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The Choice of Pre-K: An Examination into Black Caregivers' Early Childhood Care  
Decisions and How Early Childhood Care Predicts Black Children's  
Educational Outcomes

by

Anna Grace Rollins

July 19, 2024

A Dissertation submitted to the Education Faculty of Lindenwood University in  
partial fulfillment of the requirements for the degree of  
Doctor of Education  
School of Education

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## **Abstract**

Despite the national push for increased Pre-K enrollment, findings on the effects of attending Pre-K are contradictory and inconsistent. Due to conflicting research and viewpoints on traditional education outcomes, many families are choosing not to send their children to Pre-K. This study focused on the often overlooked thoughts and experiences of Black parents and guardians when making decisions about early childhood education for their children, as well as the academic and behavioral effects of attending Pre-K for Black children in subsequent years. Through surveys and interviews, this study explored factors that influence Black parents' decisions about enrolling their children in Pre-K. Themes that arose were that parents chose Pre-K because it can provide an educational head start for children and encourage them to be more social with same-aged peers, as well as adults they were not familiar with. Black parents also seek safe, high-quality educational programs with trained, supportive caregivers. In addition to the qualitative findings, behavioral frequency data and math and reading standardized test scores were collected throughout the 2022-2023 school year for Black students in kindergarten, first, and second grades. Inferential statistics showed no significant relationships between attending Pre-K and the academic or behavioral success of Black students, with the exception of second-grade reading. The researcher found that there was sufficient evidence to reject the null hypothesis and there was a difference between the academic success of Black second-grade students on a standardized iReady reading assessment, based on whether or not they went to Pre-K. The researcher aimed to help make early childhood care options more transparent, accessible, and representative of all families to close the educational gap, based on SES and race.

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## **Chapter 1: Introduction**

In 1896, George Washington Carver wrote, “Education is the key to unlocking the golden door of freedom” (Jordan, 2016, p. 1). More than 100 years later, education continues to be a gateway to a brighter future. The choice of how to educate a child begins at birth and, for many, more formal educational decisions begin as early as three years old (Baumgartner & Thrash, 2020). Between Pre-Kindergarten (Pre-K), daycare, homeschooling, or family, friend, and neighbor (FFN) care, it can be challenging to know what is the best choice (Belfield & Levin, 2016). In recent years, policymakers have further emphasized the importance of supporting child development through high-quality early childhood education and childcare (Henly & Adams, 2018). While the government urges families to get children into schools as soon as possible so they do not fall behind, other studies show that allowing kids to learn and grow in unstructured settings could be more developmentally appropriate than a classroom (Bassok et al., 2016; Durkin et al., 2022). Combine this with the various factors that impact a family’s decision (e.g., cost, transportation, family values, family dynamic), and the decision to enroll in Pre-K is even more confusing for families. Parents and guardians want to do what is best for their child and deserve to make a well-informed decision backed by research.

For this study, the researcher analyzed the thoughts and experiences of parents and guardians who identified as Black or African American. This study focuses on the unique shared experience of navigating U.S. early childhood education systems as a Black parent while recognizing Black individuals’ vastly different lived experiences. Historically, America has chosen not to invest in Black schools and communities, creating a sense of mistrust among Black families and the education system (Horsford et al., 2021). Gaining

insight into the decision-making factors of Black parents can help make early childhood care options more transparent, accessible, and representative of all families. Finally, determining if attending Pre-K impacts the academic and behavioral success of Black elementary students could help make early childhood care choices more straightforward for families and aid in closing the educational gap based on race. Researchers often discuss academic success, but behavioral and social success is just as crucial to the long-term prosperity of adolescents. Early childhood care promotes pro-sociality and self-regulation skills that children can carry throughout their lives. Early childhood education advocates aim to increase access to high-quality Pre-K programs for all families regardless of race and socioeconomic status (Barnett & Yarosz, 2007). The first step to increasing public awareness and support around Pre-K education is to understand where the educational system is falling short for students and their families.

### **Background of the Study**

Research shows that many parents choose not to enroll their children in Pre-K (Hroncich, 2022). While the number of children attending Pre-K programs has grown throughout history, in 2019, there were still 4.2 million three- to four-year-olds in the United States who were not enrolled in preschool (Miner, 2019). Notably, the Coronavirus pandemic further halted progress in Pre-K enrollment (Friedman-Krauss et al., 2022). According to the National Center for Educational Statistics (NCES, 2022), the percentage of three- to four-year-olds enrolled dropped from 54% to 40% between 2019 and 2020, the first notable change since 2010. These enrollment rates were relatively consistent across racial groups, with 41% of Black three- to four-year-olds enrolling in

school in 2020 (NCES, 2022). Nearly 300,000 fewer children enrolled in Pre-K during the 2020-2021 school year (Friedman-Krauss et al., 2022).

State Pre-K programs, such as Head Start focus on children living in poverty, provide resources, and aim to increase the social skills and cognitive development of children aged three through five (Hines, 2017). In 2020, 16% of children in the United States, 11.6 million, were living in poverty (Shrider et al., 2021). These percentages were disproportionately higher among Black children, Latino children, and children living in women-led households (Karoly et al., 2005). Attending Pre-K has been suggested to lead to better long-term social, educational, and occupational outcomes for children living in poverty (Melhuish, 2011). High-quality Pre-K programs also significantly impact students in school districts that serve predominantly Black populations (Bartik & Hershbein, 2018). For these reasons, the U.S. government has expended an immense amount of money making Pre-K free and accessible (Durkin et al., 2022). This push for universal Pre-K has become so prevalent that President Joe Biden proposed the American Families Plan, which allocated \$1.8 trillion to make Pre-K available to every child in the United States. beginning at age four (Durkin et al., 2022). While it is important to note that high-quality early childhood development can exist in formal and informal settings, the government has emphasized public center-based Pre-K programs (Henly & Adams, 2018).

Other research, however, shows that Pre-K attendance may not be a straightforward choice. Many studies showing significant positive effects for students attending Pre-K use data from programs that are not representative of the average Pre-K program (Bartik & Hershbein, 2018). A national analysis showed that the average Pre-K

program had no statistically significant effect on students' test scores, grade retention, or referral to special education by the time they reached fourth grade (Bartik & Hershbein, 2018). While some research shows insufficient evidence regarding the lasting effects of Pre-K, other studies have even found that attending Pre-K can have a negative impact on children, including burnout and increased exposure to negative behaviors (Bassok et al., 2016; Durkin et al., 2022). Educational inequalities appear as early as Pre-K, and the quality of these programs is drastically different amongst racial and economic groups, often at the expense of students of color and further increasing the achievement gap (Pendola et al., 2022).

### **Theoretical Framework**

Choice Theory and Critical Race Theory (CRT) create the overarching framework for this study. Choice Theory states that individuals make choices about everything they think, do, and ultimately feel (Glasser, 2010). People determine what options are available to them and then weigh the cost versus the benefits to select the most desirable choice based on a set of criteria (Levin & Milgrom, 2004). Choice Theory helped to guide data collection and research questions because it aids in gaining insight into how Black parents and guardians evaluate their early childcare options and reach a decision. The research questions in this study asked participants to look deeper into their personal choices and criteria for decision-making and then reflect on the outcomes.

According to Glasser (2010), "We are much more in control of our lives than we realize, but, unfortunately, much of that control is not effective" (p. 4). However, Choice Theory falls short when it does not consider the very real implications that factors, such as race, class, gender, sexuality, and disability, have on the choices people make

(Gillborn & Parker, 2020). Choice Theory cannot be an effective lens through which to view Black families' choices in this study without considering CRT. According to Gillborn and Parker (2020), CRT aims to recognize and change the oppressive experiences of marginalized groups of people. That is, racism is more than just individual prejudice and bias; it is embedded in policies that were created when equal rights were virtually nonexistent (Dixson & Rousseau Anderson, 2017). CRT rejects the idea of colorblindness when it comes to race and insists on the recognition of the lived experiences of racially minoritized groups to challenge inequities (Liu, 2022). Due to the history of education in America, Black families often do not have the same options as White families. Therefore, research is needed to amplify their voices and reflect on their experiences (Posey-Maddox et al., 2021). Although many people believe the United States is a post-racial society, findings show that relatively little has changed in terms of providing Black children with the quality education they deserve, and Black parents are noticing (Horsford et al., 2021).

Choice Theory focuses on four types of relationships: parent-child, teacher-student, husband-wife, and manager-worker (Glasser, 2010). The parent-child relationship is the focus of this study. Every parent must make a choice about their child's education, and the number of choices has increased drastically across the United States. (Belfield & Levin, 2016). CRT recognizes that dated theories and research methods can reinforce racial biases, and it is important to acknowledge that choices regarding Pre-K can vary based on the racial background of families (Gillborn & Parker, 2020).

In this study, the researcher asked parents to reflect on their educational decision-making. People are able to gain control over their choices and create better outcomes for themselves by becoming more intentional about the decision-making process and recognizing how decisions are influenced by generational habits, life experiences, and personal perceptions (Glasser, 2010). Choice Theory is a relevant lens through which to view the choice of whether or not to attend Pre-K, because this decision is ultimately up to the parent. If Choice Theory is accurate, parents tend to follow traditions based on what they have experienced, such as choosing preschool, daycare, or FFN care simply because that is what they did growing up (Glasser, 2010).

Choice Theory also applies if parents' apprehension towards Pre-K comes from a negative educational experience or deciding what is best for their child based on what did or did not work out for them. Due to systemic racism, Black parents must consider many things that White families do not, in order to make sure that their child receives a high-quality education (Posey-Maddox et al., 2021). Parents of color must consider things like the racial inequality in U.S. school disciplinary policies disproportionately affecting students of color, the lack of diversity and representation among educators, and the parents' own racial experiences in early education (Dutil, 2020; Ford, 2021; Tefera et al., 2017). Choice Theory states that although people may not have had control of what has happened to them, they do control what they do about it (Moré, 2019). In the context of this study, parents would need to take a step back and analyze this decision regarding their child's early education from an objective lens rather than their own viewpoint.

The research questions for this study reflect the Choice Theory framework directly to address the viewpoint and decision-making factors of parents and guardians.



First, the researcher conducted an analysis of the factors that impact whether parents and guardians decide to send their children to Pre-K. The responses given by participants provided insight into what dynamics are being projected from their life and past onto the situation regarding their child and what choice would be best for them. Secondly, there was an exploration of how parents feel Pre-K affected their child's success in school. The data collected investigated the parents' perceptions of the effectiveness of Pre-K. However, their perceptions may not accurately represent how their child is doing academically and socially. Lastly, the researcher surveyed families to determine what specific factors were being looked for in an early care program and what could have increased their interest in sending their child to Pre-K. The data collected allowed for an understanding of what elements of preschool programs appeal to parents and what could be improved upon so that early childhood education options are comprehensive and representative of all families.

