parenting efficacy, and access to community help were associated with educational involvement behaviors, including greater home

- involvement, higher kindergarten readiness, more positive behavior management practices, and fewer negative behavior management practices.
- 3. The positive association between common good social capital (i.e., a positive community atmosphere at the preschool) and families' involvement behaviors was partially explained by increased home-school conferencing and bonding and bridging social capital, suggesting that developing positive community atmosphere may relate to parents experiencing more positive interactions and relationships with teachers and other parents which, in turn, positively relates to families' educational involvement behaviors.
- 4. Access to community help appeared to mediate the relationship between bonding and bridging social capital and certain forms of educational involvement, including behavior management practices, home involvement, and parents' self-reported readiness to support their children's education in kindergarten. This suggests that bonding and bridging social capital related to greater access to help in the community which, in turn, related to positive family involvement.
- 5. Perceived social support to manage stress and bonding and bridging social capital decreased the likelihood of negative behavior management practices in the fall, even when caregivers reported high parenting stress.

Research Question 2 (RQ2): To what extent do families report improvement in internal and external social capital, parenting efficacy, mental health, and family involvement behaviors over the course of the school year?

T-tests were conducted to assess the differences between family attitudes, experiences, and behaviors in the beginning and end of the school year. Mean differences (i.e., spring scores minus fall scores) for each family variable are shown in Table 13. Average scores for home-

school conferencing, school involvement, number of other parents known by name, and degree centrality (i.e., the number of connections that each parent has with other parents in the network) were significantly higher at the end of the school year. In contrast, parenting self-efficacy, access to community help, and parents' reported readiness to support their child's education in kindergarten significantly decreased over the year. *T*-tests did not reveal any other significant differences between beginning-of-year and end-of-year scores.

Social network analysis was also conducted based on participants' reports of other preschool parents whom they considered to be their friends. Social networks from the fall and spring are shown in Figure 12. For these figures, each node represents a parent, and node size is based on degree centrality. That is, larger nodes represent family members who identified, or were identified by, more parents at the preschool. The colors in the figure were used to help distinguish the nodes; they do not reflect node characteristics. It is important to note that social network figures are based on responses from the 30 participants who provided informed consent and responded to this question at both time points. Parents were included in the figures if they were named by a participant who provided consent even if they did not provide consent or answer the question.

Some similarities and differences between the fall and spring figures are apparent. One similarity is that both figures include an inner ring of interconnected parents surrounded by an outer ring of less connected parents. However, the inner ring in the spring figures appears to be more compact, suggesting that interconnection among families in the inner ring was greater in the spring compared to the fall. Nonetheless, there were still several family members on the outskirts of the network in the spring, suggesting many family members remained fairly isolated. The number of friends identified by these 30 parents increased from 41 in the fall to 57 in the

spring. Additionally, the number of connections (i.e., edges/lines in the figures) increased from 66 in the fall to 110 in the spring. These findings suggest that these 30 families befriended more parents between the fall and spring, while also becoming more interconnected with one another. Despite these positive trends, the network density of the fall and spring figures (i.e., the number of actual connections divided by the number of total possible connections) remained constant at .07.

The network figures shown in Figure 13 demonstrate the results of community detection analyses. In these figures, shaded areas indicate communities or cliques identified based on the level of interconnection among groups of parents. When comparing these two figures, it is evident that there is much more overlap between communities in the spring than in the fall. Relatedly, the number of bridging (or linking) relationships which connect one "clique" to another (denoted by red lines in the figures) increased from 10 in the fall to 33 in the spring. These findings suggest greater interconnection among families in the spring compared to the fall, including across the cliques detected by these analyses.

To summarize, the key findings associated with RQ2 are:

- 1. The nature of the changes in parents' attitudes, behaviors, and supports was inconsistent: home-school conferencing, school involvement, number of other parents known by name, and degree centrality significantly increased, while parenting self-efficacy, access to community resources, and parents' reported readiness to support their child's education in kindergarten significantly decreased over the year.
- 2. Social network analysis suggested that the community of families at the preschool became more interconnected over the year.

Research Question 3-A (RQ3-A): To what extent does change in these areas vary as a

function of parents' participation in Family Program events, such as Family Cafes and Family Workshops?

Simultaneous entry multiple regressions were conducted to investigate whether change in family attitudes, behaviors, and supports related to mothers' participation in Family Cafes and Family Workshops. For these regressions, Time 2 scores were entered as dependent variables, and the number of cafes or workshops that mothers attended during the school year were entered as independent variables. Time 1 scores on the corresponding scales were also entered as independent variables so that analyses would demonstrate how attendance at cafes and workshops related to change over the year. Analyses also controlled for family income.

Standardized regression coefficients for the number of cafes and workshops attended predicting each family attitude, experience, behavior, and support are shown in Table 14. Results suggest that attendance at Family Cafes and Workshops had a significant effect on parents' degree centrality (B = .59; p < .01). In other words, parents were more likely to identify more friends or be identified as a friend by others if they attended more Family Cafes and Workshops. Attendance at Family Cafes and Workshops also showed a weak, nonsignificant, positive effect on the number of other parents who caregivers knew by name (B = .30; p = .098). These findings indicate that parents who attended more Family Program events developed more relationships with other parents over the course of the school year. Attendance at Family Cafes and Workshops did not relate to change over time in any of the other scales assessing family attitudes, behaviors, or supports.

To address the concern that the effects of mothers' attendance at Family Cafes and Workshops could be washed out be the strong relationships between Time 1 and Time 2 scores, additional regressions were conducted that did not control for Time 1 scores. For these analyses,

the relationship between attendance at Family Cafes and Workshops and the number of family members that participants knew by name was statistically significant. The only additional scale the showed a significant relation to attendance at Family Cafés and Workshops was school involvement. This relationship raised the possibility that school involvement could be another indicator of Family Program participation. Furthermore, it is possible that self-reported school involvement is a more comprehensive indicator of Family Program participation since it could include attendance at other Family Program events (e.g., holiday celebrations), volunteering to support the Family Program, and informal interactions with Family Program staff, in addition to attending Family Cafes or Workshops.

Based on that possibility, additional regressions were conducted to assess the extent to which self-reported school involvement at the end of the year related to change in family attitudes, experiences, behaviors, and supports. Standardized regression coefficients from these analyses are also shown in Table 14. Results indicate that self-reported school involvement at the end of the school year significantly predicted change in common good social capital (B = .40; p = .019), educational involvement at home (B = .37; p = .014), and home-school conferencing (B = .30; p = .049). Coefficients also trended towards significance predicting change in perceived importance of parenting (B = .30; p = .081) and support received from other families at the preschool (B = .29; p = .066) as well as parents' perceptions of support from the preschool for their family's well-being during the first few months of the COVID-19 pandemic (B = .24; p = .187). These findings suggest that mothers who were more involved in school activities showed greater increases or improvements in educational involvement at home, their child-focused interactions with school staff, their perceptions of the preschool community, their perceptions of their role as parents, the amount of support they received from other parents at the preschool, and

the amount of support they perceived from the preschool during the COVID-19 pandemic. However, these analyses do not provide evidence for the directionality of these relationships.

Finally, multiple regression assessed the extent to which the number of cafes and workshops attended through the school year and mothers' self-reported school involvement related to the number of remote activities completed during the period of remote instruction. While the number of cafes and workshops attended did not relate to remote activities, higher self-reported school involvement related to more activities completed (r = .55; p < .01).

Figure 14 shows community detection figures created through social network analysis with parents who participated in at least 3 Family Cafés or Workshops highlighted (purple nodes marked with an F). These figures show that family members who participated in more Family Program activities tended to be more central in the spring network. Furthermore, average degree centrality for those parents increased from 6.25 to 7.90. For comparison, average degree centrality for mothers who did not participate in Family Cafes or Family workshops increased from 2.48 in the fall to 2.90 in the spring. Additionally, connections among parents who participated in three or more family program events increased from 8 in the fall to 14 in the spring. Network density among family members who participated in three or more Family Program events was also much higher in both the fall (.29) and spring (.31) compared to the density of the full network (.07 at both time points) although it did not show much growth over the year. Taken together, these findings suggest that parents who participated in more Family Program events had more connections at the beginning and end of the year. Furthermore, those who participated in more family program activities developed more connections over the year, both with peers who participated in Family Program events with them and peers who did not participate regularly.

Key findings related to RQ3-A are summarized below:

- Parents who attended more Family Program events developed more relationships with other parents over the course of the school year; attendance at Family Program events did not relate to change in other areas.
- 2. Mothers who were more involved in school activities (based on a self-report school involvement scale) showed greater increases or improvements over the year in:
 - a. Educational involvement at home.
 - b. Child-focused interactions with school staff.
 - c. Perceptions of the preschool community.
 - d. Perceptions of their role as parents.
 - e. The amount of support they received from other parents at the preschool.
 - f. The amount of support they perceived from the preschool during the COVID-19 pandemic.
 - g. The number of activities completed during remote instruction.
- 3. Social network analysis indicated that parents who participated in more Family Program events had more connections with other parents at the beginning and end of the year and showed greater increases in the number of connections with other parents over the year compared to parents who participated less or not at all.

Research Question 3-B (RQ3-B): To what extent does change in these areas vary as a function of parents' participation in remote instruction during the COVID-19 pandemic?

Descriptive statistics and correlations for remote involvement indicators are shown in Table 15. Correlations suggest a significant inverse relationship between the number of calls and the number of messages that parents received (r = -.36; p = .003); that is, when teachers called

parents more often, they sent fewer messages and vice versa. Remote messages sent to family members significantly and positively related to the number of remote activities completed at home, while the number of calls did not.

OLS multiple regressions were conducted to assess the extent to which the number of calls or messages received predicted change over the year in family attitudes, experiences, supports and behaviors. Separate regressions were conducted for each independent variable, and family income and fall scores for each dependent variable (when applicable) were included as controls. Standardized regression coefficients for the number of calls received and the number of messages received are shown in Table 16. Although most coefficients did not reach traditional levels of significance, several relations warrant mention. First, the number of calls received seemed to have a positive effect on social capital and perceived support from preschool staff, such that families who received more calls indicated greater increases in their bonding and bridging social capital and sense of support from staff. Relatedly, parents who received more calls reported stronger perceptions of support during the COVID-19 pandemic, both for their families' well-being and their children's education. The number of messages received showed weak negative relations with social capital, support received from preschool staff, and perceived support for family well-being during the pandemic. Additionally, parents who received more messages reported greater absolute increases in the number of other parents they knew by name (although not significantly greater), while parents who received more calls reported smaller increases (or even decreases) in the number of other parents they knew by name. This could relate to the number of messages sent to the entire class rather than individual families, which could have created more opportunities for parents to communicate with one another.

Follow-up correlational analyses were conducted to investigate whether the relationships

between the number of calls made to families, the number of messages sent to families, and the number of remote activities that families completed related to children's functioning in the winter, immediately before remote instruction began. Correlations between indicators of child functioning and remote involvement indicators are shown in Table 17 and suggest that families received more phone calls and fewer text messages if their children showed lower functioning as assessed by the DECA and TS Gold assessments prior to the shift to remote instruction.

Conversely, families received more text messages and fewer phone calls when their children showed more positive functioning in March. Families also completed more remote activities when their children showed weaker functioning on the DECA and TS Gold assessments.

However, this trend was not entirely consistent as families also reported completing more remote activities when their children showed higher IGDIs picture naming scores (i.e., stronger English vocabulary skills).

Taken together, these findings suggest that phone and video calls were more commonly conducted when children showed weaker progress prior to remote instruction. These calls may have contributed to increased bonding and bridging social capital over the year and a greater sense of support from preschool staff. On the other hand, text messages were more likely to be sent to families of children showing strong functioning and related more strongly than phone or video calls to the number of activities that family members completed with their children.

An OLS multiple regression was run to further parse out how remote calls and messages contributed to the number of remote activities completed by families, given the breadth of other factors that seemed to relate to this indicator of educational involvement at home during the pandemic. This analysis included the number of calls and messages received during remote instruction, students' scores for DECA total protective factors and behavior concerns, students'

overall percentage of kindergarten readiness competencies as assessed by TS Gold, and the frequency at which families engaged in educational involvement behaviors at home in the fall. This regression also controlled for family income. Results (shown in Table 18) demonstrate that the number of remote calls and messages received each significantly predicted the number of remote activities completed at home, even when child functioning, prior family involvement behaviors, and family income are held constant. Furthermore, unstandardized regression coefficients suggest that for each additional call or each additional message received, families completed approximately one additional activity with their children. Results also indicate that families completed more activities if their child showed higher behavior concerns prior to remote instruction, which could relate to parents' need to facilitate more activities and provide more structure for children showing behavior challenges.

Key findings related to RQ3-B are summarized below:

- During remote instruction, phone and video calls were more commonly conducted when children showed weaker progress prior to remote instruction. These calls also contributed to increased bonding and bridging social capital over the year and related to a greater sense of support from preschool staff.
- 2. Text messages were more likely to be sent to families of children showing positive functioning and related more strongly than phone or video calls to the number of activities that family members completed with their children.
- 3. The number of remote calls and messages received each significantly predicted the number of remote activities completed at home, when child functioning, prior family involvement behaviors, and family income were held constant.

Research Question 4 (RQ4): How and to what extent does parents' participation in Family

Program events relate to child growth in preschool?

The goal of the fourth research question was to investigate whether participation in Family Program activities contributed to positive outcomes for children. Descriptive statistics for indicators of child functioning are shown in Table 19. As shown in Table 20, correlational analyses did not reveal any consistent relationships between attendance at Family Cafes and Workshops and children's functioning at the end of the school year or growth over the year, although children whose parents attended more events showed greater growth in sound identification (i.e., letter awareness) and less growth in overall school readiness competencies as assessed by TS Gold. Table 20 also shows correlations between mother-reported school involvement and indicators of child functioning. The only significant correlation indicated a positive relationship between mother-reported school involvement and social-emotional protective factors as assessed by the DECA. Follow-up mediation analyses (the detailed results of which are not presented here) suggested that this relationship was not explained by the connection between mother-rated school involvement and decreased negative behavior management practices.

While child functioning did not appear to relate to parent participation in Family Program events, additional analyses were conducted to determine whether families' attitudes, behaviors, and supports were associated with child functioning at the end of the year or child growth over the year. The purpose of these analyses was to examine whether the target outcomes of the Family Program for caregivers relate to child functioning outcomes. Table 21 shows the correlations between scores on FABS survey variables and indicators of child functioning in the fall and spring. In the fall, ethnic identity parenting, bonding and bridging social capital, and negative behavior management practices showed the strongest relationships with child

functioning, such that more frequent ethnic identity parenting behaviors and greater bonding and bridging social capital related to more positive child functioning, while more negative behavior management practices related to more negative child functioning. These relationships were not observed in the spring although relationships between ethnic identity parenting and child functioning weakly trended in a positive direction. Additionally, correlations suggested that bonding and bridging social capital, support received from preschool staff, and support to manage stress each related to students' English vocabulary (i.e., picture naming) as assessed by the IGDIs early literacy assessments. These findings could indicate that more social interactions increase children's exposure to language, and therefore lead to stronger vocabulary development.

Correlational analyses were also conducted to investigate whether children showed greater growth if caregivers reported more positive attitudes, behaviors, and supports at the end of the year, but results did not suggest any consistently positive findings. Finally, correlational analyses were conducted to determine whether change in caregivers' attitudes, behaviors, and supports over the year related to greater improvements in child functioning over the year. As shown in Table 22, children showed greater improvement in social-emotional protective factors when their parents showed greater improvement or increases in their perceptions of the importance of parenting, the number of other parents they knew by name, their home-school conferencing behaviors, and their school involvement. Children showed greater improvement in behavior (i.e., reduced behavior concerns) when their parents showed greater growth in parenting self-efficacy, bonding and bridging social capital, and support to manage stress, although correlations for the latter two parent variables did not reach traditional levels of significance. Increases in the number of other parents at the preschool that caregivers knew by name also seemed to weakly relate to children's English vocabulary skills, although this relationship did not

reach traditional levels of statistical significance. Finally, when the amount of support received from other preschool families increased more over the year, children seemed to show stronger growth in their English and Spanish language skills as assessed by TS Gold.

Follow-up analyses investigated the extent to which the relationship between increased the number of parents known by name and child growth over the year were mediated by change in parenting self-efficacy, access to community help, or positive behavior management practices. However, results were not significant, suggesting the relationship between increased parents known by name and increased parenting self-efficacy, access to community help, or positive behavior management practices did not explain the relationship between increased connections with other parents and greater child growth. Nonetheless, it is possible that increases in the number of parents known by name could provide an indirect link between Family Program participation and child growth.

The results for RQ4 are outlined below:

- Correlational analyses did not detect consistent relationships between attendance at
 Family Cafes and Workshops or parent-reported school involvement and children's
 functioning at the end of the school year or growth over the year.
- 2. Correlational analyses provided some evidence that more frequent ethnic identity parenting behaviors and greater bonding and bridging social capital tended to relate to more positive child functioning, while more negative behavior management practices tended to relate to more negative child functioning.
- 3. When parents showed greater improvement or increases in perceived importance of parenting, the number of other parents they knew by name, home-school conferencing, school involvement, parenting self-efficacy, bonding and bridging social capital, and

support to manage stress, children tended to show greater improvement in socialemotional protective factors and behavior.

CHAPTER 4: DISCUSSION

The primary goals of this study were to better understand the effects of Charlotte Bilingual Preschool's Family Program and provide information to support the ongoing improvement of the program by examining how families' attitudes, experiences, and supports relate to their behaviors, and furthermore, their children's development. Additionally, this project sought to understand the impact of families' inclusion and participation in remote instruction at the beginning of the COVID-19 pandemic in relation to their attitudes, behaviors, and supports. This section will describe the evidence that corresponds with each of those study goals.

The effects of the Family Program

Analyses which sought to assess the effects of Charlotte Bilingual Preschool's Family Program (i.e., for RQ3), found little evidence that families' participation in Family Program activities (i.e., Family Cafes and Family Workshops) contributed to change in their attitudes, experiences, sense of support, or behaviors. Multiple regressions predicting change in family variables based on parents' attendance at Family Cafes and Workshops were largely nonsignificant. However, these analyses suggested that parents who attended more Family Cafes over the year experienced significant increases in degree centrality (i.e., developed more connections with peers) and near significant increases in the number of other parents they knew by name and the support they received from other families. Given the relations between other parents known by name, support received from other parents, and other positive family outcomes (i.e., other parents known by name and support from other parents showed significant correlations with access to community help and positive, but nonsignificant correlations with

bonding and bridging social capital in the spring; support from other parents was also significantly associated with support to manage stress in the fall), it is possible that attendance at Family Cafes and Workshops indirectly affected other family attitudes, experiences, behaviors, and supports. Social networks also demonstrated that attendance at Family Cafes helped parents develop social connections with others in the preschool's family community, which could potentially yield greater social support and social capital. The significant, positive correlations between degree centrality and support received from other parents in the fall and spring support this hypothesis.

Contrary to expectations, attendance at Family Cafes and Workshops showed negative (although nonsignificant) associations with support received from preschool staff, kinship with preschool staff, and kinship with other families. Furthermore, when examining the connection between attendance at Family Cafes and Workshops and student functioning, correlational analyses suggested nonsignificant, and even weak negative relationships, both in-terms of student functioning at the end of the year and growth over the year.

There are several possible explanations for the non-significant and weak negative associations among attendance at Family Cafes and Workshops, family attitudes, behaviors, and supports, and student functioning outcomes. First, the onset and continuation of the COVID-19 pandemic could have dramatically altered caregivers' attitudes, experiences, supports, and behaviors. Because the pandemic began a few months before end-of-year data were collected, it is possible that changes in caregivers' attitudes, behaviors, and supports that may have occurred prior to the pandemic, and may have related to families' participation in the Family Program, were affected by stress related to the crisis. Furthermore, it may have become more difficult to engage in the positive parenting behaviors assessed in this study when other positive outlets,

both for children (e.g., time at school, time to play with friends) and parents (e.g., breaks from children, social interactions with other adults), were no longer available. In other words, it may be more difficult to engage in best practices related to educational involvement when navigating high-stress circumstances for both parents and children, with limited opportunities to manage that stress in a healthy way. This possible explanation is supported by a near significant increase in maternal stress over the year, although stress only showed weak, negative correlations with parenting behaviors.

Another potential effect of the pandemic was that it changed the nature of cafes as well as the sample of parents attending cafes. Within a month after the preschool shifted to remote instruction, virtual Family Cafes began. However, these cafes may have attracted a different group of parents than those who attended the in-person cafes, either due to access to technology or personal preference (i.e., some parents may have enjoyed in-person cafes, but struggled to adapt to the structure of virtual cafes). Support for this explanation is limited however, as for the most part, parents who regularly attended in-person cafes also attended virtual cafés.

Nonetheless, there were several parents who attended one or two in-person cafes or workshops, but did not attend any virtual cafes or workshops, and vice versa. Therefore, it is possible that the parents who attended in-person or virtual cafes, but not both, could have skewed the results, particularly in the context of a small sample.

That many of the initial remote cafes focused on healthy practices specific to the pandemic, such as general information about the virus, sanitation, social distancing, and stress management, rather than the initially planned topics that related more directly to parenting and educational involvement likely altered the effects of Family Cafés as well. Finally, holding cafes via Zoom reduced the facilitator's capacity to promote positive interactions and relationships

among parents, since cafes were facilitated in a large-group format during that period. Related to parents' sense of kinship in particular, the limitations of Zoom cafes may not have allowed for the deeper interactions among parents (or with staff) that the Kinship Survey sought to assess. Furthermore, parents may have attended Zoom cafes and workshops at the end of the year to combat a sense of isolation that many felt at the beginning of the COVID-19 pandemic. The increased sense of isolation, combined with the inability to promote "kinship" interactions, may help explain the counter-intuitive relations between attendance at Family Program events and parents' sense of kinship at the end of the year. All of these factors could have reduced the strength of the intervention (i.e., Family Cafes and Workshops) in relation to the outcomes assessed by this effort and therefore decreased the likelihood of detecting positive effects in this study.

The effects of Family Program participation on families' attitudes, behaviors, and supports could have also been reduced due to measurement error related to the subjectivity of the FABS survey. Especially at the beginning of the year, parents may have been influenced by a social desirability bias, such that they wanted to be seen positively by teachers and staff members at their new school. Furthermore, this social desirability bias may have been compounded by the strong emphasis on the importance of education that some research has found to be common in Latino and immigrant families (Ansari & Crosnoe, 2015; Suarez-Orozco & Suarez-Orozco, 2001), which could have led participants to rate their behaviors and parenting self-efficacy in an overly positive light. Additionally, several researchers (Crosnoe, 2010; Lee & Bowen, 2006; Walker et al., 2011) have demonstrated that families from diverse ethnic and cultural backgrounds frequently conceptualize the family's role in supporting children's education differently from how positive family involvement is understood in the United States (e.g.,

supporting positive attitudes toward school rather than implementing educational activities at home). Therefore, it is possible that parents' positive ratings at the beginning of the school year reflected cultural perspectives about family involvement practices even if their self-ratings would have been lower based on the norms of the dominant culture in the United States (i.e., White, middle-class), which informed this study's measures. Over the course of the school year, as parents' awareness of best practices (as defined by the dominant culture) increased, their ratings of their own behaviors could have decreased, regardless of whether their educational involvement actually improved during that time span. A phenomenon such as this could partially explain why Family Program participation did not relate to change over the year in these areas.

An additional explanation for the lack of significant findings regarding the effects of Family Program participation is that attendance at Family Cafes and Workshops may not offer a full indication of "participation" in the Family Program. In addition to facilitating Family Cafes and Workshops, Family Program staff facilitated community building events, developed informal relationships with families, and communicated with families regarding supports and resources available through the preschool as well as in the broader Charlotte community. During the pandemic in particular, the Family Program shifted its focus to connecting all preschool families with supports and resources in the community such as food pantries, crisis assistance (i.e., support paying for rent and utilities), and medical support. Therefore, program staff may have facilitated increased access to community resources for all families, regardless of whether they actively participated in Family Program events by attending Family Cafes and Workshops, or passively participated by receiving information about or being connected with resources in the community. While a statistically significant decrease in access to community help over the year (see RQ2; also shown in Table 13) would seem to refute this explanation, it is also possible that

parents reported reduced access to community in the spring due to the increased stress, confusion, and perhaps, increased (or changing) need caused by the COVID-19 pandemic. Furthermore, the frequent sense of uncertainty during the pandemic could have decreased families' perceived capacity to access support, since families' needs could change in an instant during the pandemic.

Because attendance at Family Cafes and Workshops may not adequately capture families' experiences with the Family Program, additional analyses included parent-rated school involvement as a predictor of family and student outcomes. These analyses suggested that school involvement had more positive effects on family outcomes, including an improved sense of common good social capital, increased home-school conferencing, and increased home involvement. Families who reported greater school involvement at the end of the year also reported greater improvement over the year in their perceptions of the importance of parenting, the support they received from other families, and their behavior management practices (i.e., reduced negative behavior management practices). Furthermore, parents who reported greater school involvement at the end of the year also completed more activities with their children during the period of remote instruction that occurred in response to the COVID-19 pandemic.

In relation to child functioning, children grew significantly more in social-emotional protective factors when their parents reported greater school involvement at the end of the school year. Moreover, children whose parents reported greater school involvement also tended to show larger English vocabularies at the end of the school year, although that relationship did not reach traditional levels of statistical significance. However, overall, inconsistent relations between parent-rated school involvement and other indicators of child functioning limit our ability to suggest that greater school involvement related to more positive child outcomes.

While parent-rated school involvement is a reasonable proxy for the broad range of services and supports offered by the Family Program, given the program's efforts to create a positive climate, identify and address families' needs, and facilitate interactions with teachers, it is important to note that the items assessing school involvement are not specific to the services and supports provided by the Family Program. Most notably, the characteristics and behaviors of teachers influence families' school involvement behaviors as well. Therefore, our ability to attribute the positive effects of school involvement to the Family Program is limited.

Connections between family attitudes, experiences, supports, and behaviors

Despite the limited evidence connecting Family Café and Workshop attendance to family and child outcomes, this study uncovered several relationships between family attitudes, experiences, supports, and behaviors which provide some support for the Family Program's approach. First, parents who reported greater bonding and bridging social capital also reported greater access to community help, support to manage stress, and parenting self-efficacy. These relationships suggest that the Family Program's focus on bonding and bridging social capital may promote other benefits for families, such as increased confidence, feelings of support, and access to community resources. As described by Ansari and Crosnoe (2015), these outcomes may be especially important for economically-marginalized Latino immigrant families who frequently face additional barriers accessing resources in the community and navigating a complex and unfamiliar social system. Importantly, bonding and bridging social capital also related to positive parenting behaviors, including greater home-school conferencing, stronger educational involvement at home, increased ethnic identity parenting, more positive behavior management practices, and fewer negative behavior management practices.

Furthermore, support to manage stress, and to a lesser extent, bonding and bridging social

capital, moderated the relationships between maternal stress and negative behavior management practices, such as yelling, corporal punishment, and loss of temper. These findings suggest that when parents receive support to manage their stress, and when parents have stronger bonding and bridging relationships, they are less likely to engage in negative behavior management practices, even if they experience high stress levels. Support to manage stress and bonding and bridging social capital did not moderate the relation between maternal stress and negative behavior management practices in the spring, likely due to the weaker relationship between maternal stress and negative behavior management practices in spring. Nonetheless, it is noteworthy that caregivers who reported greater bonding and bridging social capital reported significantly less frequent negative behavior management practices, which highlights the importance of social capital during times of high stress, such as the COVID-19 pandemic.

These results provide some evidence that promoting positive social outcomes, such as bonding and bridging social capital and social support, increases the likelihood of positive parenting practices, which theoretically would contribute to positive child outcomes as well. This study's findings also indicate that common good social capital, or the extent to which parents felt that others in the preschool community cared about all students at the preschool and were committed to making the preschool a better place, may be a starting point for facilitating positive social and behavioral outcomes for families. For instance, common good social capital related to access to community help and access to support from preschool staff as well as from other families (although the relation with support from other families was not statistically significant). Of particular salience, mediation analyses indicated that families who perceived greater common good social capital engaged in more child-focused communication with teachers and experienced greater bonding and bridging social capital, which each contributed to more positive family

involvement behaviors in turn, including greater home-based involvement, ethnic identity parenting, and positive behavior management practices, as well as fewer negative behavior management practices.

Taken together, these findings support the hypothesis that social capital, supportive relationships, and being part of a supportive community influence families' educational involvement behaviors. Furthermore, these findings align with Crosnoe's (2010) suggestion that enhancing social capital may increase parents' capacity to navigate the underlying barriers that impede positive educational involvement. As such, the promotion of positive social outcomes is an important goal that contributes to the Family Program's mission of "equipping families to support their children's education at home and at school." By creating an environment where parents can experience those social benefits, the Family Program can promote positive family involvement and parenting practices. As described by multiple researchers (Kuhns et al., 2018; McWayne et al., 2015; Padilla & Ryan, 2018; Sheridan et al., 2010), children typically show more positive outcomes when their parents engage in the positive practices studied in this effort more frequently. Therefore, if promoting social capital, support, and community relates to positive family involvement behaviors as this study's results suggest, facilitating social benefits for families would be expected to also relate to positive outcomes for children. Some evidence for this hypothesis is discussed in the following section.

Connections among families' experiences and behaviors and their children's development

Although caregiver participation in Family Program activities did not show consistent relations to indicators of child development, several family-level variables did seem to contribute to improved child functioning. Most notably, results from the fall indicated that, when caregivers engaged in negative behavior management practices more frequently, children showed poorer

functioning in several areas, including lower social-emotional protective factors, higher behavior concerns, lower Spanish language and literacy skills, and lower overall kindergarten readiness as assessed by TS Gold. These findings align with previous research connecting corporal punishment and more punitive discipline practices (e.g., yelling, threatening) to behavioral concerns, as well as delayed language development in early childhood (Ferguson 2013; Mackenzie et al., 2015; Mendez et al., 2016). This study's findings that greater support to manage stress and bonding and bridging social capital relate to less frequent negative behavior management practices (even when caregivers reported high stress) suggests that caregivers' social support and social capital may be important protective factors for adults and for children. As such, connecting parents with greater social support and social capital, as Charlotte Bilingual Preschool's Family Program aims to do, may indirectly promote more positive developmental outcomes in early childhood by altering parents' behavior management practices.