### **Statement of the Problem**

Despite the national push for increased Pre-K enrollment, the findings are contradictory and inconsistent with literature pointing to both benefits and drawbacks of attending Pre-K (Bartik & Hershbein, 2018; Durkin et al., 2022; McCormick et al., 2022; Miner, 2019; Pendola et al., 2022). Further, few studies have specifically focused on the experiences and outcomes of Pre-K for Black children and families. According to Baumgartner and Thrash (2020), one of the most important decisions in a child's educational journey is regarding Pre-K. Not only can Pre-K give children key foundational skills and set them up for success throughout their educational journey, but for many students, the school they begin Pre-K in creates a subsequent feeder pattern into

elementary, middle, and high school, creating long-term implications (Baumgartner, 2020). Contrary to many studies supporting Pre-K, research also suggests that today's young learners are learning less due to the increase in seat work, teacher-led direct instruction, and time taken away from art and music (Christakis, 2016). While students who attended Pre-K tended to show more school readiness skills when beginning kindergarten, their optimistic outlook on school was diminishing by the time they reached first grade (Christakis, 2016). Gains in academic achievement in the years following Pre-K are also inconclusive, with some fading out by the time they reach fourth grade (Pendola et al., 2022).

Research is needed to fill in gaps and provide solutions to understand Black parents' decisions regarding Pre-K and the benefits and drawbacks of attending Pre-K for Black children. While Pre-K would likely be the preferred choice for many due to its being free and regulated, barriers to access must be identified and overcome (Henly & Adams, 2018). This study aims to provide a scientific understanding of Black families' decisions on whether to enroll their children in Pre-K programs and to examine if attending Pre-K predicts Black children's academic and social success in kindergarten through second grade.

### **Purpose of the Study**

Many families choose not to utilize Pre-K programs, whether they decide to send their kids to daycare, keep them with FFN care, or choose another option for their early years (Hines, 2017). While there are studies analyzing families' choices surrounding Pre-K, this study focuses on the often overlooked choices of Black parents and guardians regarding early childhood education. Filling this gap with qualitative research examining

Black parents' early childhood care decisions could help find possible solutions for improving Pre-K programs, increasing the accessibility and knowledge regarding families' options, and creating a more transparent relationship between schools and Black families. The need for a positive relationship between families and the school system is especially important for caregivers who did not have a great experience with their educational journey (Isaacs, 2012). Listening to the people with the most at stake will help educators and policymakers understand what goes into this big decision. This study also provides further insight into how Pre-K affects Black students' academic and behavioral success in kindergarten, first, and second grade. The current studies analyzing the effects of Pre-K are contradictory and inconsistent. Further clarity on how Pre-K affects Black students' success in school could potentially help in the effort to close the educational gap between children based on race.

### **Hypotheses**

The following hypotheses guided the study:

H1: There is a difference between the academic success of Black kindergarten students on a standardized iReady math assessment based on whether or not they went to Pre-K.

H2: There is a difference between the academic success of Black kindergarten students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

H3: There is a difference between the academic success of Black first-grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.

H4: There is a difference between the academic success of Black first-grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

H5: There is a difference between the academic success of Black second-grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.

H6: There is a difference between the academic success of Black second-grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

H7: There is a difference between the rate of disciplinary infractions and suspensions of Black kindergarten students based on whether or not they went to Pre-K.

H8: There is a difference between the rate of disciplinary infractions and suspensions of Black first-grade students based on whether or not they went to Pre-K.

H9: There is a difference between the rate of disciplinary infractions and suspensions of Black second-grade students based on whether or not they went to Pre-K.

### **Research Questions**

The following research questions guided the study:

RQ1: What factors impact whether or not Black parents and guardians decide to send their children to a Pre-K program?

RQ2: How do parental demographics such as age, marital status, income, education, and employment impact the decision regarding early childhood education?

RQ3: In what ways do Black parents and guardians feel that their early childcare decisions affected their child's success in school?

RQ4: What are Black parents and guardians looking for in an early childhood program?

RQ5: What factors would increase Black parents' interest in sending their kids to Pre-K?

### **Significance of the Study**

This research is important to build an understanding between the education sector and families. Often, policymakers make decisions about children without input from their parents and guardians. The U.S. government has invested huge amounts of money into Pre-K programs (Durkin et al., 2022). Investing money and other efforts will not impact children if families, specifically Black families, continue not to enroll their children in Pre-K. Understanding the perspectives and experiences of Black families might be able to get more families invested in the early childhood education process (Isaacs, 2012).

There are various research studies on the possible benefits and disadvantages of Pre-K. According to a long-term study involving nearly 1400 former students at a publicly funded preschool program in Chicago, there is a consistent and enduring benefit for children who began preschool at age three or four compared to children who began kindergarten when older, and this is especially true for males and children of high-school dropouts (Melhuish, 2011). Another study that took place, however, found that the children in their sample who attended Pre-K had lower state achievement test scores in third through sixth grade. Beyond test scores, they also found a negative effect for disciplinary infractions, attendance, and receipt of special education services, with null effects on retention (Durkin et al., 2022). Understandably, all the contradicting information can make a big decision like this one even more difficult. However, it is

important to know the guardians' perspectives because they are the ones making the decisions. There would be no Pre-K programs to invest in if there were not any kids to attend.

### **Definition of Key Terms**

For the purpose of this study, the following terms are defined:

#### ***Disciplinary Infractions***

For the purpose of this study, disciplinary infractions are frequent or serious misbehaviors that tend to disrupt the school's learning climate and require an administrator's intervention, including exclusion from the classroom, referral to the Dean of Students or administrator, and suspension.

#### ***Early Childhood Care***

For the purpose of this study, this includes preschool, Pre-K, Head Start, daycare, family, friend, or neighbor (FFN) care, and any other option for how a child is being cared for between the ages of three and four.

#### ***FFN Care***

For the purpose of this study, FFN care includes a family member, friend, or neighbor watching children between the ages of three and four instead of attending Pre-K.

#### ***Fugitive Pedagogy***

This term is defined as the social and rhetorical frame of Black Americans' pursuit to enact affirming and humanizing practices of teaching and learning (Givens, 2021).

***Implicit Bias***

This term is defined as unconscious attitudes that influence many facets of people's lives, including perceptions, behaviors, and decisions. These occur automatically and unintentionally and are attributed to particular qualities of a member of a group by the individual (Tefera et al., 2017).

***Pre-K***

For the purpose of this study, Pre-K, or Pre-Kindergarten, is a voluntary classroom-based preschool program for children ages three to four years old.

***Retention***

This term is defined as the practice of not promoting students up a grade level in school (e.g., students repeat a grade level) and is based on the belief that children learn more academically by repeating a grade (Fait, 1982).

***Standardized Test Scores***

This term is defined as any form of test that is scored in a standard or consistent manner, making it possible to compare the relative performance of individuals or groups of students (Bartik & Hershbein, 2018). For the purpose of this study, the researcher retrieved standardized test scores from the iReady online assessment.

***Title I***

This term is defined as Part A of the Elementary and Secondary Education Act, as amended by the Every Student Succeeds Act (ESEA). It provides financial assistance to local educational agencies for children from low-income families to help ensure that all children meet challenging state academic standards (U.S. Department of Education, 2015).

### ***Zero Tolerance Policy***

This term is defined as a disciplinary policy that mandates strict punitive punishments for specific offenses regardless of situational context, mitigating circumstances, or the gravity of behavior (Tefera et al., 2017).

### **Limitations**

The sample is a limitation because the study used a convenience sample of parents and guardians at one specific school in the Midwest. This population may not be representative of the reasons Black families across the country are making their decisions regarding early childhood education for their children. The instrument is also a limitation because participants completed surveys and/or interview questions that the researcher created herself, although committee members reviewed questions to prevent leading. The survey was sent out to all parents at the school but required caregivers to volunteer to participate. Test scores remained objective because secondary data were utilized for the quantitative portion of the study. However, the researcher found that the school did not have information regarding whether students went to Pre-K, daycare, or FFN care before attending the school. The lack of documentation required the researcher to create an additional questionnaire for families. The researcher found the uncertainty around what is considered preschool versus daycare a potential limitation because many daycares now promote themselves as learning-based.

Student iReady diagnostic test scores in math and reading were used to measure student academic success. These tests were taken by students in September and January and are arguably not the sole measure of overall academic success for all students. These tests were taken on an iPad or Chromebook, and students who were unfamiliar with these



devices could get scores that did not reflect their true knowledge. However, the standardized test used by the school was the same for all students, so it was a controlled variable in the study. Finally, while collecting secondary data regarding student behaviors, the researcher found that the school did not have a comprehensive behavior-tracking system. A lack of a behavior tracking system required the researcher to gather information from multiple sources, including teachers, suspensions, the Dean of Students' Student Leadership and Accountability Center referrals, and student documentation sent to the principal's office. The researcher used triangulation of the qualitative and quantitative results in this mixed-method study to increase the validity and credibility of the research findings.

### **Conclusion**

Parents must consider various options to determine the best way to educate their young children. While some parents choose more learning-focused options, such as Pre-K or preschool, others choose daycares, family, friends, and neighbor providers or to keep them at home for those pivotal years. In the subsequent chapter, the researcher investigated several possible considerations of this choice, including the historical perspective of education for Black people in America, as well as how systemic racism has led to inequities in education. Early childhood care options, as well as the accessibility and frequency of those options, are also discussed. Research will also be explored pertaining to the various academic, social, emotional, and behavioral effects of attending Pre-K on children, especially Black children.

## **Chapter 2: Review of Literature**

As the idea of universal Pre-K for all children in the United States has become of greater interest to scholars and politicians, research has expanded to further analyze the impact of Pre-K programs on students and the decision-making factors regarding these programs for parents and guardians. Race's impact on early childhood care decision-making and success is an essential, but often overlooked piece.

This literature review was guided by the overarching theoretical frameworks of Choice Theory and Critical Race Theory to explore factors influencing Black parents' early childhood care decisions. This chapter includes the history and origins of early childhood education, specifically through the lens of Black individuals and institutional racism, and the root of early childhood care options for parents and access to these systems. Finally, the researcher will address research findings concerning how Pre-K affects children's academic and social success.

The literature review touches on the key aspects of the study and how the history of education for Black people in America is still relevant today. The literature aided in the study's overall design by presenting new information and contradictions. Gaps in current research helped to develop this study by showing what is still needed to understand this complex topic. While previous research has examined parental choices around early childhood education, the voices of Black parents and guardians have continuously been overlooked. The achievement gap between White students and students of color has also been studied at great lengths, but it has not yet been done in conjunction with the thoughts and experiences of parents. The researcher included this information in the literature review because it provides context for these decisions. One

cannot look at the educational choices of Black parents without first understanding the history of education for Black people in America.

### **Theoretical Framework**

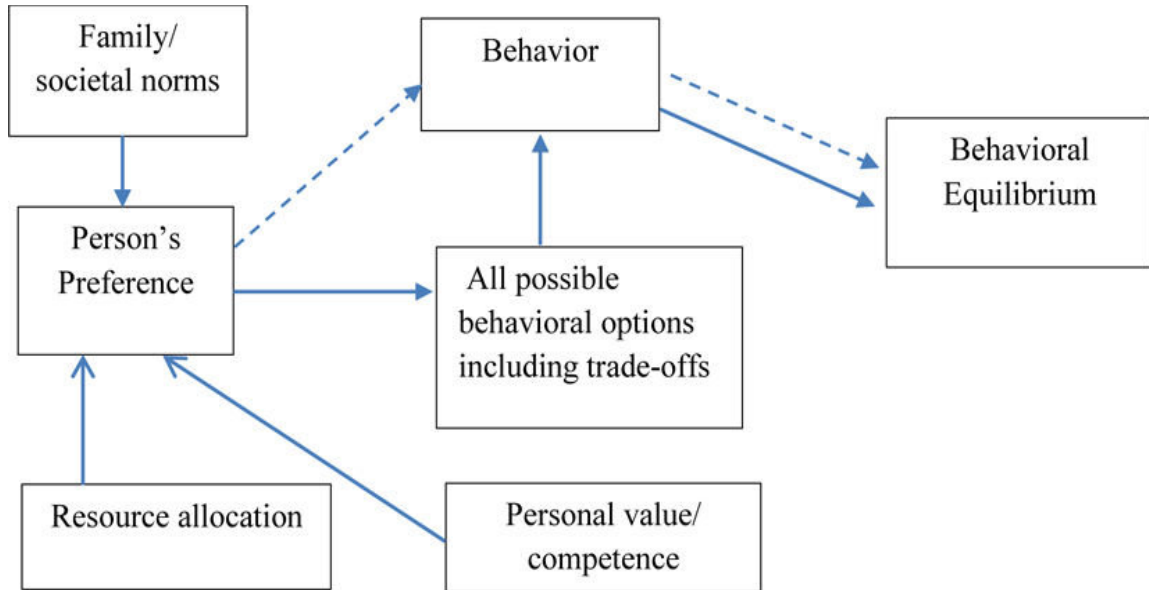
Choice Theory and Critical Race Theory (CRT) served as a guide to explore this research topic. The researcher linked pertinent components of these frameworks to the study's design, implementation, and data analysis. Based on the Choice Theory framework, individuals consider the options available and use personal criteria to determine which option best meets their needs (Levin & Milgrom, 2004). Glasser (2010) stated that people process information, make decisions, and subconsciously choose how they feel about the situation they created rather than passively experiencing emotions based on external sources.

Glasser's Choice Theory expands on Adam Smith's idea of Rational Choice Theory dating back to the eighteenth century (as cited in Friedman & Hechter, 1988). In 1776, Smith explored the idea that human nature tends to make choices in their self-interest to provide themselves with the greatest benefit (as cited in Friedman & Hechter, 1988). Individuals contemplate trade-offs among different choices by predicting the happiness they would receive from each choice and the perceived probability that their choice will yield the desired outcome (Friedman & Hechter, 1988). Witztum (2005) noted that although people may be equally self-interested, they face vastly different options due to social circumstances. People's choices are not as straightforward or easily understood by others because they are impacted by various factors, including familial and societal norms, access to resources, and personal values and competency (Friedman & Hechter, 1988). Figure 1 shows a conceptual framework model based on Friedman and

Hechter's interpretation of Rational Choice Theory (as cited in Friedman & Hechter, 1988). The bold lines represent a person's rational decision-making process, while the dashed lines show a person's impromptu behavioral decision process.

Figure 1

*A Conceptual Framework Based on the Rational Choice Theory*



*Note.* Friedman & Hechter, 1988.

Glasser (2010) stated that “Choice Theory challenges this ancient I-know-what’s-right-for-you tradition” (p. 5). Moré (2019) determined the foundation of making more intentional choices regardless of life’s inevitably difficult circumstances is that focusing on what you can control allows people to move from feeling powerless to feeling in charge of their lives. According to Glasser (2010), “The seeds of almost all of our unhappiness are planted early in our lives when we begin to encounter people who have discovered not only what is right for them – but also, unfortunately, what is right for us” (p. 4). These negative outcomes arise because people often follow damaging generational habits that they believe are the best or their only choice (Glasser, 2010). When people

become more intentional about the decision-making process and recognize how genetics and life experiences influence decisions, they can have more control over their choices and create better outcomes (Glasser, 2010).

Supporters of choices in education claim that parents know what is best for their children and should be able to make decisions that align with their opinion of the best way to educate their children (Harris & Larsen, 2015). Critics of school choice dispute that many parents in low-income households lack the resources to make comprehensive educational decisions and choose schools based on factors other than academics (Chingos & Blagg, 2017; Harris & Larsen, 2015). Chingos & Monarrez (2020) revealed that choosing schools can increase segregation because families tend to choose schools with similar demographics to their own families. Posey-Maddox et al. (2021) further supported the idea of school choice increasing segregation. They found that anti-racism was a major aspect of Black parents' educational decisions for their children, leading them to consider schools with a higher Black student population.

In order to truly understand Black parents' decision-making, Choice Theory must be considered in conjunction with CRT. Choice Theory falls short of fully addressing the complex trauma and lived experiences of Black people in America (Cao, 2022). Black parents and guardians must consider many different factors when weighing their options about education compared to White people, due to systemic racism (Posey-Maddox et al., 2021). CRT emerged in the late 1970s and examined the complex concepts of racism, power, and policy and how they are woven together (Delgado & Stefancic, 2017). The theory explains that racism is more than just individual prejudice and bias; it is embedded in policies, systems, institutions, and power dynamics throughout our country (Dixson &

Rousseau Anderson, 2017). Laws and practices have been put in place to create and sustain inequalities in the United States, from slavery and Jim Crow laws to the Chinese Exclusion Act of 1882, to the 1953 Indian Termination policy (Liu, 2022). Liu (2022) argues that although these acts and policies have ended, they continue to contribute to systemic racism and can be seen in areas like employment, housing, and education in the present day. Families have limited choices based on race and SES due to areas being separated into various school districts unequal in wealth, zoning laws preventing affordable housing to be built in areas with more desirable schools, and neighborhood-based school assignments keeping students out of neighborhoods that the family cannot afford to live (Chingos & Monarrez, 2020). CRT believes that race is a social construct because physical features and geography play a part in how people understand race, but society determines how people perceive race (Liu, 2022). Lynn and Parker (2006) reviewed studies that used CRT as a tool to analyze, critique, and improve K-12 education and offer the following definition:

Critical Race studies in education could be defined as a critique of racism as a system of oppression and exploitation that explores the historical and contemporary constructions and manifestations of race in our society with particular attention to how these issues are manifested in schools. Critical Race studies in education then - like critical pedagogy - are ultimately concerned with employing multiple methods and borrowing from diverse traditions in the law, sociology, ethnic studies and other fields to formulate a robust analysis of race and racism as a social, political and economic system of advantages and

disadvantages accorded to social groups based on their skin color and status in a clearly defined racial hierarchy. (p. 282)

While many believe that CRT is an essential lens through which to view the education of students of color and how to create a more inclusive system, it does not come without backlash (Liu, 2022). Educators and school districts have been facing legal action for teaching about systemic racism and implicit bias, which many are referring to as CRT (Cao, 2022). CRT has become a buzzword for many right-wing organizations, and there is debate about whether it creates a further divide or helps us investigate the racial inequalities woven into the fabric of American society (Liu, 2022). In 1940, the American Association of University Professors released the Statement of Academic Freedom and Tenure. The statement entitled educators to discuss relevant subjects in the classroom in the pursuit of truth and knowledge without interference. Cao (2022) critiques the judicial system's failure to protect educators and students through academic freedom.

### **History of Education for Black Americans**

Since the time of slavery, Black education was an act of resilience and rebellion. Although it was outlawed and deemed a criminal act, Black men and women continued their quest for freedom through education, which Givens refers to as fugitive pedagogy (2021). Given rampant anti-Black violence during Jim Crow, Black schoolteachers feigned compliance with White power structures while simultaneously working to overcome it (Givens, 2021). The *Brown v. Board of Education* ruling in 1954 is known as a pivotal moment in U.S. history when the Supreme Court ruled that segregating schools based on race was unconstitutional (as cited in Johnson & Nazaryan, 2019). From 1940 to

1970, in what is now known as the Great Migration, four million African Americans moved northward and westward away from the South to escape unfair Jim Crow restrictions (Derenoncourt, 2022). Looking for freedom and jobs, Black families settled in major cities while White families began to leave public schools and city neighborhoods and move to the suburbs (Derenoncourt, 2022).

Despite the lack of resources in Black schools, many high-quality schools served Black families (Givens, 2021). When schools began to integrate, Black educators were often not allowed to teach in White schools, leading to the predominantly White female workforce we have in education today (Givens, 2021). By the 1980s, many major American cities were home to a predominantly poor and non-White population (Noguera & Alicea, 2020). As monumental societal changes took place, causing riots to break out in these Great Migration cities, it led to higher police spending, incarceration, and murder rates, negatively impacting communities of color (Derenoncourt, 2022). These same issues still disproportionately impact inner cities today. Although the country has improved since 1954, residential and educational segregation continues to be a problem in American society (Johnson & Nazaryan, 2019).

In 2007, the Supreme Court prohibited school districts from attempting to desegregate schools in the *Parents Involved* ruling (Rothstein, 2019). Civil rights activists first came up with *de facto* segregation in an attempt to force the country to recognize that schools were still segregated out of the South (Glass, 2018). However, lawmakers, school officials, and citizens alike used this new term to blame racial segregation on personal choice and deny any responsibility (Glass, 2018). The Supreme Court concluded that *de facto* segregation is the reason people of different races live in different



neighborhoods, and the government does not have the responsibility to intervene because it is the individuals' personal choice to decide where to live (as cited in Rothstein, 2019). This ruling helped to re-segregate public schools (Green, 1999). Rothstein (2019) argues that de facto segregation is a myth, and the government has the responsibility to intervene in an attempt to integrate schools in segregated neighborhoods because residential segregation is a result of racist laws and policies made by the government in the past. In 1999, Green noted that African Americans were experiencing an increase in public school segregation. Rothstein (2019) echoed that observation 20 years later, stating that racially segregated neighborhoods have caused schools in the United States to be more racially segregated now than they have been in the past 50 years. While many social scientists question the efficacy of school desegregation, it is in the best interest of Black students to have an integrated society (Green, 1999).