Ethnic identity parenting practices (i.e., parenting behaviors that help children learn about and appreciate their culture and heritage) were also found to be relevant to children's functioning as children showed stronger social-emotional functioning, physical development, math skills, and overall kindergarten readiness as assessed by TS Gold (in the fall) when their parents engaged in more frequent ethnic identity parenting practices. Ethnic identity parenting also showed mild positive relationships with social-emotional protective factors (as assessed by the DECA), Spanish language and literacy skills, and English literacy skills. Although these relationships were stronger in the fall, spring correlations between ethnic identity parenting and child functioning trended towards significance as well. These findings are consistent with research suggesting that immigrant parents who teach their children about their ethnic identity and their heritage culture, in addition to preparing children to navigate the culture of the society

in which they reside, can prepare them for positive outcomes (Motti-Stefanidi & Masten, 2017). Furthermore, identifying the relative strength of ethnic identity parenting compared to other family involvement behaviors as a predictor of developmental outcomes in this study may add to the literature by suggesting that these practices can be impactful in early childhood in addition to other periods of youth development. These findings suggest that it may be beneficial for ethnic identity parenting to be emphasized more in parent education programs in settings serving young children from marginalized racial and ethnic backgrounds.

Parents' social experiences, including bonding and bridging social capital, support to manage stress, and other parents known by name seemed to relate to children's English and Spanish language skills, Spanish literacy skills, and English vocabulary development in the fall, although these relationships were not evident in the spring. One explanation for these findings is that children receive greater exposure to language when their parents have more social connections, and therefore more social interactions. This explanation would align with research suggesting that greater exposure to language relates to improved language development in early childhood (Brooks-Gunn & Markman, 2005). Furthermore, this finding may add to previous research by highlighting the importance of social capital and social connections as a precursor to children's exposure to a high quantity of language, and indirectly, their language development.

More broadly, the connections between families' experiences, supports, and behaviors and positive developmental outcomes for children lend support to the theory that a two-generation approach involving children and their caregivers can be especially impactful for children in immigrant families (Suarez-Orozco & Suarez-Orozco, 2001). That is, connecting immigrant families with a community of support and promoting evidence-based educational involvement practices can help families support their children's education and development

effectively. Furthermore, this study's findings suggest that social support and social capital should be considered valuable elements of a two-generation approach due to the relations among these variables, positive family involvement practices, and children's functioning. These findings support the approach taken by parent education programs such as CAP Tulsa that intentionally work to promote bonding and bridging relationships among participating parents (RTI & UNC School of Government, 2019). Notably, findings that parents who participated in more Family Cafes and Workshops developed more connections with other parents over the year may suggest that the Family Program laid an effective foundation for the development of social capital and supportive relationships. However, additional work may be needed to increase the likelihood that those relationships develop further and yield benefits related to social capital, social support, and ultimately, positive family involvement.

Additional correlational analyses suggested that when parents reported positive change over the year in diverse family-level domains, their children showed greater growth in various educational domains. For instance, when parents reported increases over the year in home-school conferencing, school involvement, and the number of other parents they knew by name, their children showed greater improvement in social-emotional protective factors. Moreover, when parents reported increased parenting self-efficacy, bonding and bridging social capital, and support to manage stress, their children showed greater reductions in problematic behaviors. Additionally, when the level of support that families received from other parents at the preschool increased, their children showed greater increases in physical functioning as well as improved English and Spanish language skills as assessed by TS Gold. These findings highlight that families' attitudes, behaviors, and supports are not static, and positive changes in these beliefs, practices, and social connections may contribute to positive changes in student functioning.

Furthermore, these findings suggest that changes in families' attitudes, behaviors, and supports can lead to benefits for their children in a short time frame (i.e., 9 months), even within the context of a school year disrupted by the pandemic. Once again, these findings appear to testify to the merit of the approach taken by the program by connecting changes in family outcomes (targeted by the Family Program) with changes in child outcomes.

The effects of families' participation in remote instruction

When Charlotte Bilingual Preschool transitioned to remote instruction at the beginning of the COVID-19 pandemic, teachers worked to engage family members by providing activities for families to complete at home and facilitating Zoom classes to support children in their activities. Teachers also offered support to families through phone and video calls and text messages, although the frequency of calls and messages varied by teacher and by family. Of note, correlations suggested that families who received more calls received fewer messages, and vice versa. The number of calls and messages received also related to students' functioning immediately prior to the shift to remote instruction, such that families received more calls if their child showed poorer functioning and more messages if their child showed more positive functioning.

While calls weakly (and nonsignificantly) related to a greater sense of support from preschool staff and greater bonding and bridging social capital, the number of messages sent related more strongly (and significantly) to the number of activities completed during remote instruction. A multiple regression found that the number of remote messages sent and the number of calls made to families significantly predicted the number of activities completed during remote instruction, even when child functioning prior to the pandemic, fall home involvement behaviors, and family income remained constant. These relationships suggest that

more frequent interactions through either method of communication can increase the number of activities that caregivers facilitate with their children.

Nonetheless, the number of messages sent seemed to predict the number of activities completed more strongly than the number of calls made. There are multiple possible explanations for this finding. First, it is possible that the stress of the pandemic – and the time constraints related to balancing childcare, work, and housework – made it difficult for parents to answer and participate actively in phone calls. Text messages, on the other hand, could allow greater flexibility for caregivers to read messages and engage their children in activities when they had time. Second, it is possible that receiving text messages regularly (possibly at a similar time each day) encouraged parents to develop and maintain routines that involved completing educational activities with their children. Third, it is possible that sending and receiving messages is the preferred method of communication among families at the preschool, which could relate to parents' age and cultural preferences.

The results of the multiple regressions predicting the number of activities completed at home during remote instruction indicate that a combination of calls and messages might be helpful to increase families' engagement in activities with their children. While messages seemed to have the strongest effect on the number of activities completed, calls seemed to reinforce the completion of activities at home while also promoting a sense of support and social capital for family members. Supporting that notion, the number of messages sent to families showed a weak (i.e., not statistically significant) negative relationship with parents' perceptions of support received from the preschool for their families' well-being during the pandemic. The number of phone and video calls received showed a weak positive relationship with perceptions of support received from the preschool, both for families' well-being and children's education.

These findings suggest that calls provide an important social benefit that is not provided by messages. Furthermore, the social benefits of calls may have been particularly meaningful for families who were more isolated during the pandemic.

Implications for the Family Program at Charlotte Bilingual Preschool

Taken together, these findings support the Family Program's approach of promoting social connections, social support, and social capital for families at Charlotte Bilingual Preschool. Results indicated that positive social outcomes such as these can affect family involvement behaviors by reducing the negative effects of stress (i.e., reducing the likelihood that parents experiencing high stress engage in negative behavior management practices) and increasing the frequency at which families engage in positive educational involvement behaviors, such as home-school conferencing, educational involvement at home, ethnic identity parenting, and positive behavior management practices. By creating a supportive environment and facilitating positive interactions among families, the program can also increase families' access to community resources and boost parenting self-efficacy.

This study provided some evidence that could link parents' social outcomes to their children's development. Of particular relevance, children showed more improvement over the year when their parents reported greater increases related to school involvement, perceived importance of parenting, parenting self-efficacy, bonding and bridging social capital, and the number of other parents they knew by name. This finding, particularly when viewed in the context of the correlations among these family variables, suggests that supporting families who are more isolated by engaging them in school activities and connecting them with others in the school community could yield important benefits for those parents as well as their children.

The use of FABS survey data and social network data to identify and support more

isolated families could enhance these efforts moving forward. For instance, in the present study, social network analysis demonstrated how the preschool's family community became more interconnected over the 2019-20 school year, based on changes in the number of nodes (i.e., parents), edges (i.e., connections among parents), and linking connections (i.e., friendships that crossed cliques). Comparing the fall and spring networks visually also illustrates how parents were more interconnected in the spring, compared to the fall. These figures also demonstrate how the Family Program promotes positive outcomes at the community-level. The Family Program could target similar outcomes for the family community at the preschool in future school years (e.g., increased connections among family members). Furthermore, Family Program staff could use the fall network to identify parents who are isolated and implement strategies to connect them with peers (e.g., invite them to small-group volunteering efforts). Similar efforts could develop connections within or across cliques to create more interconnected networks overall.

Although Kinship Survey results contradicted expectations at times, the positively-trending relations among parents' sense of kinship with other families, bonding and bridging social capital, common good social capital, access to community help, and support received from other families and preschool staff may indicate convergent validity with scales assessing other components of social support. The scales assessing parents' sense of kinship with other families and with school staff also showed adequate reliability in this sample (α s = .80 and .85, respectively). As such, the Kinship Survey may be a helpful tool for assessing the depth of and benefits associated with social connections created at the preschool in the future.

This study's inability to connect attendance at Family Cafes and Workshops to change in families' attitudes, experiences, behaviors and supports might be viewed as a negative reflection

of the program. However, there are several possible explanations for these results including the COVID-19 pandemic and the potential for social desirability biases, which could have inflated beginning of year scores on the FABS survey. Nonetheless, it may be helpful to review the plans for cafes and workshops moving forward to ensure that the topics covered align with Family Program goals, such as promoting positive behavior management practices, educational involvement at home, ethnic identity parenting, and effective communication with teachers. Furthermore, it may be possible to restructure Family Cafes and Workshops in a way that promotes positive interactions among family members, which could initiate friendships that translate into social support and social capital. This could be achieved by facilitating small group discussions at these events that encourage family members to share their experiences with one another. Notably, these discussions may even be possible at virtual Family Program events through the use of breakout rooms.

Findings related to communication with families during remote instruction also have implications for the Family Program. Most notably, findings suggest that sending messages to families may be an effective way to encourage families to engage their children in educational activities. However, messages do not yield a sense of support in the same way that phone and video calls do. A combination of messages and calls might be the most effective way to promote family engagement at home, while also increasing the likelihood that families feel supported by the preschool. Family Cafes and Workshops (whether in-person or via Zoom) may be an effective way to promote this sense of support as well since they allow for more interaction and conversation than text messages.

Limitations

There are several limitations that affected the results of this study as well as our ability to

draw conclusions. First, as described in an earlier section explaining the limited connections between Family Program participation and families' attitudes, behaviors, and supports, the COVID-19 pandemic had important consequences, both for the implementation of the Family Program as well as families' experiences. As noted, the pandemic may have impacted which families participated in Family Cafes and Workshops due to access to technology and interest in the virtual format. The pandemic may have also affected how parents conceptualized and experienced social capital, social support, educational involvement, and parenting self-efficacy as they had to manage the stress related to a global traumatic event, the transition to remote learning, and their anxiety related to their families' health and well-being. Many family members also lost work and had to navigate economic challenges to find ways to put food on the table. Through all of this, parents also had to adapt to their children being at home all day rather than attending school. As a result of all of these changes, the fundamental nature of the family-level variables studied in this effort may have been altered – if the nature of the variables of interest changed between the pre- and post-assessments, our capacity to detect and interpret change over the year in relation to the intervention (i.e., Family Cafes and Workshops) would be decreased.

Another major limitation of this study was the inability to comprehensively measure Family Program participation. While attendance at Family Cafes and Workshops is one indicator of participation, it fails to account for the Family Program's work to create a welcoming environment at the preschool, provide opportunities for family members to volunteer at the school, and facilitate school-wide celebrations of holidays and culture. Therefore, it is possible that attendance at Family Cafes and Workshops does not adequately capture families' active participation in the Family Program. Additionally, during the COVID-19 pandemic, the Family Program initiated a food distribution program that partnered with local restaurants, provided

referrals to local food pantries, distributed home goods, and partnered with other community organizations to connect families with support. These actions made it possible for families to experience benefits of the program, even if they only participated passively (i.e., did not attend Family Program events). Such activities, while necessary and justifiable, may have reduced the distinction between the two study groups and limited this study's capacity to detect differences between groups.

A related concern was that data regarding parents' participation in English as a Second Language classes were not available. Parents who participated in these classes may have experienced important social benefits, even if they did not attend Family Cafes and Workshops. Thus, there were several aspects of the Family Program that were not captured by this study's primary indicator of Family Program participation (i.e., attendance at Cafés and Workshops), and it is possible that families who attended fewer Family Cafes and Workshops participated more in other aspects of the program and experienced benefits from those other components. Once again, this occurrence would make it possible for families to experience benefits related to the goals of the Family Program even if they did not attend Family Cafes and Workshops, decreasing the likelihood that this study would detect significant effects specifically related to Family Cafes and Workshops.

It is also possible that staff turnover at the beginning of the school year may have decreased the effectiveness of Family Cafes and Workshops, which would decrease the likelihood of findings significant effects. As key examples, a new Family Program Director and Family Educator (the person who facilitates Family Cafes) were hired in October 2019. As a result, there was a delay initiating Family Cafes and Workshops, and training was required early in the year to design cafes and workshops that adhered to the Family Program's goals and values.

As such, the intervention assessed by this study (i.e., a year-long progression of Family Cafes and Workshops) may not have been implemented as initially planned.

Another limitation that may have decreased this study's ability to connect family attitudes, behaviors, and supports to child outcomes was the inability to collect student data in May and June. Because of this necessary change to the initially planned assessments, analyses could only assess the relations among family-level data collected through the FABS survey in June and student-data collected in February and March. On one hand, it is possible that change between October and May administrations of the FABS survey could have occurred by February and March and, therefore, could have been connected to student functioning, or student growth, as of March 2020. However, there are multiple reasons why family data collected in May would not relate optimally to student data collected two to three months earlier. First and foremost, due to the COVID-19 pandemic families' attitudes, behaviors, and supports may have changed dramatically between March and May, and any potential relationships between family attitudes, behaviors, and supports and child functioning that existed in March would have been missed. Additionally, collecting student data in May and June would have allowed more time for children to grow and their scores on the various indicators of functioning used in this study to change. Thus, collecting student data later would have allowed more time for children's development to be influenced by their parents' changing attitudes, behaviors, and supports and increased the likelihood of detecting relationships between family and student variables. However, this was not possible given the circumstances. It is also important to note that followup correlational analyses did not support the notion that attendance at Family Cafes and Workshops prior to the shift to remote instruction (and remote cafes and workshops) related to children's functioning or growth prior to the onset of the pandemic.

An additional shortcoming of this study was its reliance on self-report data for the key family variables. Especially at the beginning of the school year, parents may have wanted to make a good impression on their teachers and school staff, which could have led them to describe their attitudes and behaviors in a more positive light. Additionally, cultural differences in the perceptions of best practices related to educational involvement at the beginning of the school year may have led to higher ratings, which could have decreased over the year as parents were introduced to more evidence-based practices that aligned with the dominant culture (i.e., White, middle-class). It bears mention that such an introduction to evidence-based practices may have positive and negative consequences. In either case, this occurrence would have added additional error to survey responses and reduced this study's capacity to detect significant results. Furthermore, parents' sense of support and social capital may have been higher at the beginning of the school year because of the excitement of being introduced to teachers and staff members and the new supports and programs available to families. Any of these cases could have inflated scores at the beginning of the year, which would have reduced the likelihood of detecting change over the year.

Another important limitation that reduced this study's capacity to detect significant results was the low sample size. In the fall, approximately 68 mothers completed the measure (slightly more completed scales presented earlier in the FABS survey). In the spring, approximately 71 mothers completed the survey. At both timepoints, samples were slightly under fifty percent of the population of preschool families. Because several parents chose not to provide consent to be included in this study, the samples for data analysis ranged from 42 to 47 in the fall and 61 to 62 in the spring depending on the scale (again, sample sizes were slightly higher for scales presented earlier in the FABS survey). Furthermore, because some parents

provided consent, but did not complete the survey at both timepoints, analyses assessing change over the year only included 42 to 45 parents. Such a small sample size severely restricted the nature of the analyses that could be run and decreased the power of the analyses conducted in this study. Additionally, the small sample size reduced the capacity to draw conclusions because of the high number of variables and analyses and the lack of consistent trends across indicators and timepoints.

Future Directions

The findings and limitations presented here suggest several future directions that could grow out of this research. First and foremost, it would be helpful to replicate this study in a way that addresses the limitations delineated above. For example, replicating this study in a more typical school year (i.e., one in which a global health catastrophe does not occur in the middle of the year) would allow for more confidence in the findings. In a more typical year, a similar study could assess more consistent programming, collect data more reliably from students and families at the beginning and end of the school year, and yield more confidence that variables of interests are conceptualized consistently by participants. Although family behaviors and socioeconomic experiences are never static (especially for economically-marginalized, immigrant families), assessments of families' attitudes, behaviors, and supports would be more reliable when a global health emergency is not threatening families' physical, psychological, and economic well-being.

If this study were to be replicated in another year, several changes would strengthen its practical implications and its broader potential contribution to the literature. First, it would be helpful to increase the number of families who completed the FABS survey in both the fall and the spring, which would increase the study's potential to detect relationships and change over time. Second, it would be important to utilize more comprehensive indicators of Family Program

participation, which could include attendance at Family Cafes and Workshops, participation in ESL classes, attendance at community-building events, and volunteering at the preschool. Investigating the relationship between family engagement in these activities and the outcomes studied here could provide a more thorough understanding of the Family Program's impact on children and families.

One way to build on this study would be to investigate the factors that contribute to a sense of common good social capital at the preschool. This study found that common good social capital related to school involvement, home-school conferencing, bonding and bridging social capital and access to community help at the end of the school year. Furthermore, mediation analyses found that common good social capital had direct and indirect effects on educational involvement at home, ethnic identity parenting, positive behavior management practices, and parents' readiness to support their child's education in elementary school. Given the potential importance of this construct as a predictor of positive family-level outcomes, it would be beneficial to develop a stronger understanding of what the preschool does, and could do better, to promote families' positive outlook on the preschool community. This could involve collecting qualitative data from family members about why they feel that other families are committed to supporting the education and well-being of all students at the preschool. Furthermore, this variable and its assessment could be expanded to include other components of psychological sense of community, such as families' sense of belonging and ability to influence what happens at the preschool. An investigation of how the preschool promotes a positive sense of community and how sense of community at the preschool relates to positive outcomes for children and families could help guide the Family Program's efforts.

Additional research could also seek to clarify the directionality of the relationships

examined in this study. For instance, this study was unable to demonstrate whether families' perceptions of common good social capital led to greater school involvement and increased home-school conferencing, or if families who were more involved grew to have a stronger sense of common good social capital. The same question exists for the relationships between bonding and bridging social capital and parenting self-efficacy. The question of directionality could also extend to relations between parenting behaviors and child functioning. For example, the frequency at which parents engage in negative behavior management practices could lead to differences in child functioning. However, it is also possible that child functioning (e.g., challenging behaviors) could lead to more negative behavior management practices. Future research could evaluate the directionality of these relationships more effectively by collecting data related to these variables more frequently and assessing how change in one variable precedes change in other variables.

Another way to extend this research would be to assess how changes in families' attitudes, experiences, and supports contribute to their behaviors, and furthermore, their children's development over a longer span of time. An investigation of whether initiating positive family practices during the 2019-20 school year contributes to more positive outcomes for children at the beginning or end of the 2020-21 school year could increase understanding of the continuity or longer-term effects associated with the Family Program. At Charlotte Bilingual Preschool, this research could assess whether changes reported by parents of children in the 3-year-old classrooms in 2019-20 were sustained over the following school year and whether those positive practices relate to children's growth over their two years in the program. Given the larger literature on the benefits of high-quality preschool for children's development and adjustment trajectories (e.g., Campbell et al., 2002; Deming, 2009; Heckman et al., 2013;

Reynolds et al., 2011; Yoshikawa et al., 2016), there would be value in examining whether changes in family behaviors while children are in preschool are sustained and whether they relate to children's development in elementary school.

Additionally, in light of the shift to remote instruction, analyses could assess whether the number of activities that families completed during remote instruction related to children's functioning at the beginning of the following year. Relatedly, it could be important to investigate whether parents reported varying levels of support or social capital at the beginning of the school year depending on whether they received more calls or messages during remote instruction.

These findings could inform communication methods during periods of remote instruction as well as in-person instruction in the future. If findings align with this study's results, it could also suggest that the Family Program could enhance families' educational involvement practices and sense of support through a combination of phone calls to families and text reminders about best practices at home and ways to get involved at the preschool.

Conclusions and Key Takeaways

Among this study's main findings, results indicated that parents' experiences of social support and social capital relate to their parenting and educational involvement behaviors. While this study was unable to connect Family Program participation to social or behavioral outcomes for families or developmental outcomes for children, these findings support the approach that Charlotte Bilingual Preschool's Family Program takes to supporting families. By building on this approach, the Family Program could promote important changes in families' attitudes, experiences, and behaviors, which could prepare them to foster and support their children's school readiness. As several prior studies have shown, boosting school readiness prior to kindergarten entry can promote children's smooth transitions to elementary school and increase

the likelihood of more positive educational trajectories (Duncan et al., 2007; Grissmer et al., 2010; Quirk et al. 2017; Stormont et al., 2017). This project also pointed to the need for subsequent investigations and yielded ideas for enhancing this study's design, which could improve future evaluation efforts and provide a more comprehensive understanding of the Family Program's impacts on Charlotte Bilingual Preschool students and families.

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Table 1. Goals of the Family Program.

Goals of the Family Program

- **1. Engagement in education at home**: Families understand their role in their child's education and engage in behaviors outside of school that advance learning and prepare him/her to excel in school. A sub-goal related to engagement in the child's education at home is the development of general parenting skills that prepare parents to facilitate healthy child development.
- **2. Engagement in education at school**: Families participate in preschool activities and communicate with preschool teachers and staff. By the end of the school year, parents are prepared to navigate the public-school system by enrolling their child in Charlotte Mecklenburg Schools elementary schools and interacting with their new schools to address educational or social challenges.
- **3.** Addressing basic needs: Charlotte Bilingual Preschool helps connect families to community services so that they can have their basic needs (i.e., housing, food, health, etc.) met.
- **4. Internal social capital**: Families at Charlotte Bilingual Preschool develop strong relationships with one another and with preschool staff. These relationships can help parents address challenges related to parenting and improve parent well-being (e.g., psychological and instrumental support) and contribute to a strong sense of community at the preschool.
- **5. External social capital**: Families develop relationships with individuals from diverse socioeconomic backgrounds (i.e., language, income), that connect them with community resources to 1) better address their needs and 2) identify opportunities (e.g., employment).
- **6. Parenting efficacy**: Families acknowledge the expertise that they possess and are confident in their parenting abilities. Families are able to recognize and address their own needs and become aware of their ability to have a positive impact on their family, school, and community.

Table 2. Core components of the 2019-20 Family Program

Charlotte Bilingual Preschool Family Program Components

<u>Family Cafes</u> are facilitated conversations about topics related to parents' interests. In a typical café, parents are asked to discuss the challenges related to a topic and brainstorm solutions to those challenges, before discussing evidence-based best practices in that area. Topics covered in Family Cafes have included behavior management, routines and transitions, stress management, and interactions with teachers.

<u>Family Workshops</u> provide information to address specific issues and challenges raised by parents and develop parenting competencies. Family Workshops have shared information regarding enrollment in Charlotte-Mecklenburg Schools and active reading.

<u>English as a Second Language (ESL) Classes</u> teach basic and intermediate English language skills through an engaging curriculum. ESL classes are highly attended by current parents as well as alumni parents, suggesting that they are addressing an important need for parents.

<u>Community-Building Events</u> provide opportunities for Charlotte Bilingual Preschool families to come together, build relationships with one another, and celebrate their culture. Some events also promote social interactions between families and individuals from outside the preschool, such as board members or other community members.

Table 3. Testing schedule for the Individual Growth and Development Indicator assessments.

Task		3-Year-O	lds		4-Year-C	Olds
	<u>Fall</u>	Winter	Spring*	<u>Fall</u>	Winter	Spring*
Picture Naming	X	X	X	X	X	X
Sound Identification		X	X	X	X	X
Rhyming			X	X	X	X
Which One Doesn't Belong				X	X	X
Alliteration					X	X

Note: Spring assessments did not occur due to school closures related to the COVID-19 pandemic.

Table 4. Descriptive statistics for family attitudes, experiences, supports and behaviors in the fall and spring.

	Ra	nge		Fall	Sp	oring
				Std.		Std.
	Low	High	Mean	Deviation	Mean	Deviation
Parenting Self-Efficacy	1	4	3.29	.36	3.23	.34
Importance of Parenting	1	4	3.63	.47	3.56	.49
Access to Community Help	1	4	3.39	.53	3.29	.50
Common Good SC	1	4	3.25	.39	3.35	.40
Bonding & Bridging SC	2	8	6.25	1.06	6.28	.91
Support from CltBP Staff	1	4	3.40	.58	3.40	.59
Support from CltBP Families	2	10	4.39	2.17	4.63	2.23
Other Parents By Name	0		3.81	4.60	6.25	5.76
Degree Centrality	0		3.45	2.74	5.39	4.28
Support When Stressed	1	4	2.97	1.19	3.12	1.11
Parenting Stress	1	4	2.15	.60	2.27	.56
Kinship with Families	1	4			2.31	.43
Kinship with Staff	1	4			2.49	.39
Home-School Conferencing	1	4	3.46	.59	3.74	.37
School Involvement	1	4	2.94	.69	3.15	.59
Home Involvement	1	4	3.62	.37	3.71	.31
Ethnic Identity Parenting	1	4	3.68	.49	3.71	.41
Kindergarten Readiness	1	4	3.61	.54	3.48	.59
Positive Discipline	2	14	11.50	1.69	11.65	1.77
Negative Discipline	1	7	3.06	1.04	2.94	1.07

Note: Means and standard deviations are based on all completed responses at each time point and are not limited to participants who completed surveys at both time points. n for fall ranged from 42 to 47; n for Support When Stressed in the fall = 34. n for spring ranged from 61 to 62. n for Support When Stressed in the spring = 58. n for Kinship with Families = 34. n for Kinship with teachers and school staff = 33.

Table 5. Correlations among family attitudes, experiences, and supports in the fall and spring (fall/spring).

11. Parenting Stress Stress 12. Kinship with Families 13. Kinship with Staff 14. COVID Family	11. Parenting Stress 12. Kinship with Families 13. Kinship with Staff	11. Parenting Stress 12. Kinship with Families	11. Parenting Stress	11. Parenting	Stressed	10. Support When	Degree Centrality	o. Other Parents By Name	7. Support from CltBP Families	6. Support from CltBP Staff	 Bonding & Bridging SC 	4. Common Good	3. Access to Community Help	2. Importance of Parenting	1. Parenting 1 Self-Efficacy	1	
														1	.56"/.32"	2	
													1	38"/36"	.79**/.68**	ω	
												1	.49"'/.55"	.36*/.48**	.62**/.47*	4	
											1	.55**/.63**	.66"/.59"	.14/.35**	.51"/.50"	O,	
										1	.47**/.63**	.56**/.68**	.56**/.50**	.39"/.30"	.46"/.34"	6	
									_	.29/.38**	.39**/.18	.27/.24	.12/.27*	.03/.02	.07/.05	7	
								1	.23/.55**	.03/.05	.04/.15	03/.25	.10/.30*	01/.08	05/.00		
							1	.67**/.51**	.57**/.38*	.18/08	.14/.10	.20/.09	.04/16	.22/.08	.12/17	9	
						1	.30/.11	.26/05	.34*/.24	.17/.40**	.21/.53**	.26/.08	.26/.30*	.06/.03	.18/.29	10	
				-		09/17	.29/.16	.13/09	.25/04	.08/.00	10/05	.05/.09	28/08	.09/10	14/02	11	
			1	1/-13	10	-/.14	-/16	-/03	-/.32	-/.41*	-/31	-/30	-/29	-/.15	-/.15	12	
		1	.60**	/.01	2	-/14	-/26	-/26	/.08	-/.17	/.02	-/.14	/.05	/.01	/.19	13	
	1	-/19	/.20	-/12	3	/.16	-/01	/02	/.26	-/.54**	/.10	/.13	/.00	/.06	-/22	14	
-	/.29	/05	-/22	/.00	2	-/08	/04	-/17	-/02	/36*	-/04	/.30	/.10	/.20	/.25	15	

Note: SC = Social Capital; CltBP = Charlotte Bilingual Preschool; * p < .05; ** p < .01.

Table 6. Correlations between family attitudes, experiences, and supports and educational involvement behaviors in the fall and spring (fall/spring).

	Home-School Conferencing	School Involvement	Home Involvement	Ethnic Identity Parenting	Kindergarten Readiness	Positive Discipline	Negative Discipline	Remote Activities
Parenting Self- Efficacy	.25/.23	.18/.05	.36*/.30*	.13/.39**	.67**/.65**	.65**/.43**	.05/04	/09
Importance of Parenting	.05/.37**	.11/.31*	.20/.20	.19/.31*	.50**/.48**	.49**/.26*	.10/18	/04
Access to Community Help	.23/.22	.22/.17	.46**/.24	.20/.31*	.67**/.51**	.70**/.42**	10/.03	/04
Common Good SC	.25/.49**	.24/.44**	.08/.32*	.05/.36**	.60**/.66**	.35*/.37**	11/22	-/11
Bonding & Bridging SC	.27/.36**	.27/.31*	.39**/.33**	.17/.38**	.56**/.59**	.62**/.49**	21/31*	-/.12
Support from CltBP Staff	.35*/.36**	.13/.25	.31*/.22	.36*/.21	.45**/.58**	.51**/.40**	02/20	/08
Support from CltBP Families	.35*/.36**	.37*/.42**	.27/20	.17/.13	.07/.21	.21/.19	15/.14	/.03
Other Parents By Name	.16/.26	.24/.42**	.17/.22	.21/.15	.04/.05	.09/.00	04/.22	/01
Degree Centrality	.32/.22	.40/.47**	.28/.14	.08/.03	.12/.04	.22/.06	05/.01	-/.15
Support When Stressed	.22/.26	.17/.18	.27/.17	.24/.24	.01/.22	.26/.50**	38*/10	/.28
Parenting Stress	03/12	.15/12	04/04	10/15	15/.05	12/13	.31*/.13	/.20
Kinship with Families	/.34	-/.13	/.03	/.20	/.21	/.44*	/06	-/29
Kinship with Staff	/.26	/09	/09	/01	/.21	/.33	/16	/36
COVID Family	/.16	-/21	/28	-/24	/10	/26	-/13	-,17
COVID Child Edu Support	/14	/10	/04	-/.16	/.06	/.10	-/.11	 /

Note: SC = Social Capital; CltBP = Charlotte Bilingual Preschool. * <math>p < .05; ** p < .01.

parenting behaviors, mediated by bonding and bridging social capital. Table 7. Standardized regression coefficients from mediation analyses for the relation between common good social capital and

Parenting Behaviors (PB)