Today, the cry for social and racial justice in America has been exacerbated by the countless murders of Black people, such as George Floyd, Breonna Taylor, and Ahmaud Arbery (Noguera & Alicea, 2020). In the push for racial equity, the education system cannot be overlooked (Noguera & Alicea, 2020). School districts across the nation are implementing various anti-racism and equity professional development in an attempt to be more inclusive (Horsford et al., 2021). Johnson and Nazaryan (2019) argue that while culturally responsive teaching and anti-bias training are helpful, they overlook the large issue of how racially separate and unequal schools continue to be almost 70 years after the *Brown v. Board of Education* ruling. While these trainings can have an impact on interpersonal racism, they overlook structural racism that has been compounding for centuries.

Historically, the United States has not invested in Black schools and communities (Horsford et al., 2021). Policies, such as unequal access to healthy food, health care, clean water and air, redlining, and unfair bank lending all continue to impact this structural racism, because they continue to disadvantage communities of color (Noguera & Alicea, 2020). Local property taxes determining school funding, inexperienced teachers being hired to teach at the most disadvantaged schools, overcrowding, poor school building infrastructure, and lack of extracurricular activities and Advanced Placement (AP) classes lead to further inequality in low-income schools, which are often attended by students of color (Horsford et al., 2021). Many Black parents worry that low expectations, racially biased teaching and curriculum, and funding going towards the surveillance of Black students rather than investing in counselors and social workers further exacerbate the issues (Horsford et al., 2021).

Across the country, COVID-19 and racial violence have also had an overwhelmingly disproportionate and traumatic impact on Black students, families, and communities (Horsford et al., 2021). One study found that 93% of Black respondents reported that the increased visibility of White supremacy and police violence in the past few years negatively impacted them and made them increasingly worried about their safety and the safety of loved ones (Horsford et al., 2021). This widespread loss and uncertainty, accompanied by further racial and political polarization in American society, directly affects Black families and education (Horsford et al., 2021). According to Horsford et al. (2021), many Black parents experience constant worry about their child's safety when they leave the house. They are concerned that public schools are not

equipped to meet their children's intellectual, social, or emotional needs, which has caused many parents to lose trust in the education system (Horsford et al., 2021).

### **Discipline at School for Black Children**

Racial inequality in U.S. school disciplinary policies is a major civil rights issue and disproportionately affects students of color (Dutil, 2020; Ford, 2021; Tefera et al., 2017). Before suspensions and expulsions, corporal punishment was the most prevalent disciplinary method used in schools until the 1970s and is still legally used in many states today (Tefera et al., 2017). Zero-tolerance policies were introduced in the 1990s after several high-profile school shootings led to an increase in public perception of school violence (Tefera et al., 2017). Zero tolerance policies mandate strict punitive punishments for specific offenses regardless of situational context, mitigating circumstances, or the gravity of behavior (Ford, 2021). While these policies originally mentioned bringing lethal weapons to school, over time they began to expand to include drugs, alcohol, disruptive behaviors, and other nonviolent offenses, which led to more subjectivity (Ford, 2021). School districts created these expansive policies due to the Broken Glass Theory with the idea that harsh punishments for minor offenses would prevent major ones (Ford, 2021). Tefera et al. (2017) argue that although these policies appear racially neutral in design, research shows a correlation between particular discipline approaches and racially disproportionate outcomes because of the way these policies are enacted in the classroom, school, and school system.

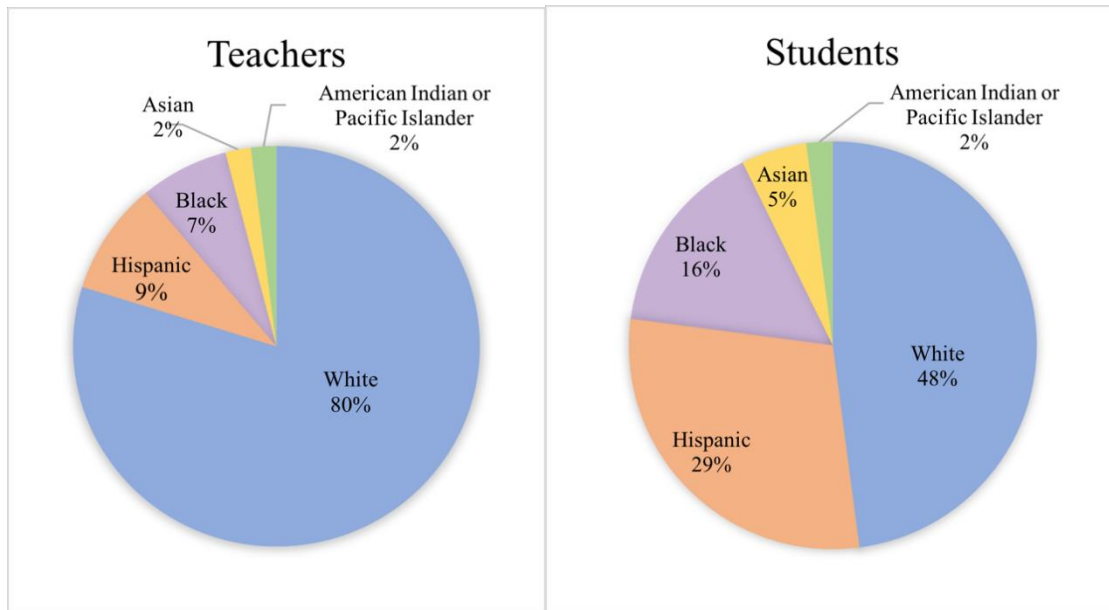
Students of Color, particularly Black students, are referred, suspended, and expelled from K-12 public schools at significantly higher rates than White students (Tefera et al., 2017). Despite school violence remaining relatively stable within the last

30 years, there has been an increase in the number of Black youth being punished under zero-tolerance policies (Ford, 2021). A study by the U.S. Department of Education found that Black students made up more than 70% of the school-related incidents referred to law enforcement (Elias, 2013). These discrepancies are not just for older children. While only 18% of the children in Pre-K are Black, they make up 48% of the students receiving out-of-school suspensions (Tefera et al., 2017). Black youth are disciplined sooner and more harshly than their White counterparts for similar infractions, because research shows that Black students are more likely to be monitored, scrutinized, and suspected by school staff due to implicit biases (Ford, 2021).

Research shows that a large contributing factor to biases in schools is that staff members are often not representative of student populations (Tefera et al., 2017). Schaeffer (2021) notes that U.S. K-12 public school teachers are considerably less racially and ethnically diverse than the students they teach, and a similar diversity pattern is also found with school principals. Figure 1 shows the discrepancies between teachers' and students' racial demographics (National Center for Education Statistics, 2022).

Figure 2 shows the discrepancies between teachers' and students' racial demographics (National Center for Education Statistics, 2022).

Figure 2.

*Race of Teachers vs. Students*

Tefera et al. (2017) argue that these implicit biases stem from the lack of meaningful contact with other racial, ethnic, and social groups prior to teaching students of color, which leads to racial anxiety and stereotyping in the classroom. Black students with teachers of the same race were rated as less disruptive by their teachers and suspended less often compared to those with teachers of a different race (Wright, 2015). Tefera et al. (2017) also noted that when Black students are disciplined, it is often for subjective offenses such as defiance or disrespect. Statistics show that Black students receive harsher punishments for their behaviors, so they inherently have more disciplinary infractions (Ford, 2021). Tefera et al. (2017) found that there was no evidence to support the idea that students of color are more likely to engage in problem behaviors, but they are punished more harshly than White students who exhibit the same behaviors.

Students of color experience higher rates of trauma, and a punitive approach can have detrimental effects, such as criminalizing and retraumatizing this group of children

(Dutil, 2020). Balistreri and Alvira-Hammond (2016) found that Black youth are more likely to have adverse childhood experiences than any other race or ethnicity, which resulted in significant impairment in cognitive, social, and emotional development and functioning. Young children who have experienced trauma are highly vulnerable to negative consequences in school, especially when school personnel are insufficiently trained to recognize and respond to signs of trauma (Walkley & Cox, 2013; Weist-Stevenson & Lee, 2016). There is increasing evidence that experiencing racism and racial stressors is a strong predictor of psychiatric symptoms, emotional distress, and the development of post-traumatic stress disorder (Dutil, 2020). In addition to the emotional implications, exclusionary discipline practices, such as suspensions and expulsions are connected to negative academic effects and higher rates of entry into the criminal justice system (Tefera et al., 2017). One study estimated that school discipline caused 12 million days of lost instructional time each year (Tefera et al., 2017). Ford (2021) argues that zero-tolerance policies and practices in schools are biased against Black youth and expose them to the juvenile justice system at an early age because schools are required to refer students to law enforcement.

Further consideration needs to be given to trauma related to poverty, intergenerational trauma, and discrimination among students of color (Dutil, 2020). Dutil (2020) suggests replacing exclusionary discipline with trauma-informed practices that focus on social-emotional support for students. Discipline policies that push students out of the classroom and into the criminal justice system create a phenomenon known as the school-to-prison pipeline (Elias, 2013). This pipeline was created by imposing suspensions, expulsions, and referrals to juvenile justice systems on children in schools at

alarming rates, leading to decreased access to instruction and social-emotional skills (Dutil, 2020). Removing zero-tolerance policies from U.S. school systems, replacing them with preventative discipline measures and trauma-informed practices, as well as hiring more diverse teachers and administrators would help in the effort to dismantle the school-to-prison pipeline (Dutil, 2020; Ford, 2021; Tefera et al., 2017). Dutil (2020) specifically notes the significant lack of early assessment and intervention to identify disruptive behavior as a manifestation of trauma.