	Home-School Conferencing	Home-School School Home Conferencing Involvement Involvement	Home Involvement	Ethnic Identity Kindergarten Parenting Readiness	Kindergarten Readiness	Positive Discipline	Negative Discipline	Remote Activities
$CGSC \Rightarrow BBSC(a)$.54**/.57**	.54**/.57**	.54**/.57**	.53**/.57**	.54**/.57**	.54**/.57** .53**/.57** .54**/.57**	.54**/.57**	/.65**
BBSC \rightarrow PB (b)	.18/.08	.19/.06	.44**/.24	.22/.26	.37*/.33*	.63**/.46**	22/29	/.38**
Direct Effect: CGSC → PB (c)	.14/.43**	.12/.42**	16/.17	06/.18	.45**/.46**	.01/.10	.01/05	/35
Indirect Effect: CGSC \rightarrow BBSC \rightarrow PB (a*b)	.10/.04	.10/.03	.24*/.14	.12/.15	.20**/.19*	.33**/.26**	12/17	/.25
Total Effect: CGSC \Rightarrow PB (c+a*b)	.24/.47**	.22/.45**	.07/.31**	.06/.33**	.65**/.65**	.35**/.36**	11/21	/10
п	45/62	45/62	45/62	44/62	45/62	44/61	45/61	/34
Note: CGSC = Common good social capital. BBSC = Bonding and bridging social capital. PB = Parenting behaviors as shown in the column labels. Lower case letters (i.e., a, b, and c) correspond with the unique paths in the mediation model depicted in Figure 7. * p	capital. BBS	C = Bondin correspond	g and bridgi with the un	ng social capi ique paths in t	al. PB = Pare he mediation	enting behav model depi	iors as shov cted in Figu	vn in the re 7. * p

< .05; ****** *p* < .01. a

parenting behaviors, mediated by home-school conferencing. Table 8. Standardized regression coefficients from mediation analyses for the relation between common good social capital and

Parenting Behaviors (PB)

	School Involvement	Home Involvement	Ethnic Identity Kindergarten Parenting Readiness	Kindergarten Readiness	Positive Discipline	Positive Negative Remote Discipline Discipline Activities	Remote Activities	
$CGSC \Rightarrow HSC(a)$.24/.47**	.24/.47**	.20/.47**	.24/.47**	.20/.46**	.20/.46** .24/.46**/.50**	/.50**	
$HSC \rightarrow PB(b)$.72/.67**	.40/.57**	.11/.39**	.19/.02	.19/.18	.19/.1818/31*/.41*	/.41*	
Direct Effect: CGSC → PB (c)	.05/.14	02/.04	.03/.15	.60**/.64**	.31*/.28*07/07		/31	
Indirect Effect: CGSC \Rightarrow HSC \Rightarrow PB (a*b)	.17/.31**	.10/.27**	.02/.18*	.05/.01	.04/.0804/14	04/14	/.20*	
Total Effect: CGSC \Rightarrow PB (c+a*b)	.22/.45**	.08/.31**	.06/.33**	.65**/.65**	.35*/.36*	11/21*	/10	
n	45/62	45/62	44/62	45/62	44/61	45/61	/34	

Note: CGSC = Common good social capital. HSC = Home-school conferencing. PB = Parenting behaviors as shown in the column labels. Lower case letters (i.e., a, b, and c) correspond with the unique paths in the mediation model depicted in Figure 8.

^{*} *p* < .05; ** *p* < .01.

parenting self-efficacy. Table 9. Results of mediation analyses for the relation between access to community help and parenting behaviors, mediated by

Parenting Behaviors (PB)

	Home- School Conferencing	School Involvement	Home Involvement	Ethnic Identity Parenting	Kindergarten Readiness	Positive Discipline	Negative Discipline	Remote Activities
ACH \rightarrow PSE (a)	.77**/.64**	.77**/.64**	.77**/.64	.77**/.64	.77**/.64	.77**/.66	.77**/.66 .77**/.66**	/.59**
$PSE \rightarrow PB(b)$.23 / .15	.06/12	01 / .25	13 / .32*	.36 / .55**	.24 / .26	.33 /12	/12
Direct Effect: ACH → PB (c)	.03 / .11	.15 / .24	.39* / .06	.30 / .07	.41*/.13	.48** / .23	35 / .11	/.04
Indirect Effect: ACH \Rightarrow PSE \Rightarrow PB (a*b)	.17 / .09	.05 /08	01 / .16	10 / .20*	.27* / .35*	.19 / .17	.26 /08	/07
Total Effect: PSE \rightarrow PB (c+a*b)	.20 / .20	.19 / .16	.38* / .22	.20 / .27	.68**/.49**	.66** / .40*	09 / .03	/04
п	44 / 62	44 / 62	44 / 62	43 / 62	44 / 62	43 / 61	44 / 61	/34
				;		•		-

Note: ACH = Access to community help. PSE = Parenting Self-Efficacy. PB = Parenting Behaviors as shown in the column labels. Lower case letters (i.e., a, b, and c) correspond with the unique paths in the mediation model depicted in Figure 9.

^{*} *p* < .05; ** *p* < .01.

mediated by access to community help. Table 10. Results of mediation analyses for the relation between bonding and bridging social capital and parenting behaviors,

Parenting Behaviors (PB)

	Home-School	School	Home	Ethnic	Kinderoarten	Positive	Negative	Remote
	Conferencing	ment	ement	Identity Parenting	Readiness		6	Activities
$BBSC \Rightarrow ACH(a)$.77**/.67**	.77** / 67**	.77**/.67** .77**/.67**	.77**/.67**	.77**/.67**	.77**/.66** .77**/.66**	.77**/.66**	/ .65**
$ACH \rightarrow PB(b)$	01 / .02	.06 /02	.29 / .06	.19 / .12	.57**/.24*	.46**/.19	.09 / .30*	/17
Direct Effect: BBSC \rightarrow PB (c)	.38 / .35*	.23 / .36*	.16 / .32	.02 / .31*	.21 / .48**	.37* / .40**	33 /52**	/ .23
Indirect Effect: BBSC \Rightarrow PB (a*b)	01 / .02	.05 /02	.22* / .04	.15 / .08	.44**/.16*	.35*/.13	.07/ .20*	/11
Total Effect: BBSC \Rightarrow PB (c+a*b)	.37 / .37*	.28 / .35*	.38*/.36*	.16/.38*	.64**/.64**	.72**/.53**26/32*	26 /32*	-/.12
n	44 / 62	44 / 62	44 / 62	43 / 62	44 / 62	43 / 61	44 / 61	/ 34
NT CTT		j						-

Note: ACH = Access to community help. PSE = Parenting Self-Efficacy. PB = Parenting Behaviors as shown in the column labels. Lower case letters (i.e., a, b, and c) correspond with the unique paths in the mediation model depicted in Figure 10.

^{*} *p* < .05; ** *p* < .01.

Table 11. Standardized regression coefficients from moderation analyses assessing the interaction between maternal stress and bonding and bridging social capital as predictors of negative discipline practices.

	$B\left(Fall\right)$	B (Spring)
Constant	.01	.05
Maternal Stress	.45*	.11
Bonding and Bridging Social Capital	16	32*
Maternal Stress x Bonding and Bridging Social Capital	32	.03
n = 45 in the fall and 61 in the spring * n <	05	

n = 45 in the fall and 61 in the spring. * p < .05.

Table 12. Standardized regression coefficients from moderation analyses assessing the interaction between maternal stress and support to manage stress as predictors of negative discipline practices.

	B(Fall)	B (Spring)
Constant	06	05
Maternal Stress	.53**	.16
Support When Stressed	31*	09
Maternal Stress x Support When Stressed	40**	.13

n = 34 in the fall and 57 in the spring. * p < .05. ** p < .01.

Table 13. Mean differences between family attitudes, experiences, behaviors, and supports in the fall and spring.

	Mean Difference	t	95% Conf Interv	
Parenting Self-Efficacy	12	-2.32*	22 -	02
Importance of Parenting	07	81	25 -	.11
Access to Community Help	16	-2.29*	30 -	02
Common Good SC	.01	.19	13 -	.16
Bonding & Bridging SC	27	22	-2.75 -	2.21
Support from CltBP Staff	05	60	24 -	.13
Support from CltBP Families	.27	.67	55 -	1.10
Other Parents By Name	1.81	2.15*	.10 -	3.53
Degree Centrality	1.94	3.46**	.79 -	3.08
Support When Stressed	.08	.39	33 -	.48
Parenting Stress	.14	1.43	06 -	.33
Home-School Conferencing	.26	4.36**	.14 -	.38
School Involvement	.23	2.86**	.07 -	.40
Home Involvement	.02	.57	06 -	.11
Ethnic Identity Parenting	.00	.00	11 -	.11
Kindergarten Readiness	21	-2.24*	41 -	02
Positive Discipline	18	76	69 -	.31
Negative Discipline	11	61	48 -	.26

Note: SC = Social Capital. CltBP = Charlotte Bilingual Preschool. * p < .05. ** p < .01.

Table 14. Standardized regression coefficients showing how Family Program participation and parent-rated school involvement at the end of the year predicted family attitudes, experiences, supports, and behaviors.

Family Attitudes, Experiences, and Supports	B (Cafes/Workshops Attended)	B (School Involvement)
Parenting Self-Efficacy	03	.07
Importance of Parenting	10	.31
Access to Community Help	08	03
Common Good SC	.01	.40*
Bonding & Bridging SC	01	.20
Support from CltBP Staff	28	04
Support from CltBP Families	.22	.29
Other Parents By Name	.30	.20
Degree Centrality	.59**	.35
Support When Stressed	15	.13
Parenting Stress	02	.01
Kinship with Families	23	.16
Kinship with Staff	28	14
COVID Family Support	02	.24
COVID Child Edu Support	.03	.13
Family Involvement Behaviors	B (Cafes/Workshops Attended)	B (School Involvement)
Home-School Conferencing	.09	.30*
School Involvement	.11	
Home Involvement	.01	.37*
Ethnic Identity Parenting	11	.02
Kindergarten Readiness	.04	.18
Positive Discipline	.11	.07
Negative Discipline	.05	24
Remote Activities	.01	.55**

Note: Regressions included fall scores on each dependent variable as predictors; coefficients demonstrate extent to which focal variable (i.e., cafes/workshops attended or school involvement) predicted change over the year in each family variable. Regressions for Kinship, COVID support and Remote Activities did not control for fall scores since they were not available. Analyses also controlled for family income. SC = Social Capital. CltBP = Charlotte Bilingual Preschool. Edu = Educational. * p < .05. ** p < .01.

Table 15. Descriptive statistics and correlations among remote calls received, remote messages received, and the number of remote activities completed at the end of the school year.

	Mean	Standard Deviation	Remote Calls	Remote Messages	Remote Activities Completed
Remote Calls	3.57	4.49	1	36**	.18
Remote Messages	7.01	6.44		1	.49**
Remote Activities Completed	14.03	11.60			1

n = 65 for remote calls and remote messages. n = 37 for remote activities. * p < .05. ** p < .01.

Table 16. Standardized regression coefficients depicting the relationships between the number of remote calls and messages received and family attitudes, experiences, supports, and behaviors.

Family Attitudes, Experiences, and Supports	B (Remote Phone/Video Calls)	B (Remote Messages)
Parenting Self-Efficacy	11	.06
Importance of Parenting	09	.05
Access to Community Help	.00	.01
Common Good SC	.16	11
Bonding & Bridging SC	.22	17
Support from CltBP Staff	.25	26
Support from CltBP Families	17	03
Other Parents By Name	28	.27
Degree Centrality	06	02
Support When Stressed	.01	.10
Parenting Stress	02	.14
Kinship with Families	09	18
Kinship with Staff	.05	14
COVID Family Support	.27	24
COVID Child Edu Support	.21	.03
Family Involvement Behavior	B (Remote Phone/Video Calls)	B (Remote Messages)
Home-School Conferencing	11	.02
School Involvement	.11	.04
Home Involvement	.02	.08
Ethnic Identity Parenting	06	.05
Kindergarten Readiness	.03	.04
Positive Discipline	14	.02
Negative Discipline	02	.11
Remote Activities	.20	.47**

Note: Regressions for all dependent variables except for kinship, COVID support, and remote activities completed included fall scores on each dependent variable as predictors, such that coefficients demonstrate the extent to which focal variable (i.e., remote calls or remote messages) predicted change over the year in each family variable. Analyses also controlled for family income. SC = Social Capital. CltBP = Charlotte Bilingual Preschool. Edu = Educational. * p < .05. ** p < .01.

Table 17. Correlations between student functioning prior to the shift to remote instruction and indicators of remote involvement and participation.

	Remote Calls	Remote Messages	Remote Activities
DECA: Total Protective Factors	33*	.41**	02
DECA: Behavior Concerns	.30*	01	.34
TS Gold: Social-Emotional Competencies	45**	.18	34*
TS Gold: Physical Competencies	41**	.14	41*
TS Gold: English Language Competencies	18	.01	.07
TS Gold: Spanish Language Competencies	28*	.01	10
TS Gold: Cognitive Competencies	47**	.17	42*
TS Gold: English Literacy Competencies	51**	.24	23
TS Gold: Spanish Literacy Competencies	33*	.11	06
TS Gold: Math Competencies	24	.19	25
TS Gold: Overall Competencies	42**	.18	27
IGDIs: Picture Naming	21	.18	.57**
IGDIs: Sound Identification	10	.06	.15

Note: $n_{\text{DECA}} = 57$; $n_{\text{TSGold}} = 61$; $n_{\text{IGDIs}} = 56$ for Picture Naming and Sound Identification. DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold. IGDIs = Individual Growth and Development Indicators. * p < .05. ** p < .01.

Table 18. Ordinary Least Squares multiple regression predicting the number of activities that parents completed with their children during remote instruction.

Variable	b	95% CI	$\boldsymbol{\mathit{B}}$	R^2
				.64
(Intercept)	-49.53	-106.71 - 7.66		
Remote Calls	.98*	.07 - 1.88	.39*	
Remote Messages	1.22**	.64 - 1.79	.82**	
DECA: Total Protective Factors	.09	5068	.09	
DECA: Behavior Concerns	.80	12 - 1.72	.38	
TS Gold: Total Percent Competencies	21	5917	34	
Home Involvement (Fall)	3.68	-6.98 - 14.33	.13	
Family Income (in 1000s)	.18	3168	.11	

Note: n = 30. *p < .05. **p < .01. DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold.

Table 19. Descriptive statistics for child functioning indicators in the fall and winter.

	Ra	nge	F	all	W	inter
Student Indicators of Functioning	Low	High	Mean	Std. Deviation	Mean	Std. Deviation
DECA Total Protective Factors	28	72	46.41	10.58	53.67	12.08
DECA Behavior Concerns	28	72	48.56	9.88	48.21	7.93
TS Gold: Social-Emotional Competencies	0	100	35.37	33.65	70.97	32.90
TS Gold: Physical Competencies	0	100	47.33	39.65	76.77	33.43
TS Gold: English Language Competencies	0	100	25.00	33.35	49.19	39.71
TS Gold: Spanish Language Competencies	0	100	30.60	33.62	52.71	34.91
TS Gold: Cognitive Competencies	0	100	49.50	37.57	75.97	31.12
TS Gold: English Literacy Competencies	0	100	60.21	18.59	76.21	22.80
TS Gold: Spanish Literacy Competencies	0	100	52.37	18.76	67.19	20.67
TS Gold: Math Competencies	0	100	64.17	20.02	74.60	23.93
TS Gold: Overall Competencies	0	100	47.98	20.28	68.32	23.01
IGDIs: Picture Naming	0	3	1.18	0.91	1.21	0.77
IGDIs: Sound Identification	0	3	1.21	0.77	1.50	1.17

DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold. IGDIs = Individual Growth and Development Indicators.

Table 20. Correlations between indicators of parent participation in Family Program activities and indicators of child functioning.

	Cafes/Works	Cafes/Workshops Attended	Mother-Reported School	School Involvement	
Student Outcomes	Relation to Winter Student Outcomes	Relation to Change in Student Outcomes	Relation to Winter Student Outcomes	Relation to Change in Student Outcomes	
DECA Total Protective Factors	14	19	03	.34*	
DECA Behavior Concerns	08	04	02	10	
TS Gold: Social-Emotional Competencies	13	17	05	.10	
TS Gold: Physical Competencies	08	14	14	10	
TS Gold: English Language Competencies	06	24	04	.06	
TS Gold: Spanish Language Competencies	.05	15	.09	26	
TS Gold: Cognitive Competencies	18	14	17	02	
TS Gold: English Literacy Competencies	06	16	06	11	
TS Gold: Spanish Literacy Competencies	.12	15	.13	05	
TS Gold: Math Competencies	08	20	05	04	
TS Gold: Overall Competencies	05	28*	05	08	
IGDIs: Picture Naming	12	02	.27	.18	
IGDIs: Sound Identification	.04	.61**	.13	.05	
	2			2 11 12 1	

Development Indicators. * p < .05. ** p < .01. Note: DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold. IGDIs = Individual Growth and

Table 21. Correlations between family attitudes, experiences, supports, and behaviors and student functioning in the fall and winter.

	DECA Total Protective Factors	DECA Behavior Concerns	IGDIs: Picture Naming	IGDIs: Sound Identification
Parenting Self-Efficacy	15/06	.08/.05	.25/.06	.09/21
Importance of Parenting	03/.21	.02/19	.30/.17	.37/09
Access to Community Help	09/35**	.06/.22	.34*/.13	.03/28*
Common Good SC	09/11	01/10	.37*/.25	.46/09
Bonding & Bridging SC	.03/26	15/11	.45**/.30*	.59*/01
Support from CltBP Staff	14/30*	.02/04	.43**/.26	.13/08
Support from CltBP Families	11/23	13/08	.53**/.03	.29/.02
Other Parents By Name	01/17	06/03	.24/12	46/18
Degree Centrality	02/20	29/38*	.35/06	17/02
Support When Stressed	.05/33	27/.07	.52**/.27	.53/.17
Parenting Stress	.18/.08	13/.06	.36*/.08	03/.01
Kinship with Families	/36	/.10	/.03	/15
Kinship with Staff	/13	/06	/13	/05
Home-School Conferencing	29*/03	.16/01	.17/.23	.13/22
School Involvement	.00/03	04/02	.24/.27	.02/.13
Home Involvement	.05/.12	.08/03	.23/.27	02/23
Ethnic Identity Parenting	.24/.19	20/11	.06/.10	.00/15
Kindergarten Readiness	15/06	.12/08	.21/.05	.35/17
Positive Discipline	20/13	.06/05	.21/.33*	.05/.03
Negative Discipline	27/.08	.32*/08	04/09	29/.02

Note: SC = Social Capital. CltBP = Charlotte Bilingual Preschool. DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold. IGDIs = Individual Growth and Development Indicators. * p < .05. ** p < .01. Each cell presents fall and winter correlations (fall/winter).

Table 21 (cont).

	TS Gold: Social- Emotional	TS Gold: Physical	TS Gold: English Language	TS Gold: Spanish Language	TS Gold: Cognitive	TS Gold: English Literacy	TS Gold: Spanish Literacy	TS Gold: Math	TS Gold: Overall
Parenting Self-Efficacy	06/10	18/10	23/12	06/11	21/08	20/16	19/20	22/19	23/18
Importance of Parenting	04/.19	16/.20	.07/.13	09/.00	14/.20	02/.21	10/.10	.00/.18	10/.16
Access to Community Help	.02/27*	18/- .35**	07/12	01/16	10/27	.07/28	.05/21	03/32	05/29
Common Good SC	.02/05	11/01	.02/05	.02/07	09/01	04/.01	05/.03	12/06	09/05
Bonding & Bridging SC	.29/06	.18/05	.21/01	.22/.01	.21/04	.16/.00	.20/.07	.11/14	.24/05
Support from CltBP Staff	.12/16	03/12	.07/07	07/07	01/09	.20/08	.10/02	.02/16	.06/12
Support from CltBP Families	.18/02	.16/.08	.40**/.22	.18/.12	.15/.02	.07/.04	.18/.26	.04/02	.22/.13
Other Parents By Name	01/11	03/04	.39*/.01	.24/.09	.14/07	.17/.00	.46**/.23	.13/12	.25/.02
Degree Centrality	.11/.00	.05/11	.55/.15	.37/.30	.29/05	.00/05	.39*/.42*	.09/.03	.36/.12
Support When Stressed	.15/23	02/20	.34*/08	.42*/.00	.00/24	.00/18	.46**/04	.10/30*	.22/20
Parenting Stress	01/01	13/.00	.14/.03	15/04	.11/01	.16/04	.04/.03	.07/10	.02/01
Kinship with Families	/12	/02	/.23	/.05	/13	/23	/10	/22	/08
Kinship with Staff	/01	/01	/.13	/.05	/04	/21	/12	/10	/02
Home-School Conferencing	.00/02	.01/03	.02/14	.20/.08	08/09	16/.00	.03/.07	13/03	02/03
School Involvement	.12/05	.05/14	.07/04	.33*/.09	.05/17	.00/06	.18/.13	.04/05	.15/05
Home Involvement	.23/.00	.21/.05	04/08	.27/.13	.18/08	.16/.05	.09/.04	.12/03	.19/02
Ethnic Identity Parenting	.33*/.14	.30*/.13	.04/05	.27/.18	.21/.19	.27/.18	.20/.11	.37*/.11	.33*/.13
Kindergarten Readiness	.04/.07	.03/.10	12/09	09/09	.05/.13	03/.05	03/.08	09/.01	04/.03
Positive Discipline	.01/.05	12/04	.00/.08	.04/.00	18/.05	09/.05	.01/.07	06/06	08/.04
Negative Discipline	39**/.05	14/01	15/.32*	43**/09	19/.04	23/.05	40**/.13	19/.18	35*/.09

Note: SC = Social Capital. CltBP = Charlotte Bilingual Preschool. DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold. IGDIs = Individual Growth and Development Indicators. * p < .05. ** p < .01. Each cell presents fall and winter correlations (fall/winter).

Table 22. Correlations between **change** in family attitudes, experiences, supports, and behaviors and **change** in student outcomes.

	DECA Total Protective Factors	DECA Behavior Concerns	IGDIs: Picture Naming	IGDIs: Sound Identification
Parenting Self-Efficacy	.19	36*	.00	.00
Importance of Parenting	.26	.09	02	.06
Access to Community Help	04	.09	.02	27
Common Good SC	.18	18	.23	.32
Bonding & Bridging SC	13	29	.23	.08
Support from CltBP Staff	.00	07	05	.00
Support from CltBP Families	09	01	.08	.33
Other Parents By Name	.30	11	.29	.34
Degree Centrality	22	04	.07	.60*
Support When Stressed	.14	28	.34	.00
Parenting Stress	.03	02	11	.18
Kinship with Families	30	.06	.11	65*
Kinship with Staff	11	.09	.14	40
Home-School Conferencing	.26	03	18	.12
School Involvement	.34*	10	.18	.05
Home Involvement	.12	22	.13	22
Ethnic Identity Parenting	.10	23	.21	41
Kindergarten Readiness	.08	06	11	.26
Positive Discipline	13	09	.15	40
Negative Discipline	15	.01	01	16

Note: SC = Social Capital. CltBP = Charlotte Bilingual Preschool. DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold. IGDIs = Individual Growth and Development Indicators. * p < .05. ** p < .01.

Table 22 (cont). Correlations between change in family attitudes, experiences, supports, and behaviors and change in student outcomes.

	TS Gold: Social- Emotional	TS Gold: Physical	TS Gold: English Language	TS Gold: Spanish Language	TS Gold Cognitive	TS Gold: English Literacy	TS Gold: Spanish Literacy	TS Gold: Math	TS Gold: Overall
Parenting Self-Efficacy	.10	01	.06	26	02	11	05	04	08
Importance of Parenting	.22	02	02	15	.28	.24	16	.02	.11
Access to Community Help	.06	.12	08	.06	.03	03	.21	04	.08
Common Good SC	.00	.00	03	34*	.04	.09	13	.19	02
Bonding & Bridging SC	.12	.28	.12	.09	.13	09	06	.06	.13
Support from CltBP Staff	.14	.16	.06	18	.27	25	21	02	.02
Support from CltBP Families	.15	.31*	.30*	.34*	.11	.02	.05	04	.25
Other Parents By Name	05	.12	.20	.30	12	06	.01	03	.05
Degree Centrality	40	40	40	37	30	20	15	04	52**
Support When Stressed	14	.02	.10	.18	13	17	14	08	09
Parenting Stress	.05	07	.04	22	.11	.14	02	.49**	.08
Kinship with Families	.17	13	09	27	.19	.07	.00	19	02
Kinship with Staff	.04	18	.08	01	.12	.23	.25	.16	.17
Home-School Conferencing	.10	10	.29	27	02	10	03	.08	01
School Involvement	.10	01	.06	26	02	11	05	04	08
Home Involvement	.22	02	02	15	.28	.24	16	.02	.11
Ethnic Identity Parenting	.06	.12	08	.06	.03	03	.21	04	.08
Kindergarten Readiness	.00	.00	03	34*	.04	.09	13	.19	02
Positive Discipline	.12	.28	.12	.09	.13	09	06	.06	.13
Negative Discipline	.14	.16	.06	18	.27	25	21	02	.02

Note: SC = Social Capital. CltBP = Charlotte Bilingual Preschool. DECA = Devereux Early Childhood Assessment. TS Gold = Teaching Strategies Gold. IGDIs = Individual Growth and Development Indicators. * p < .05. ** p < .01.

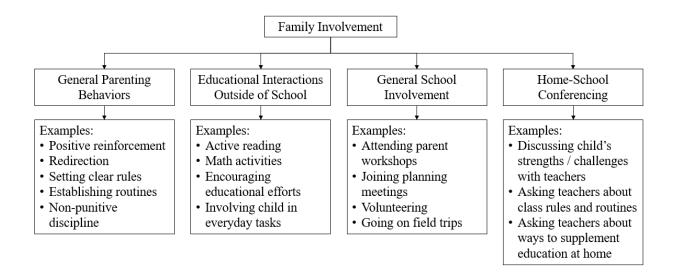


Figure 1. Four forms of Family Involvement as conceptualized for the present study.

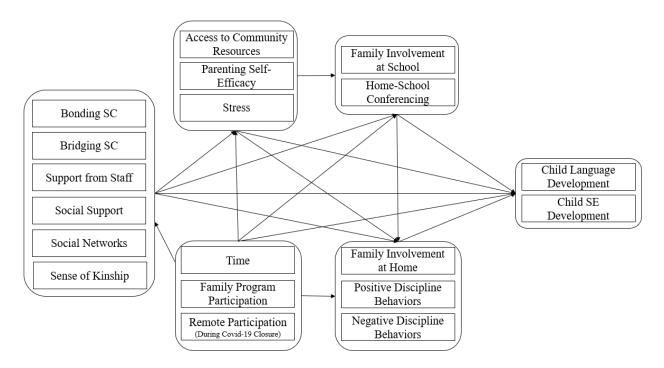


Figure 2. Framework of key relationships examined by the present study. Note: SC refers to social capital. SE refers to social-emotional.

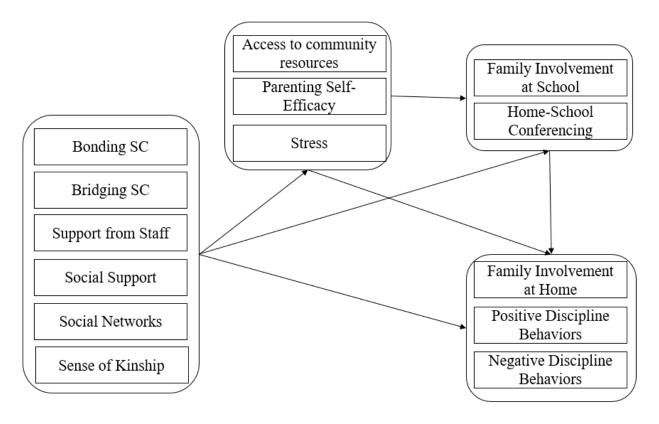


Figure 3. Variables and paths assessed for research question 1. Note: SC refers to social capital.

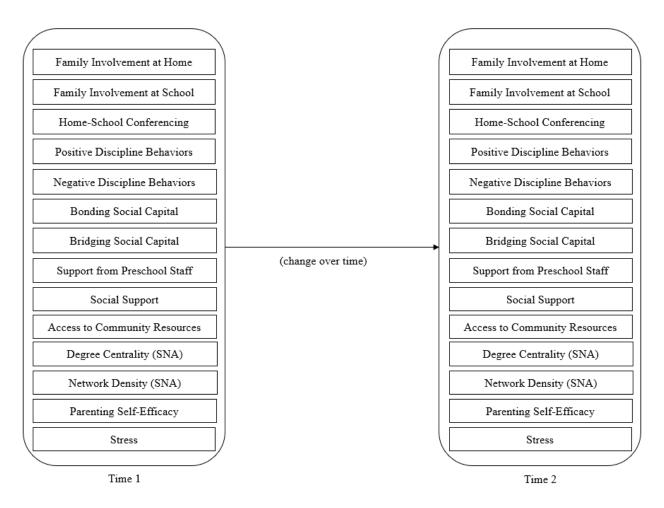


Figure 4. Family outcome variables for which change over the school year was assessed to address research question 2.

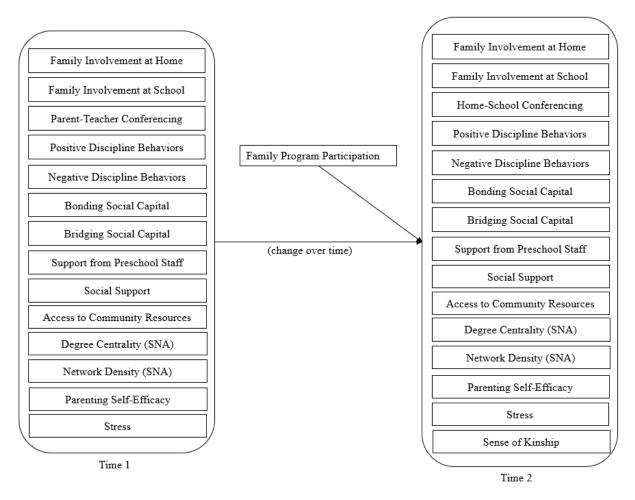


Figure 5. Illustration of Ordinary Least Squares regressions conducted to assess the relationship between family program participation and change over time in family attitudes, behaviors, and supports.

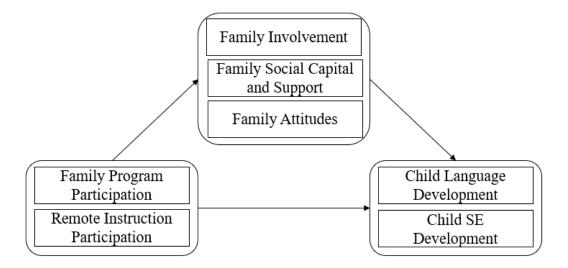


Figure 6. Simplified illustration of potential direct and indirect effects of family's participation on child educational outcomes. SE Development refers to social-emotional development.