### **The Academic Achievement Gap**

The achievement gap in education refers to the disparity in academic performance between groups of students, including standardized test scores, grades, course selections, dropout rates, and college completion rates (Mason et al., 2019). This term is most often used to describe the gaps in academic performance between Black and Hispanic students compared to non-Hispanic White students and students from low SES (i.e., parental education and household income) families compared to middle and high SES families (Mason et al., 2019). On average, Black children enter school with lower literacy, math, and science skills, and these achievement gaps remain or increase slightly as children move through grade levels (Henry et al., 2020; Reardon & Portilla, 2016). Extensive research shows that lower academic achievement for Black children contributes to an ongoing pattern of inequities in success as an adult, such as educational attainment, annual earnings, and economic mobility (Henry et al., 2020). The U.S. education system claims to have made unsuccessful attempts to close these achievement gaps between groups of students by expanding early childhood education programs, creating smaller

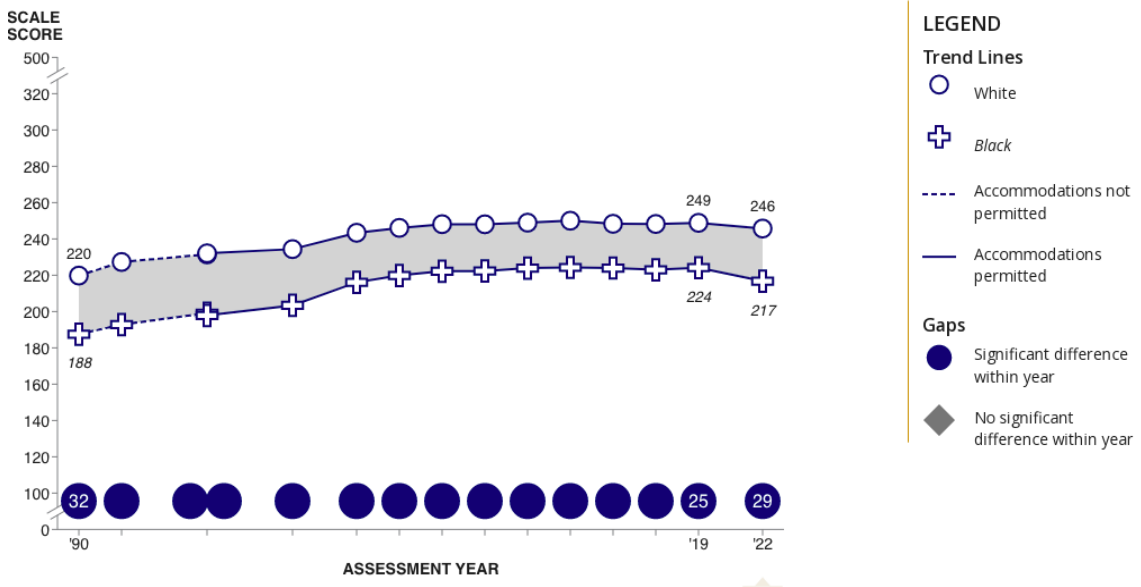
schools and class sizes, raising academic standards, and improving the quality of teachers for ethnic-racial minority and low SES students (Williams, 2021).

Morgan et al. (2023) investigated the racial disparities in advanced science and math achievement during elementary school. They found that 13% to 16% of White students and only 3% to 4% of Black or Hispanic students displayed advanced achievement in science and math. Morgan et al. (2023) found that the family's SES had an impact on student achievement in science, math, and reading by the time children were in kindergarten. This achievement in kindergarten consistently correlated with advanced science and math placement in first, second, third, fourth, and fifth grades. Families living in poverty often lack access to resources and information to support their children's learning and development, which keeps them from providing the same experiences for their children (Williams, 2021). Research shows that a student's third-grade reading level is a predictor of eighth-grade reading level, ninth-grade academic performance, high school graduation, and college attendance, even after accounting for demographic characteristics (Lesnick et al., 2010). Figure 3 and Figure 4 show how the reading and math achievement gaps between Black and White students in the United States have remained statistically significant over the last 30 years.



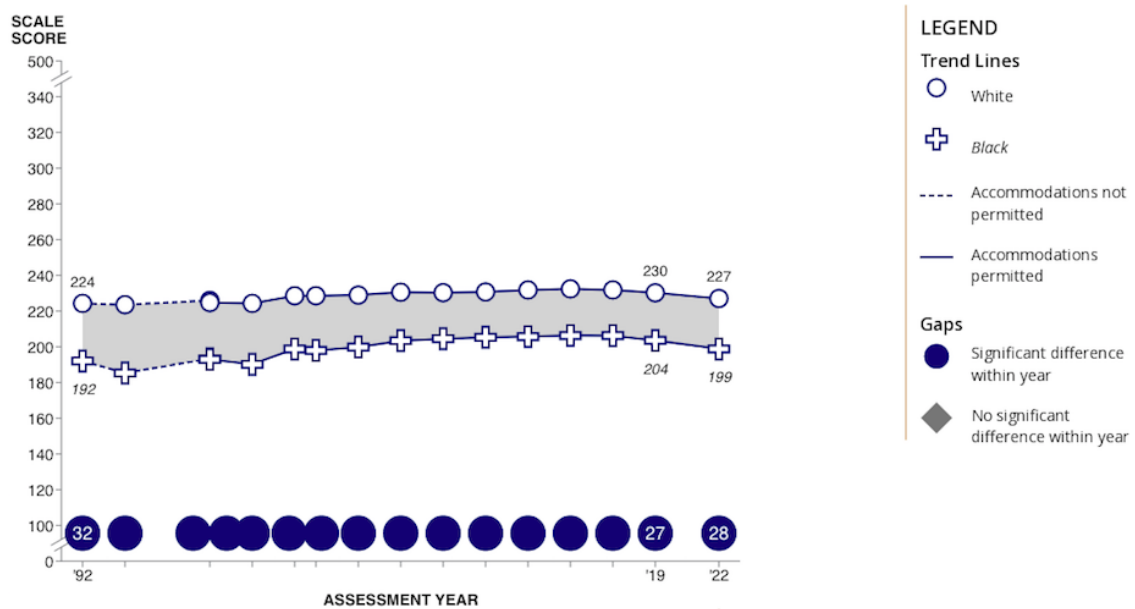
Figure 3.

*Mathematics Score Gap Between Fourth-Grade White and Black Students Nationally*



The achievement gaps are even more prominent in Missouri and continue beyond fourth grade. Wu (2022) found that retention experiences of Black and Hispanic students had a substantial impact on racial academic achievement gaps, followed by poverty concentration in the school, class sizes, and school discipline. Children with rich pre-literacy experiences during early developmental years, such as encountering a variety of words through everyday conversations and being read to by parents, have better outcomes in school (Dearing et al., 2004).

Figure 4.

*Reading Score Gap Between Fourth-Grade White and Black Students Nationally*

Research also shows that parental involvement in a child's education and school experience greatly influences a child's academic success, especially for children from low SES households, English Language Learners, and children from diverse cultural backgrounds (Jeynes, 2012). SES and ethnicity come into play here because research shows that parents from low SES backgrounds are less likely to communicate with teachers about their child's early literacy development and ask how to support their child's learning at home, especially if there are cultural or language differences between home and school (Sheldon & Epstein, 2005). Findings suggest that it is important to examine the intersectionality of race and SES and how they influence achievement gaps and educational inequalities (Henry et al., 2020).

Henry et al. (2020) examined how race and SES intersect to create achievement gaps from kindergarten through middle school between Black and White students and

found that parental education and household income did not fully explain the racial gaps. Researchers found that race may fundamentally alter the experiences of Black Americans regardless of SES because racial and social stratification is historically interconnected, Black families face greater proximity to spatial, relational, and intergenerational disadvantage than White families (Gosa & Alexander, 2007). Regardless of a family's current SES status, Black Americans are more likely to have grown up in poor households and communities, live in or near distressed neighborhoods, and be embedded in disadvantaged family and peer networks (Henry et al., 2020). Black and White children from high SES households may not make similar gains in academic achievement because proximity to disadvantage shapes families' exposure to environmental stressors, access to resources, and sociocultural factors at a family and community level (Magnuson & Votruba-Drzal, 2009).

### **Early Childhood Care Options**

Choosing early childhood care for young children requires families to examine their child's and family's complex needs (Carlin et al., 2019). While universal Pre-K for four-year-olds has become a popular topic in recent years, it is not mandatory in the United States, and some states do not require children to begin school until the age of seven (Williams, 2021). Even before the COVID-19 pandemic decreased Pre-K enrollment for the first time in 20 years, the enrollment growth seen in the past two decades had already begun to slow (Friedman-Krauss et al., 2021). Stanford (2023) pointed out that while universal Pre-K is supposed to be accessible to all four-year-olds, state funding and enrollment caps often determine who can participate. In order for a state to truly have universal Pre-K, at least 70% of four-year-olds would have to be

enrolled, and only the District of Columbia, Wisconsin, Florida, Vermont, and Oklahoma were meeting that criteria prior to the COVID-19 pandemic (Stanford, 2023). Missouri had only 7% of four-year-olds enrolled in Pre-K during the 2019-2020 school year, one of the lowest in the nation (Friedman-Krauss et al., 2021).

Research suggests that although there are a variety of different Pre-K programs available, often the children who would benefit the most from these programs do not enroll (Barnett & Yarosz, 2007; Fairman et al., 2016). According to a comprehensive study conducted comparing the participation of three and four-year-olds in Pre-K programs from 1991 to 2005, there are a few common factors that affect participation, including the child's race, family income, mother's education, age, and employment (Barnett & Yarosz, 2007). In relation to race, Black parents were also more likely than White or Hispanic parents to choose relative-care options for their infants and toddlers (Early & Burchinal, 2001). Despite the effects of COVID-19, trauma from racial inequality, and the lack of trust between Black parents and the U.S. education system, Black communities continue to come together to take care of each other (Horsford et al., 2021). From this perspective, it is clear why many Black parents choose FFN to care for their young children.

A national survey from 1995 found that families with incomes that are at least twice the poverty line are more likely to choose non-parental childcare options for their children than lower-income households (Early & Burchinal, 2001). This study coincides with a study nearly 20 years later, which found that families who worked more hours were more likely to enroll their children in center-based early childhood care, such as Pre-K, and decrease the use of informal care options, such as FFN care (Carlin et al.,

2019). Carlin et al. (2019) also found that parents who completed higher education levels were more likely to choose center-based childcare, while lower-income households more often chose FFN care. In concordance with previous research, Early and Burchinal (2001) found that families who chose Pre-K valued early childcare options with trained care providers and who would care for children when sick (Early & Burchinal, 2001).

According to Fairman et al. (2016), “Children from lower-income families still have lower Pre-K participation rates than those from average-income families, and the highest participation rates are for children whose mothers have a bachelor’s degree or higher” (pp. 2-3). Low SES families tend to have limited options for childcare, quality early childhood education programs, and resources to support parents’ efforts as their child’s first teacher (Williams, 2021). As states relaxed their standards during the pandemic, the quality of many programs remained a concern, as states already spent too little per child to provide a high-quality program (Friedman-Krauss et al., 2021).

### **Positive Effects of Pre-K**

Substantial research shows that important academic, social, and emotional development takes place outside of the traditional K-12 classroom setting, including during early childhood, before and after school, and during the summer months (Williams, 2021). High-quality programs and activities support youth development in many ways, including keeping kids in safe environments, fostering healthy relationships with peers and mentors, and teaching skills, beliefs, and behaviors (Karoly et al., 2005). Underserved children, including low SES and children of color, are less likely than their peers to have access to these learning opportunities (Wright, 2015). Studies showed that programs that followed the SAFE programming structure (sequenced, active, focused,

and explicit) yielded significant increases in positive social behaviors, academic achievement, and youth self-perceptions (Williams, 2021).