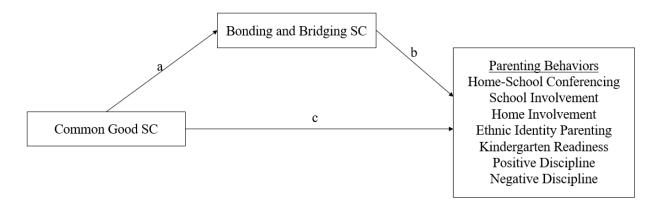


Figure 7. Mediation model assessing the extent to which relationships between common good social capital and parenting behaviors are mediated by bonding and bridging social capital. Note: SC refers to social capital.

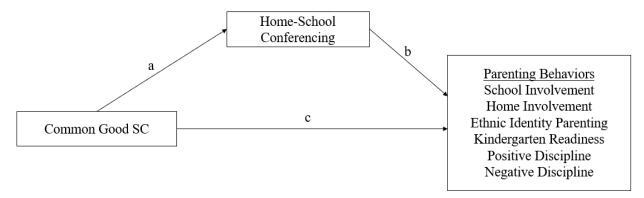


Figure 8. Mediation model assessing the extent to which relationships between common good social capital and parenting behaviors are mediated by home-school conferencing. Note: SC refers to social capital.

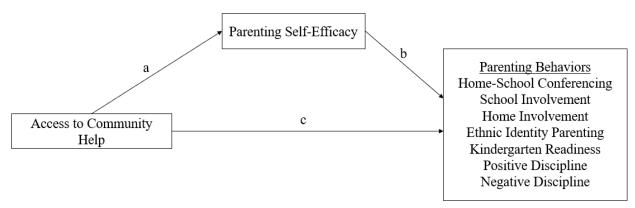


Figure 9. Mediation model assessing the extent to which relationships between access to community help and parenting behaviors are mediated by parenting self-efficacy.

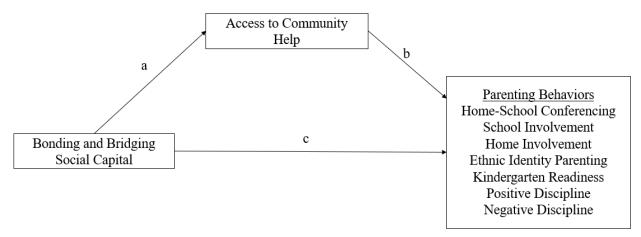


Figure 10. Mediation model assessing the extent to which relationships between bonding and bridging social capital and parenting behaviors are mediated by access to community help.

Fall Negative Discipline Practices

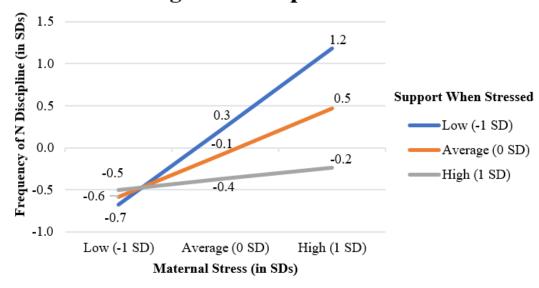


Figure 11. Simple slopes plot demonstrating the interaction between maternal stress and support to manage stress as predictors of the frequency of negative discipline practices.

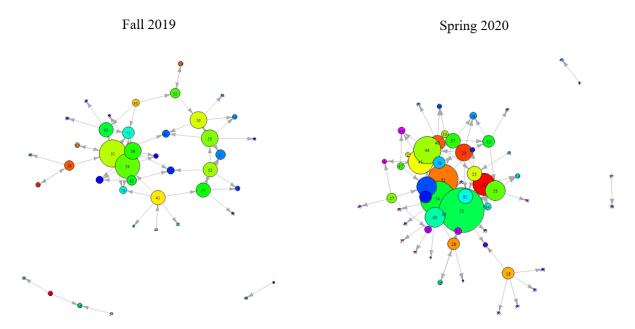


Figure 12. Social network analysis figures from the fall and spring.

Note: N = 30. Figures only include responses from caregivers who completed the social network analysis portion of the Family Attitudes Behaviors and Supports survey at both time points. Node size reflects degree centrality. Colors are used here to distinguish the nodes; they are arbitrary and do not reflect node characteristics.

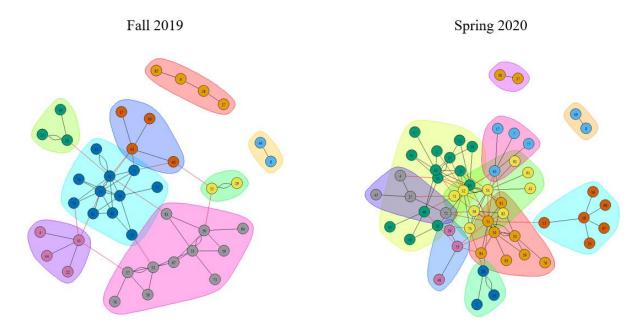


Figure 13. Community detection figures from fall and spring.

Note: N = 30. Figures only include responses from caregivers who completed the social network analysis portion of the Family Attitudes Behaviors and Supports survey at both time points. Cliques, i.e., groups of caregivers that seem to cluster together, are represented by common shaded areas. Red lines indicate friendships that cross cliques.

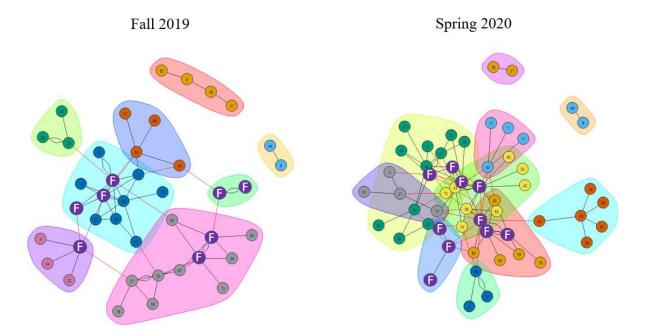


Figure 14. Community detection figures from fall and spring highlighting families who participated in 3 or more Family Cafes or Workshops.

Note: N = 30. Figures only include responses from caregivers who completed the social network analysis portion of the Family Attitudes Behaviors and Supports survey at both time points. Cliques, i.e., groups of interconnected caregivers that seem to cluster together, are represented by common shaded areas. Red lines indicate friendships that cross cliques. Family members who participated in three or more Family Cafes or Workshops denoted by purple nodes with an "F" in the center.

Appendix A: Family Attitude, Behavior, and Support Survey Charlotte Bilingual Preschool Family Survey

Dear Families,

In addition to providing a strong education for our students, Charlotte Bilingual Preschool hopes to support families. Completing this survey will help us better understand the strengths and needs of families at our school. The information you provide will also help us improve the services we offer to families this year and in the future. Your responses will not be shared with anyone outside of Charlotte Bilingual Preschool, so please answer honestly. In doing so, you will help us make our school the best that it can be.

Furthermore, by completing this survey, you will be entered into a drawing to win one of 15 gift cards worth \$20 dollars each.

Thank you for your input.

Your Name:	
Relationship to Child:	
Child's Name:	
Child's Teacher / Classroom:	
AM / PM / Full Day:	
How many people live in your home (including you)?	
How many adults live in your home (including you)?	_

Please answer the following questions about your interactions with your child who is attending the Charlotte Bilingual Preschool.

A. How often do you engage in the following behaviors? Please circle the appropriate answer. (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Frequently).

	Never	Rarely	Sometimes	Frequently
1. I attend conferences with the teacher to talk about my child's learning or behavior	1	2	3	4
2. I participate in planning classroom activities with the teacher	1	2	3	4
3. I take my child places in the community to learn special things (e.g., zoo, museum, etc.)	1	2	3	4
4. I talk to my child's teacher about his/her daily school routine	1	2	3	4
5. I attend parent workshops or trainings offered by my child's school	1	2	3	4
6. I talk about my child's learning efforts in front of relatives and friends	1	2	3	4
7. I talk to my child's teacher about the classroom rules	1	2	3	4
8. I participate in planning school trips for my child	1	2	3	4
9. I talk with my child about how much I love learning new things	1	2	3	4
10. I talk to the teacher about how my child gets along with his/her classmates	1	2	3	4
11. I volunteer in my child's classroom	1	2	3	4
12. I bring home learning materials for my child (tapes, videos, books)	1	2	3	4
13. I talk to my child's teacher about my child's accomplishments	1	2	3	4
14. I go on class trips with my child	1	2	3	4
15. I spend time with my child working on reading/writing skills	1	2	3	4
16. I talk to my child's teacher about his/her difficulties at school	1	2	3	4
17. I participate in parent and family social activities at my child's school	1	2	3	4
18. I spend time with my child working on creative activities (like singing, dancing, drawing and storytelling)	1	2	3	4
19. I talk with my child's teacher about schoolwork he/she is expected to practice at home.	1	2	3	4
20. I talk with other parents about school meetings and events	1	2	3	4
21. I spend time with my child working on number skills	1	2	3	4
22. I talk to my child about my family's culture, traditions, food, and music	1	2	3	4

	Never	Rarely	Sometimes	Frequently
23. I tell stories or read books with my child	1	2	3	4
24. I talk to my child about his or her unique strengths and skills	1	2	3	4
25. I involve my child in activities I do at home (cooking, cleaning, fixing things)	1	2	3	4
26. I talk to my child about our family history	1	2	3	4
27. I play with my child	1	2	3	4
28. I talk with my child's teacher about things I can do to support my child's education	1	2	3	4

B. To what extent do you agree with the following statements? Please circle the appropriate number. (1 = Strongly disagree, 2 = Slightly disagree, 3 = Slightly agree, 4 = Strongly agree)

	Strongly Disagree	Slightly Disagree	Slightly Agree	Strongly Agree
1. I know what to do to keep my child safe	1	2	3	4
2. I know what to do to make sure my child feels cared for an loved	nd 1	2	3	4
3. I worry about the choices I make as a parent	1	2	3	4
4. I know how to prepare my child for school	1	2	3	4
5. As a parent, I know how to handle things that happen with my child	1	2	3	4
6. I know what to do to make sure my child grows up to be a good person	1	2	3	4
7. I have a hard time making good choices as a parent	1	2	3	4
8. I know what to do to make sure my child stays out of trouble	1	2	3	4
9. I make a lot of mistakes as a parent	1	2	3	4
10. I know what to do to keep my child from going down the wrong path	1	2	3	4
11. I know what to do when my child acts up	1	2	3	4
12. I know how to deal with power struggles between my chil and me	d 1	2	3	4
13. I know what to do to keep my child on the right path	1	2	3	4
14. I know what works for raising my child	1	2	3	4
15. I know what to do when my child breaks a rule or doesn't listen	1	2	3	4
16. I am my child's most important teacher	1	2	3	4
17. Children can learn as much at home as they do at school	1	2	3	4
18. I want to learn to be the best possible parent for my child	1	2	3	4

C. To what extent do you agree with the following statements? (1 = Strongly disagree, 2 = Slightly disagree, 3 = Slightly agree, 4 = Strongly agree)

		Strongly Disagree	Slightly Disagree	Slightly Agree	Strongly Agree
1.	I can get the help I need to address my family's needs	1	2	3	4
2.	When my family has problems, I know where to go for help	1	2	3	4
3.	If my child had a problem <u>outside</u> of school, I would be able to address it	1	2	3	4
4.	We rarely let people know what our family needs	1	2	3	4
5.	We rarely ask for help when we need it	1	2	3	4
6.	We rarely/never ask for help from a spiritual or faith- based community	1	2	3	4
7.	I feel comfortable talking to Charlotte Bilingual Preschool teachers and staff about my child's needs	1	2	3	4
8.	I feel comfortable talking to Charlotte Bilingual Preschool teachers and staff about family challenges	1	2	3	4
9.	I talk to other families about how to improve our school	1	2	3	4
10.	I work with other families to make Charlotte Bilingual Preschool a better place for our children	1	2	3	4
11.	Families at Charlotte Bilingual Preschool do things to improve our school	1	2	3	4
12.	As parents, we are contributing to the Charlotte Bilingual Preschool's well-being	1	2	3	4
13.	We work with families like ours to help the school understand our needs	1	2	3	4
14.	My child's education and development are important to parents at this school	1	2	3	4
15.	There are many things we can do to have an impact on our school	1	2	3	4
16.	I am confident that I can talk to teachers and administrators at my child's elementary school to address his/her needs	1	2	3	4
17.	I am prepared to help my child succeed in elementary school	1	2	3	4

D. To what extent do you agree with the following statements? (1 = Strongly disagree, 2 = Slightly disagree, 3 = Slightly agree, 4 = Strongly agree)

	Strongly Disagree	Slightly Disagree	Slightly Agree	Strongly Agree
I know several people who I trust to help solve my problems	1	2	3	4
2. The people I interact with make me want to try new things	1	2	3	4
3. I do not know anyone well enough to get them to do anything important	1	2	3	4
4. The people I interact with make me feel like part of a larger community	1	2	3	4
5. When I feel lonely, there are several people I can talk to	1	2	3	4
6. The people I interact with connect me with new people to talk to	1	2	3	4
7. The people I interact with would help me fight an injustice	1	2	3	4
8. The people I interact with make me interested in things that happen outside of my neighborhood	1	2	3	4
9. There is someone I can turn to for advice about making very important decisions	1	2	3	4
10. The people I interact with make me interested in what people unlike me are thinking	1	2	3	4
11. If I needed an emergency loan of \$500, I know someone I can turn to	1	2	3	4
12. I come in contact with new people all the time	1	2	3	4
13. There is no one that I feel comfortable talking to about intimate personal problems	1	2	3	4
14. The people I interact with make me feel connected to the bigger picture	1	2	3	4
15. The people I interact with would share their last dollar with me	1	2	3	4
16. The people I interact with make me curious about other places in the world	1	2	3	4
17. The people I interact with would be good job references for me	1	2	3	4
18. I am willing to spend time to support general community activities	1	2	3	4
19. The people I interact with would put their reputation on the line for me	1	2	3	4
20. The people I interact with remind me that everyone in the world is connected	1	2	3	4

E. Behavior Management

Many parents report challenges managing their children's behavior. Furthermore, many parents use different strategies to address their children's behavior challenges.

In the past month, how often have you engaged in the following behaviors?