Studies show that children from low socioeconomic (SES) households begin school further behind their more privileged peers in basic knowledge and social skills, and these gaps typically widen over time (Károly et al., 2005). According to Issacs (2012), “Fewer than half (48 percent) of poor children are ready for school at age five, compared to 75 percent of children from families with moderate and high income, a 27 percentage point gap” (p. 1). This could be due to fewer financial resources, generally poorer health, less education, and higher rates of teen pregnancy and single parenting (Isaacs, 2012). This discrepancy directly affects Black children because they are more than twice as likely as their White peers to attend high-poverty schools (García, 2020). According to García (2020), “In America, race and poverty are intertwined, further disadvantaging Black students” (p. 2).

According to Sedgwick and Stothard (2018), “Up to 50% of children starting mainstream school have speech, language, and communication needs to be linked to poor academic performance and social, emotional, and mental health needs.” (p. 361) With so many children experiencing these substantial needs, Pre-K is the first structured place outside of the home for interventions to be implemented (Zigler, 2003). It has been suggested that learning should begin as early as possible, with some advocating that it should begin in infancy (Miner, 2019). However, time, education, and resource limitations may limit caregivers’ abilities to support their children (Issacs, 2012). Further, parents may have different goals around their child’s early learning experiences. Differing goals may especially come into play when considering the parents’ ethnic and

cultural backgrounds (Curry, 2018). Research shows that Pre-K programs are typically higher quality than daycare or center-based programs, leaving children more ready for kindergarten (Magnuson et al., 2007).

Bartik and Hershbein (2018) explain that Pre-K programs only need to have modest positive effects to predict long-term benefits greater than the program's cost. Pre-K would only need to reduce referral by 3.5% or retention by 2.9% in order to recoup the cost of Pre-K programs. One study conducted to determine if attendance in a quality Pre-K program had a positive effect on kindergarten mathematics readiness skills and achievement found that the children who attended Pre-K scored significantly higher than those who did not (Perry, 1999). According to Gormley et al. (2017), a study in Oklahoma, the second state in the United States to adopt a universal Pre-K program, found a significant impact on school readiness, motor skills, and language development at the start of kindergarten. The population in this study still exhibited significant results eight years later, with increased standardized math scores, increased participation in honors courses, and reduced grade retention for students who attended Pre-K programs (Gormley et al., 2017).

While Bartik and Hershbein (2018) did not find statistically significant evidence of average state Pre-K programs affecting the average student's test scores, grade retention, or referral to special education programs, they did find that states with high-quality Pre-K programs had a positive effect on math scores for all students. They also found that school districts with a majority of Black students had significant positive effects on math and reading test scores, even in states with high-quality Pre-K programs (Bartik & Hershbein, 2018). A similar study found that higher state spending per student

in Pre-K significantly increased English Language Arts test scores for all fourth graders, especially Black students, which subsequently decreased the achievement gap between Black and White students (Pendola et al., 2022).

### **Insignificant or Negative Effects of Pre-K**

It is important to examine whether a program for three- and four-year-olds can truly draw conclusions for their lives one, five, 10, or even 20 years in the future. According to a publication from the MDRC, “decades of research on early care and education have shown four-year-old children who enroll in Pre-K programs start kindergarten scoring higher on assessments of academic skills than those who do not” (McCormick et al., 2022, p. 1). McCormick et al. (2022) also found, however, that as early as kindergarten or first grade, these academic gaps close due to what is known as fadeout or convergence, which has led to debate regarding the value of large-scale investment in Pre-K. In a national analysis of public Pre-K effects on standardized test scores, grade retention, and referral to special education, Bartik and Hershbein (2018) found that the average Pre-K program had no significant effects on students by the time they reached fourth grade. While Pendola et al. (2022) found positive effects on fourth-grade English Language Arts test scores with increased state spending on Pre-K programs, they also found that increases in the Pre-K quality standards index are associated with a decrease in Black student achievement and subsequently larger achievement gap between Black and White students. These legislated standards can be adopted to show compliance, which instead can uphold outdated practices and keep culturally relevant approaches and content from being accessible to the students who need it most (Pendola et al., 2022). According to McCormick et al. (2022), measuring



more complex critical thinking and problem-solving skills beyond rote memorization of facts, such as letter and number identification, is key to a more comprehensive understanding of the benefits of Pre-K programming. Unconstrained skills are acquired gradually and continue to develop throughout a person's life; such as vocabulary, reading comprehension, storytelling, and oral discourse (McCormick et al., 2022). These higher-order thinking skills better indicate children's ability to learn and apply new information. In contrast, rote memorization does not mean a child can access increasingly challenging information as they move through higher grades.

Many studies examining the effectiveness of Pre-K programs look at programs that are only accessible to an elite few. While two studies from the 1960s-1970s found profound effects of Pre-K attendance on test scores and adult earnings, the two Pre-K programs in the study cost between \$21,000 and \$89,000 per student (Bartik & Hershbein, 2018). In other studies analyzing data from places closer to typical state Pre-K programs, most are still of higher quality than the typical state Pre-K program and, therefore, draw conclusions that may not be representative of the state programs families have access to (Bartik & Hershbein, 2018).

While some research shows insufficient evidence regarding the lasting effects of Pre-K, other studies have even found that attending Pre-K can have a negative impact on children. In one study, kindergarten teachers who felt they were expected to have children reading by the end of the school year went from 30% in 1998 to 80% in 2010, leaving students and teachers feeling burnt out (Bassok et al., 2016). Durkin et al. (2022) discovered that the children in a sample who attended Pre-K had lower scores on state achievement tests in third through sixth grade than those who did not. Outside of lower

test scores, research also showed that the students previously enrolled in Pre-K had worse attendance and more disciplinary infractions than their peers who did not attend Pre-K (Durkin et al., 2022). The inequalities in education appear as early as Pre-K, and the quality of Pre-K varies systematically across racial groups, often at the expense of students of color and further increasing the achievement gap (Pendola et al., 2022).

### **Summary**

This chapter reviewed the theoretical frameworks of Choice Theory and CRT, which served as a guide for examining the current research on early childhood care options and their effects. The researcher then reviewed the history of education through the lens of Black Americans, the inevitable discipline of Black students in the United States, and their academic achievement compared to other racial and ethnic groups. The researcher then looked closely at how parents and guardians make early childhood care and education choices for their children. Contradictories in research regarding the effects of Pre-K on children led to the current study's design. The subsequent chapter provides a detailed outline of the methodology and research design of the study. The population, sample, instrumentation, and ethical considerations are also identified so that the study can be replicated in the future.

### **Chapter 3: Methodology**

The following chapter presents the methodology and design of this research study. This includes a review of the problem and purpose, research questions and hypotheses being studied, the research design, population and sample, instrumentation, data collection, and analysis methods. Finally, safeguards put in place to assure confidentiality and anonymity throughout the data collection and analysis phases to protect participants are discussed.

#### **Problem and Purpose Overview**

Despite the push for universal Pre-K, many families still choose not to enroll in these programs (Hines, 2017). Parents and guardians are faced with the challenging decision regarding early childhood care and education during pivotal years of their child's life (Baumgartner & Thrash, 2020). They must weigh the pros and cons of these options and ultimately decide how they wish to begin their child's learning journey. While Pre-K, preschool, daycare, and FFN care all have the potential to be great options for young children, this research study looks into the decision-making factors of Black parents and guardians regarding early childhood care. While parent choice has been studied in the past, Black parents' perspectives have been overlooked, and this research aims to help fill that gap.

These previously overlooked perspectives and decision-making factors, in conjunction with the contradictory findings regarding the efficacy and lasting benefits of Pre-K, are what led to the current study (Christakis, 2016; Pendola et al., 2022). The goal of this study is to provide further research to assess Black families' decisions on whether or not to enroll their children in Pre-K programs and to examine if attending Pre-K

predicts Black children's academic and behavioral success in kindergarten through second grade. This information could help close the educational gap for Black children in America.

### **Hypotheses**

The following null hypotheses guided the study:

NH<sub>1</sub>: There is no difference between the academic success of Black kindergarten students on a standardized iReady math assessment based on whether or not they went to Pre-K.

NH<sub>2</sub>: There is no difference between the academic success of Black kindergarten students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

NH<sub>3</sub>: There is no difference between the academic success of Black first grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.

NH<sub>4</sub>: There is no difference between the academic success of Black first grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

NH<sub>5</sub>: There is no difference between the academic success of Black second grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.

NH<sub>6</sub>: There is no difference between the academic success of Black second grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

NH<sub>7</sub>: There is no difference between the frequency of disciplinary infractions and suspensions of Black kindergarten students based on whether or not they went to Pre-K.

NH<sub>8</sub>: There is no difference between the frequency of disciplinary infractions and suspensions of Black first grade students based on whether or not they went to Pre-K.

NH<sub>9</sub>: There is no difference between the frequency of disciplinary infractions and suspensions of Black second grade students based on whether or not they went to Pre-K.

### **Research Questions**

The following research questions guided the study:

RQ1: What factors impact whether or not Black parents and guardians decide to send their children to a Pre-K program?

RQ 2: How do parental demographics such as age, marital status, income, education, and employment impact the decision regarding early childhood education?

RQ 3: In what ways do Black parents and guardians feel that their early childcare decisions affected their child's success in school?

RQ 4: What are Black parents and guardians looking for in an early childhood program?

RQ 5: What factors would increase Black parents' interest in sending their kids to Pre-K?

### **Research Design**

This study seeks to determine how Black families decide on early childhood care options for their children and if attending Pre-K affects the academic or behavioral success of Black students in subsequent years. The researcher chose to conduct a mixed-method study and included various means of quantitative and qualitative data collection.

For this study, the term Pre-K includes any educational, center-based programs outside of the home, including preschool, prekindergarten, or Head Start programs (Barnett & Yarosz, 2007). Pre-K does not include daycare, staying in the home, or FFN care. Determining why families decide to enroll their children in Pre-K rather than other options was first done through surveys, which included quantitative and qualitative questions.

According to studies comparing the participation of three- and four-year-olds in Pre-K programs, researchers found some common factors that affect participation, including race/ethnicity, family income, mother's education, age, and employment (Barnett & Yarosz, 2007; Carlin et al., 2019; Early & Burchinal, 2001). These factors were analyzed in this study to find commonalities or differences in the findings from 2005. The researcher collected quantitative survey data regarding race, employment status, education, and other demographic information and cross-referenced it with the families' choices regarding sending their child to Pre-K to determine if there is any correlation.

In addition, survey data was collected that was open-ended and qualitative, in order to allow parents and guardians to express their decision-making process and reasoning. In a qualitative exploratory study, the researcher gains an understanding of a proposed problem by gathering a collection of personal experiences from individuals with first-hand insight into the problem or experience being researched (Creswell, 2013; Scarbrough, 2018). Surveys and interviews are appropriate when seeking to determine the "why" of a question (Scarbrough, 2018). The researcher sent out the electronic survey using various forms. First, the principal of the site location included the survey in the

school newsletter for four weeks. The researcher also posted the survey on the school's parental communication application, Class Dojo, to reach more potential participants. At the end of the survey, participants were asked to leave their email addresses if they would be open to a follow-up interview. The researcher then contacted everyone who provided their email to schedule a one-on-one interview.