(1 = Never, 4 = Sometimes, 7 = Most of the Time)

								ost of
		Never		So	ometim	es	the	time
1.	Stuck to your rules and not changed your mind	1	2	3	4	5	6	7
2.	Avoided struggles with your child by giving clear choices (such as offering toast or cereal for breakfast)	1	2	3	4	5	6	7
3.	Used physical punishment	1	2	3	4	5	6	7
4.	Spoke calmly with your child when you were upset with him/her	1	2	3	4	5	6	7
5.	Warned your child before a change of activity (such as a five-minute warning before leaving the house in the morning)	1	2	3	4	5	6	7
6.	Yelled or raised your voice with your child when you were upset	1	2	3	4	5	6	7
7.	Explained what you wanted your child to do in clear and simple ways	1	2	3	4	5	6	7
8.	Planned ways to prevent problem behavior (such as feeding your child before going to the store)	1	2	3	4	5	6	7
9.	Lost your temper with your child too fast	1	2	3	4	5	6	7
10.	Told your child what you wanted him/her to do rather than telling him/her to stop doing something	1	2	3	4	5	6	7
11.	Gave reasons for your requests (to your child)	1	2	3	4	5	6	7
12.	Did not have enough patience with your child	1	2	3	4	5	6	7
13.	Told your child how you expected him/her to behave (such as in the grocery store)	1	2	3	4	5	6	7
14.	Made a game out of everyday tasks (such as picking up toys) so your child followed through	1	2	3	4	5	6	7
15.	Set rules on your child's problem behavior that you were willing to enforce	1	2	3	4	5	6	7
16.	16. Broke a task into small steps (such as "Put your shoes on first and then get your coat." instead of "Get ready to go.")		2	3	4	5	6	7
17.	Made sure your child followed the rules you set all or most of the time	1	2	3	4	5	6	7
18.	Prepared your child for a challenging situation (such as going to a toy store or starting a new school)	1	2	3	4	5	6	7

F.	Stress	and	Sup	port:
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F. Stres	ss and Support:				
	ng a young child can be stressful. When you of a 3-5-year-old, would you say that you (cl		elmed or s	stressed al	bout being a
	Receive some help or support, but would lead to be receive just a little help or support and feed bo not receive any help or support			ore	
	indicate how much you agree or disagree with the case, 2 = Slightly disagree, 3 = Slightly agree, 4		-	nents. (1 =	Strongly
		Strongly Disagree	Slightly Disagree	Slightly Agree	Strongly Agree
1. B	eing a parent is harder than I thought it would be	1	2	3	4
	feel trapped by my responsibilities as a parent	1	2	3	4
3. I	find that taking care of my child(ren) is much more ork than pleasure	1	2	3	4
	often feel tired, worn out, or exhausted from raising a mily	1	2	3	4
	ften have you received support from another all Preschool to help you manage your stress	-	•	ber at Cha	arlotte
Never	Rarely A few Times	Many Time	es	All of th	e Time
	ften have you received support from another hal Preschool to help you care for your child?	-	•	ber at Cha	arlotte
Never	Rarely A few Times	Many Time	es	All of th	e Time
How m	nany other parents at the Charlotte Bilingual	Preschool do	you knov	w by name	e?
Please friends	list up to 5 parents at the Charlotte Bilingual		ho you co	onsider to	be your
Please	list up to 5 children with whom your child ha	as played or	spent time	e outside o	of school:

Appendix B: Kinship Survey

Charlotte Bilingual Preschool

Dear Family Members,

At Charlotte Bilingual Preschool, we hope to create a community where family members and school team members can build friendships and support one another. Please complete this brief survey honestly to help us understand how we can continue to build a strong community at Charlotte Bilingual Preschool in the future.

Before the preschool closed, how often did you engage in the following activities?

Ra So: Fai	rely = Less metimes = 0 irly Often =	ing questions: than once a mo Once or twice a Three to four t ly = Once a we	month times a month						
1.	. Interact with other Charlotte Bilingual Preschool families in-person, outside of school.								
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
2.		ncerns related Preschool famil	-	oment or education with	h other Charlotte				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
3.	Discuss pa	renting behavio	ors with other Charlott	e Bilingual Preschool f	families.				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
4.	Discuss pe	rsonal issues w	vith other Charlotte Bil	ingual Preschool famil	ies.				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
5.	Discuss far	mily issues wit	h other Charlotte Bilin	gual Preschool familie	S.				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
6.	Discuss co	mmunity issue	s with other Charlotte	Bilingual Preschool far	milies.				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
7.	Discuss iss	sues related to	Charlotte Bilingual Pre	eschool with other fami	lies.				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
8.	Get togeth	er with other C	harlotte Bilingual Pres	chool families to do so	mething fun.				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				
9.	Discuss co	ncerns related	to your child's develor	oment with a teacher or	staff member.				
Ne	ver	Rarely	Sometimes	Fairly Often	Very Frequently				

10. Discuss pa	renting beh	naviors with a teac	her or st	aff men	nber.					
Never	Rarely	Sometimes		Fairly	Often	Very Frequently				
11. Discuss personal issues with a teacher or staff member.										
Never	Rarely	Sometimes		Fairly	Often	Very Frequently				
12. Discuss fa	12. Discuss family issues with a teacher or staff member.									
Never	Rarely	Sometimes		Fairly	Often	Very Frequently				
13. Discuss co	ommunity is	ssues with a teach	er or staf	f memb	er.					
Never	Rarely	Sometimes		Fairly	Often	Very Frequently				
To what exter	nt do you a	gree with the fol	lowing s	tateme	nts?					
14. Other fami	ilies at Cha	rlotte Bilingual Pr	eschool	value m	y opinions.					
Strongly Disag	gree]	Disagree	Agree		Strongly Agre	e				
15. Teachers a	and staff me	embers value my o	pinions.							
Strongly Disag	gree]	Disagree	Agree		Strongly Agre	e				
16. I have lear	ned a lot fr	om other families	at Charle	otte Bil	ingual Preschoo	ol.				
Strongly Disag	gree]	Disagree	Agree		Strongly Agre	e				
17. I have lear	ned a lot fr	om teachers and/o	r staff m	embers	at Charlotte Bi	lingual Preschool.				
Strongly Disag	gree]	Disagree	Agree		Strongly Agre	e				
18. Other fam	ilies at Cha	rlotte Bilingual Pr	eschool	truly ca	re about me and	d my child.				
Strongly Disag	gree]	Disagree	Agree		Strongly Agre	e				
19. Teachers a child.	and staff me	embers at Charlott	e Bilingı	ıal Pres	chool truly care	e about me and my				
Strongly Disag	gree]	Disagree	Agree		Strongly Agre	e				
20. I am an im	portant par	t of the Charlotte	Bilingua	l Presch	nool community	<i>/</i> .				
Strongly Disag	gree 1	Disagree	Agree		Strongly Agre	e				
_	21. Please explain your answer to number 20: What makes you feel like you are or are not an important part of the Charlotte Bilingual Preschool community?									

	22. I feel supported by teachers, staff, and other family members at Charlotte Bilingual Preschool.							
Strongly	Disagree	Disagree	Agree	Strongly Agr	ree			
	3. Please explain your answer to number 22: What makes you feel like you are or are not supported by teachers, staff, or family members at Charlotte Bilingual Preschool?							
24. How child		e Bilingual Presch	ool's Family I	rogram affected yo	ou, your family, or your			
25. What	could we do	to make the Char	·lotte Bilingual	Preschool commu	nity stronger?			
Separate	Section:							
Since the	e preschool	was closed (on M	arch 16 th) due	to Covid-19:				
26. How phone	•	ou spoken with ar	nother Charlott	e Bilingual Prescho	ool parent over the			
Never	Rarely	Sometime	es F	airly Often	Very Frequently			
27. How	often have y	ou spoken with a	teacher or staft	member over the j	phone?			
Never	Rarely	Sometime	es F	airly Often	Very Frequently			
28. To w	hat extent ha	s the preschool su	pported you ar	nd your family sinc	e the preschool closed?			
Not at all	A little	Bit Somewha	nt Very Mu	ch				
	hat extent ha hool closed?	-	elped you conti	nue your child's ed	lucation since the			
Not at all	A little	Bit Somewha	nt Very Mu	ch				

20	041	Comments
3()	Unner	Comments:

Thank you for completing the survey!



Department of Psychology

9201 University City Boulevard, Charlotte, NC 28223-0001

Appendix C: Consent to be Part of a Research Study

Title of the Project: Preparing Latinx families to support their children's education: Evaluation of an early childhood family program

Principal Investigator: Andrew Gadaire, MA, UNC Charlotte Health Psychology Ph.D. Program

Faculty Advisors: Dr. James R. Cook and Dr. Ryan P. Kilmer, UNC Charlotte Department of Psychology

You are invited to participate in a research study. Participation in this research study is voluntary. The information provided is to help you decide whether or not to participate. If you have any questions, please ask.

Important Information You Need to Know

The purpose of this study is to better understand the impact of Charlotte Bilingual Preschool's Family Program for participating children and families. Throughout the school year, Charlotte Bilingual Preschool collects information from families, teachers, and students in order to monitor student growth, family support, and quality of service delivery. To participate in this study, you must simply provide permission for Charlotte Bilingual Preschool to share the data that you provide with a team of researchers from the Health Psychology Ph.D. Program at UNC Charlotte. The research team will analyze and summarize these data and share aggregate findings (i.e., combined; not individually identifiable) to help Charlotte Bilingual Preschool, other early childhood education settings, and early childhood education researchers better serve families like yours.

Notably, participation in this study does not require any additional action or time outside of completing standard surveys and signing this consent form. As described further below, the research team will take multiple steps to maintain confidentiality and ensure that your private information is not shared with anyone outside of the research team. As such, there are no foreseeable risks or discomforts associated with your participation in this study. Finally, if you choose not to participate, you (and your child) will not be treated differently in any way. You will still be invited to share your opinions and experiences for the purposes of internal evaluation and program improvement and preschool staff will do its best to support your child and your family.

Why are we doing this study?

The purpose of this study is to better understand how Charlotte Bilingual Preschool's Family Program contributes to positive outcomes for family members and students at the preschool. More specifically, the research aims to understand how the Family Program influences family engagement in children's education, parenting behaviors, family members' sense of social support, and families' ability to utilize community resources to meet their needs. Furthermore, this study will investigate how participation in the Family Program relates to children's educational development, potentially by influencing families' behaviors and experiences.

Why are you being asked to be in this research study.

You are being asked to be in this study because of your child's enrollment at Charlotte Bilingual Preschool. There are no additional requirements for participation in this study other than completing the Preschool's standard evaluation surveys at the beginning and end of the school year.

What will happen if I take part in this study?

If you choose to participate in this study, the information that you provide (or have provided) to Charlotte Bilingual Preschool will be shared with a research team from UNC Charlotte's Health Psychology Ph.D. Program. This includes information that you provide (or have provided) through the Family Measure, the Community Development survey, and Family Café surveys. Additionally, demographic information that you provided during enrollment, your attendance at Family Program events (i.e., Family Cafes and Workshops) and information regarding your child's (or children's) functioning and development collected through standard Charlotte Bilingual Preschool procedures will be shared with the research team. Outside of providing information through these standard Charlotte Bilingual Preschool procedures and signing this consent form, there are no additional requirements for participation (i.e., no additional time commitment is necessary).

As described further below, the research team will take multiple steps to maintain your confidentiality. As such, there are no foreseeable risks associated with participation in this study for you or your family.

What benefits might I experience?

By participating in this study, you will help Charlotte Bilingual Preschool develop a more comprehensive understanding of the impact of its Family Program, improve its Family Program, and enhance services provided for children and families in the future. Additionally, your participation in this study will allow the research team to share Charlotte Bilingual Preschool's strengths and areas for growth with other early childhood education programs and researchers so that they can better support families like yours.

What risks might I experience?

The research team will take several steps (see below) to protect your family's privacy and minimize any potential risk of loss of confidentiality.

How will my information be protected?

Any information related to your participation in this study, including the identity of you or your child, will be kept confidential to the extent possible. Several steps will be taken in order to ensure that all data remain confidential.

If you choose to participate, you and your child will be assigned a research ID number. At the end of the school year, all study data, with the exception of this consent form and gift card receipt, will be identified using your child's research ID number. This consent form will be kept in locked filing cabinets in a locked room so that no one outside of the research team will be aware of your participation. Consent forms will be kept (in this secure location) for three years after this study has been completed (in adherence with UNC Charlotte Institutional Review Board requirements). After three years, all consent forms will be destroyed.

All electronic study files (including identifiable data) will be stored in a secure, restricted-access UNC Charlotte Dropbox folder. Only members of the research team will be able to access these data files. At the end of the school year, once data have been merged successfully into one comprehensive database, any identifying information will be replaced by research ID numbers. A key (i.e., a code book) will be prepared that links your child's actual name. This key will be stored in a separate document in a separate folder of this restricted-access Dropbox account. Only the principal investigator will be able to access this document and it will be deleted once data analyses have been completed.

This study's findings will be reported as common themes and collective trends rather than individual, identifiable results. If any quotations/excerpts from focus groups are used during the analysis or presentation of data, all identifying information will be removed from (or modified within) the quotations/excerpts. If necessary, pseudonyms (made-up names) will be used to protect your confidentiality.

Regarding information provided during focus groups, we will do everything we can to keep your identity private and your responses confidential. However, given the nature of focus groups, we cannot make guarantees about how others in the group might use your information. We ask that you respect the privacy and confidentiality of the group and group members to keep the discussion private and confidential.

Finally, there are a few circumstances when researchers would be required to break confidentiality. We are required by law to make a report to proper authorities in cases involving risk of harm to self or others by the child or caregiver, or physical or sexual abuse of the child. It is important that you understand that confidentiality will be broken in the situations described above.

How will my information be used after the study is over?

After this study is complete, identifiers will be removed from the data/information and the data/information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent. The data we share will NOT include information that could identify you.

Will I receive an incentive for taking part in this study?

Participants who complete the Family Measure will be entered into a random drawing to win one of 15 \$20 visa gift cards. Drawings will take place in both the fall and the spring, so by

completing the measure at both time points, you will be entered into both drawings. In the fall, 15 \$20 gift cards were drawn. If you complete the measure in the spring (i.e., at the end of the year) you will have the chance to win one of 50 \$20 gift cards. It is important to note that by completing the Family Measure, you will be eligible for these incentives regardless of whether you agree to participate in this study.

What if I choose not to participate in this study?

There will be no consequences should you choose not to participate in this study. You will still be invited to participate in Family Program events and share your opinions and experiences with Charlotte Bilingual Preschool staff. You and your child will not be treated differently in any way. Finally, if you complete the Family Measure or participate in the Family Program focus groups, but choose not to participation in this study, you will still be eligible for any drawings or incentives.

What are my rights if I take part in this study?

It is up to you to decide to be in this research study. Participating in this study is voluntary. You do not have to answer any questions you do not want to answer. You may also revoke your consent at any time during this study (i.e., during the 2019-2020 school year) by emailing the Principal Investigator (contact information provided below). If you revoke your consent, the data that you provide will not be shared with the researcher. If data have already been shared with the researcher, and you revoke your consent before the end of the 2019-2020 school year, any information associated with you or your family will be deleted from files in possession of the research team and will not be used in data analyses.

Who can answer my questions about this study and my rights as a participant?

For questions about this research, you may contact Andrew Gadaire (the Principal Investigator) via email (agadaire@uncc.edu) or by phone (352-284-9140). You may also contact advising faculty members for this study: Dr. Jim Cook (jcook@uncc.edu; 704-687-1327) or Dr. Ryan P. Kilmer (rpkilmer@uncc.edu; 704-687-1340).

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Office of Research Compliance at 704-687-1871 or uncc-irb@uncc.edu.

Consent to Participate

By signing this document, you are providing permission for Charlotte Bilingual Preschool to share your anonymous answers to this questionnaire and other information you have shared during the school year with a research team from the Health Psychology Ph.D. Program at UNC Charlotte. Make sure you understand what the study is about before you sign. You will receive a copy of this document for your records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I understand what the study is about this study.	ut and my questions so far have been answered. I agree to ta
Child Name (PRINT)	
Parent/Legally Authorized Repres	entative Name and Relationship to Child (PRINT)
Signature	Date
Name and Signature of person obtained	aining consent Date