The selected site for this research study was ideal because it only offers kindergarten through fifth-grade. This means that families would have to make a conscious decision to enroll their child in Pre-K before beginning elementary school rather than choosing to keep them home, enroll them in daycare, or FFN care.

To bring deeper meaning and relevance to the study, the researcher collected secondary data using a quantitative method to assess if there is a statistically significant difference in student achievement based on whether they went to Pre-K. There is a great inconsistency in the quality of Pre-K programs, which greatly affects their effectiveness in creating lasting results (Barnett & Yarosz, 2007). According to McCormick et al. (2022), four-year-olds who attended Pre-K score higher on assessments and academic skills when they begin kindergarten than those who did not, but these academic gaps begin to close as early as that same year due to fade out. This led the researcher to collect math and reading scores from the beginning, middle, and end of the academic school year.

In this study, an analysis of iReady reading and math diagnostic scores, which is the testing site's school-wide standardized summative assessment, was conducted. The iReady math diagnostic assesses students across four domains: Algebra and Algebraic Thinking, Number and Operations, Geometry, and Measurement and Data (iReady,

2019). The iReady reading diagnostic assesses students across six domains: informational text comprehension, literature comprehension, phonics, phonological awareness, high-frequency words, and vocabulary (iReady, 2019). The diagnostic assessment tested constrained and unconstrained skills. Constrained skills include things children can memorize over a relatively short period of time and can be easily assessed, such as letter recognition or high-frequency words in reading, counting, and identifying names of shapes in math. Unconstrained skills develop over the course of a lifetime and require higher level thinking and problem solving, such as vocabulary, comprehension, inference, or comparing. The National Head Start Impact Study collected six language, literacy, and math assessments in the spring of Pre-K through first grade for a four-year-old cohort of study participants and found that the initial positive impacts of Head Start were only detectable when assessing unconstrained skills (McCormick et al., 2022; Puma et al., 2005). Another study also found that associations between attending Pre-K and literacy and math outcomes were stronger for unconstrained skills by the end of kindergarten (McCormick et al., 2021). Using the iReady diagnostic to determine the academic success of K-2 students in this study will allow for an assessment of constrained and unconstrained skills that are more likely to be detectable over time.

The researcher used inferential statistics to analyze the iReady reading and math diagnostic scores for all kindergarten, first grade, and second grade students to determine if there are statistically significant differences between attending Pre-K and scores on each of the three diagnostic tests throughout the 2022-2023 school year. The hypotheses were separated by each grade level and each subject because previous studies had found differing information based on the subject (Bartik & Hershbein, 2018; Pendola et al.,



2022). It was also important to have more precise data in terms of if and when scores differ in relation to Pre-K attendance.

In order to determine the behavioral and social success of the sample, information was gathered to determine if there was a difference in the number of behavioral infractions among students who attended Pre-K and those who did not. The researcher collected the data from a school-wide behavioral referral tracking log, which included each of the various types of infractions. Data was gathered throughout the second half of the school year, from January through May. For the purpose of this study, disciplinary infractions are frequent or serious misbehaviors that tend to disrupt the learning climate of the school and require the intervention of an administrator, including exclusion from the classroom, referral to the Dean of students, and suspension. When collecting data regarding disciplinary infractions, the following rubric was used by teachers and administrators to track frequency.

Table 1.

*Disciplinary Infraction Weighted Rubric*

Incident	Weighted infraction total
Exclusion from the classroom for a period of time	1
Referral to Dean or Administrator's Office	2
Suspension	5

This rubric was used to account for the varying severity of incidents and time spent outside of the learning environment. Time spent out of the classroom, as well as other exclusionary discipline practices, such as suspensions and expulsions, are connected to negative academic effects and higher rates of entry into the criminal justice system (Tefera et al., 2017). Tefera et al. (2017) estimated that school discipline caused 12 million days of lost instructional time each year. In-school and out-of-school suspensions require students to be out of the classroom for the longest amount of time, sometimes for multiple days at a time. A referral to the Dean of students in the Student Leadership Accountability Center or administrator's office requires students to be removed from the classroom and reset in another environment. A referral to the Dean is weighted as two points because students are typically out of the room anywhere from 15 minutes to an hour. Lastly, exclusion from the classroom, including sitting in the hallway or calm-down spot, is one point because this typically lasts for the shortest amount of time. Typically, this gives students a chance to reset on their own or have a private discussion with a teacher for less than 10 minutes before returning to the learning environment. The weighted infraction totals help account for these varying lengths of time the child is unable to learn with his or her classmates.

### **Population and Sample**

For this study, the ideal target population for the qualitative research would have been parents and guardians who identify as Black or African American and have a child attending an elementary K-5 school across the country. However, the practical target population for this study was one parent and guardian who identified as Black or African American and had a child attending a single public, charter K-5 elementary school in

Saint Louis city. This study used a convenience sample to which the researcher had access, which is an acknowledged limiting factor of the study. There are currently just under 200 students attending the given school, and the racial demographics of students consist of approximately 85% Black or African American, 9% White, 4% two or more races, 1% Hispanic/Latino, and 1% American Indian or Alaska Native. Considering the school's student population, the approximate number of parents who met the criteria for the study was 200. Fifty-one people began the survey, and forty-five of them met the requirements for participation. The relatively large sample size (n=45) helped the generalizability of the findings.

In regard to the quantitative portion of the study, the population included kindergarten, first grade, and second grade students who identify as Black or African American or multiracial with one of those races including Black or African American. This information was determined based on how their family identified their race in the school management application, Tyler SIS, when registering for school. Students who had an IEP that directly hindered their learning and testing ability were not included in the study because it would not accurately show the effects of attending Pre-K. The sample included all K-2 students in the school who met the criteria, which was 91 students. This sample included 37 kindergarteners, 29 first graders, and 25 second graders.

### **Criteria**

In order to qualify for the qualitative research study, a participant must have identified as Black or African American and be a parent or guardian of a student attending a single public, charter K-5 elementary school in Saint Louis city during the

2022-2023 school year. In order to have qualified for the secondary data collection, a participant must be a kindergarten, first, or second grade student who identifies as Black or African American. Students in these grades were not included in the study sample if they had an IEP, which would hinder their learning and test-taking abilities and interfere with the validity of the results. The selection criteria were necessary for this study, because only the experiences of Black parents and Black children were being examined. The potential biases regarding this kind of sample included families who did not have the technology to check their email on a regular basis, may not have had access to the survey, individuals who did not have the time or were unwilling to give their views would not be surveyed or interviewed, and those who agreed to take the survey and/or interview were likely to be people with a strong opinion one way or the other, regarding Pre-K. The researcher combatted these biases by including information on demographics and other characteristics of the sample studied.

### **Instrumentation**

The survey items and interview questions were developed based on the research questions, literature reviewed, and theory. The researcher chose to begin the survey with demographic information to analyze the responses for possible correlations between choices around early childhood care and demographics, such as employment status, level of education, household dynamics, and age. The survey was revised based on the input of the dissertation chair and committee members to not include other demographic information, because the researcher only wanted to include pertinent information that could be analyzed for the purposes of this study in order to keep the participants engaged.

The remaining questions were developed to answer the research questions based on themes among participant responses.

Participants were asked how and why they made the decision whether or not to send their child to Pre-K to determine what factors impacted those decisions and what other options they were considering. Participants were also asked how their experience in school impacted their decision to send their child to Pre-K in order to determine if there are connections between the educational experiences of Black parents and guardians and how they make decisions for their children. Parents and guardians were then asked to reflect on how their early childcare choices surrounding Pre-K impacted their child's academic and behavioral success.

The quantitative portion of the study answered this question through secondary data collection, but it was important for the researcher to compare the actual data results with the perceptions of the parents. Lastly, the survey asked participants to identify what they were looking for in an early childcare option and what could increase their interest in sending their child to Pre-K. These questions were developed in order to help draw conclusions and recommendations from the study. The feedback from these questions aims to help bridge the gap between early childhood education and Black families by identifying what is important to Black families and what could help make Pre-K more accessible. The final question on the survey asked participants to leave their email if they would be willing to participate in a brief interview. Many of the interview questions were brought to the survey instead, because more responses would yield more meaningful results. The interview questions were then designed to dive deeper into the experiences and perceptions of Black parents about early childhood education and the impact of early

childhood care on their children. Participants were given a choice between interviewing in-person or via Zoom video call.

### **Data Collection**

For this study, the researcher collected data in various forms to increase its validity and reliability. First, the researcher distributed an open-ended survey to parents and guardians of children at the designated school by the principal, through the Weekly Newsletter email and Class Dojo during the months of October and November 2022. Families were informed of the survey participation opportunity, provided with the research information sheet and a link to the letter of informed consent (see Appendix A), and informed that participation in the study is completely voluntary. By reading the letter of informed consent, participants were provided a link to the open-ended survey on *Qualtrics* (see Appendix B).

The final question of the open-ended survey informed participants that if they were willing to participate in a brief (10-15 minute) interview, they were to leave their email address in the text box. Ten participants provided their email addresses, signifying they were interested in participating in an interview. The researcher emailed the 10 participants in February 2023 and attempted to schedule a time to meet virtually or in person. Of the 10 participants, three scheduled an interview. Despite multiple attempts to contact the participants and reschedule, the three potential participants did not show up to their designated interview time and stopped responding to communication efforts. The researcher then put out another link for interview sign-ups on Class Dojo in April and May of 2023 and received six replies agreeing to schedule an interview. Of those respondents, three did not show up for their interview times, but the researcher was able

to successfully interview three individuals. These interviews were recorded with the participants' permission in order for the researcher to be fully present and return to the recording in order to transcribe. The researcher then analyzed participants' responses in order to find themes.

Finally, data was also gathered by accessing existing databases. This information included demographics of students in kindergarten, first grade, and second grade, iReady reading and math diagnostic scores, disciplinary infraction data from teachers, the Dean of students' Student Leadership and Accountability Center program, and Tyler SIS suspension records. Due to the fact that the school did not keep records regarding where children were before they came to the current school, the researcher had to gather data from teachers and families regarding whether students went to Pre-K, daycare, or FFN care when they were three or four-years-old. This was done through conversations during parent-teacher conferences and communication through Class Dojo and telephone.

## **Data Analysis**

### ***Qualitative Procedures***

The researcher gathered qualitative data through an online *Qualtrics* survey and personal interviews. *Qualtrics* was used to collect, record, and manage data for this study. Survey participants completed five demographic questions, including their ethnicity, employment status, highest level of education, age, and the number of people residing in their households. Participants then had six open-ended questions regarding their choice of early childhood care for their child. They were able to reflect on their choice, other options they considered, the impact early childhood care had on their child behaviorally and academically, and how early childhood education could be improved. Interview

participants answered six open-ended questions that directly applied to each research question. The researcher then transcribed the three interviews and proceeded to the data analysis.

The researcher completed a thematic analysis by coding the qualitative data to find common themes. The researcher used inductive coding by allowing codes to emerge from the raw data of participants' responses. Coding is the process of assigning labels to recurring words and phrases and organizing qualitative data to identify different themes and the relationships between them (Graneheim & Lundman, 2004). To consolidate the number of codes and themes, the researcher used the method of structural coding in which the codes were grouped together in relation to the research questions (Saldaña, 2009). This method greatly reduced the number of codes and helped to create themes that would answer the research questions (Belotto, 2018).

### *Quantitative Procedures*

The researcher wanted to analyze as many data points as possible to determine if there was any difference between the academic success of Black K-2 students on standardized iReady math and reading assessments or the frequency of disciplinary infractions and suspensions based on whether or not they went to Pre-K. For the purpose of this study, the researcher broke this down into separate hypotheses for each subject, topic, and grade level. For example, there were separate hypotheses for the math achievement of students in kindergarten, first, and second grade. There were also hypotheses for the reading achievement of students in kindergarten, first, and second grade. Due to prior research showing that the fadeout can occur over the course of a school year, the researcher chose to go more in-depth by including student test scores



from three different assessments: the beginning of the year, the middle of the year, and the end of the school year (Hershbein, 2018; McCormick et al., 2022). Analyzing three sets of data points per subject and per grade level helped to increase the validity of the study. Lastly, there were separate hypotheses for disciplinary infractions of students in kindergarten, first, and second grade.

The researcher used inferential statistics, known as hypothesis testing, to evaluate claims about a population based on information obtained from samples (Bluman, 2008). In accordance with Bluman (2008)

In hypothesis testing, the researcher must define the population under study, state the particular hypotheses that will be investigated, give the significance level, select a sample from the population, collect the data, perform the calculations required for the statistical test, and reach a conclusion. (p. 406)

The researcher used null hypotheses, symbolized as  $NH_0$ , to state that there is no difference between the two parameters. If the  $p$ -values were outside of the  $t$ -distribution, then the researcher was able to reject the null hypothesis.

In order to analyze the quantitative data in this study, the researcher began by utilizing descriptive statistical procedures, such as calculating the means, standard deviations, and sample variances of each subset of data. The researcher used a  $t$ -test of independent means to test each hypothesis to determine if there were any significant differences between the academic achievement or frequency of behavioral infractions of Black K-2 children based on whether they attended Pre-K. A  $t$ -test was used because the two samples were random samples, the sample data were independent of one another, and

the populations were approximately normally distributed because the sample sizes were less than 30 (Bluman, 2008).

### **Ethical Considerations**

The participants in the study were protected and assured confidentiality and anonymity throughout the duration of the study. The researcher assured confidentiality by saving all files on a personal password-protected computer and destroying documents after they had been recorded. The researcher also kept the anonymity of participants by using data codes and approximations when discussing school statistics, such as location and demographics. After the interviews, the researcher also conducted member checking, in which participants were presented with the transcript to review and had an opportunity to ask questions or make comments. The researcher established appropriate safeguards throughout the data collection and analysis phases and ensured each participant received a consent form describing the purpose of the study and the opportunity to opt out at any time without negative effects.

### **Summary**

This chapter reviewed the methodology and design of this research study, which included a review of the problem and purpose, research questions and hypotheses being studied, the research design, population and sample, instrumentation, data collection, and analysis methods. This chapter went into depth regarding the design and various methods used for qualitative and quantitative data collection and analysis. The researcher collected qualitative data through an open-ended survey and personal interviews. Quantitative data was collected from the school's iReady standardized assessment scores and a school-wide Behavioral Referral Tracking Log. Lastly, the researcher covered ethical safeguards

to protect the confidentiality and anonymity of all participants. The analysis of the data collected will be discussed in the following chapter, and the results of the data analysis will be examined in order to answer research questions and hypotheses.

### **Chapter 4: Analysis of Data**

This chapter includes the qualitative and quantitative results from this research study. This study aimed to examine the decision-making factors of Black parents and guardians regarding early childhood care and provide further insight into how Pre-K affects Black students' academic and behavioral success in kindergarten, first, and second grade. While there are studies analyzing families' choices surrounding Pre-K, this study focused on the often overlooked thoughts and experiences of Black parents and guardians regarding early childhood education. Previous studies analyzing the effects of Pre-K are contradictory and inconsistent, and there was a need for further clarity on how this may impact Black students' success in school. The researcher aimed to provide further information to help close the educational gap based on SES and race.

The researcher developed survey and interview questions to align with the study's research questions. The survey included demographic information and open-ended questions, while the interview focused on open-ended questions that addressed each research question. The researcher completed a thematic analysis by coding the qualitative data to find common themes. The researcher also gathered secondary quantitative data using the school's standardized testing database. The database included math and reading scores of kindergarten, first, and second-grade students during the academic year's beginning, middle, and end. The researcher used inferential statistics, known as hypothesis testing, to evaluate claims about a population based on information obtained from samples (Bluman, 2008). The researcher also used a *t*-test of two independent means to test data for each null hypothesis.

Data from the survey and interviews revealed common themes throughout the collection methods and research questions. The researcher aimed to collect as much data as possible regarding participants' perspectives and thought processes, so each research question was addressed in the survey and interviews. Survey participants could leave questions blank or answer without providing further details or clarification, so creating multiple opportunities for vital information gathering is important. The survey results included 23 participants responding that their children attended Pre-K and 23 participants responding that their children did not attend Pre-K. Other options for those who did not attend Pre-K included daycare or FFN care. The following table represents which data collection methods were used to answer each research question.

Table 2.

*Data Collection Methods Related to Research Questions*

Research Question	Instrument	Question
RQ1: What factors impact whether or not Black parents and guardians decide to send their children to a Pre-K program?	Survey Interview	Q9, Q10, Q12, Q13 Q1, Q2, Q3
RQ 2: How do parental demographics such as age, marital status, income, education, and employment impact the decision regarding early childhood education?	Survey Interview	Q4, Q5, Q6, Q7 Q2
RQ 3: In what ways do Black parents and guardians feel that their early child care decisions affected their child's success in school?	Survey Interview	Q11 Q6
RQ 4: What are Black parents and guardians looking for in an early childhood program?	Survey Interview	Q10, Q13 Q4
RQ 5: What factors would increase Black parents' interest in sending their kids to Pre-K?	Survey Interview	Q14 Q5

## Hypotheses

**NH<sub>1</sub>: There is no difference between the academic success of Black kindergarten students on a standardized iReady math assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of students in math. The researcher analyzed data from the site's standardized test database to compare the test scores of kindergarten students who attended Pre-K ( $n=12$ ) and those who did not attend Pre-K ( $n=25$ ). The researcher conducted  $t$ -tests of two independent means comparing the scores of Black kindergarteners on a standardized math test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

### **Kindergarten iReady Math Beginning of the Year**

The analysis revealed that the iReady math test scores for kindergarten students who attended Pre-K ( $M = 340.25$ ,  $SD = 18.76$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 330.36$ ,  $SD = 14.56$ );  $t = 1.6$ ,  $p = 0.14$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black kindergarten students on a standardized iReady math assessment at the beginning of the school year based on whether or not they went to Pre-K.

**Kindergarten iReady Math Middle of the Year**

The analysis revealed that the iReady math test scores for kindergarten students who attended Pre-K ( $M = 353.92$ ,  $SD = 22.34$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 349$ ,  $SD = 19.85$ );  $t = 0.68$ ,  $p = 0.50$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black kindergarten students on a standardized iReady math assessment in the middle of the school year based on whether or not they went to Pre-K.

**Kindergarten iReady Math End of the Year**

The analysis revealed that the iReady math test scores for kindergarten students who attended Pre-K ( $M = 366$ ,  $SD = 27.80$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 363.08$ ,  $SD = 21.02$ );  $t = 0.32$ ,  $p = 0.76$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black kindergarten students on a standardized iReady math assessment at the end of the school year based on whether or not they went to Pre-K.

**NH<sub>2</sub>: There is no difference between the academic success of Black kindergarten students on a standardized iReady reading assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K



impacted the academic success of students in reading. The researcher analyzed data from the site's standardized test database to compare the test scores of kindergarten students who attended Pre-K ( $n=12$ ) and those who did not attend Pre-K ( $n=25$ ). The researcher conducted  $t$ -tests of two independent means comparing the scores of Black kindergarteners on a standardized reading test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

### **Kindergarten iReady Reading Beginning of the Year**

The analysis revealed that the iReady reading test scores for kindergarten students who attended Pre-K ( $M = 359.50$ ,  $SD = 31.18$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 345.68$ ,  $SD = 31.20$ ;  $t = 1.26$ ,  $p = 0.23$ ). The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black kindergarten students on a standardized iReady reading assessment at the beginning of the school year based on whether or not they went to Pre-K.

### **Kindergarten iReady Reading Middle of the Year**

The analysis revealed that the iReady reading test scores for kindergarten students who attended Pre-K ( $M = 380.42$ ,  $SD = 38.57$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 373.88$ ,  $SD = 25.08$ ;  $t = 0.54$ ,  $p = 0.60$ ). The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic

success of Black kindergarten students on a standardized iReady reading assessment in the middle of the school year based on whether or not they went to Pre-K.

### **Kindergarten iReady Reading End of the Year**

The analysis revealed that the iReady reading test scores for kindergarten students who attended Pre-K ( $M = 411.5$ ,  $SD = 39.56$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 393.88$ ,  $SD = 31.41$ );  $t = 1.35$ ,  $p = 0.21$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black kindergarten students on a standardized iReady reading assessment at the end of the school year based on whether or not they went to Pre-K.

**NH<sub>3</sub>: There is no difference between the academic success of Black first grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of students in math. The researcher analyzed data from the site's standardized test database to compare the test scores of first grade students who attended Pre-K ( $n=7$ ) and those who did not attend Pre-K ( $n=23$ ). The researcher conducted  $t$ -tests of two independent means comparing the scores of Black first graders on a standardized math test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

**First Grade iReady Math Beginning of the Year**

The analysis revealed that the iReady math test scores for first grade students who attended Pre-K ( $M = 366.83$ ,  $SD = 16.68$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 360.96$ ,  $SD = 18.03$ );  $t = 0.76$ ,  $p = 0.48$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black first grade students on a standardized iReady math assessment at the beginning of the school year based on whether or not they went to Pre-K.

**First grade iReady Math Middle of the Year**

The analysis revealed that the iReady math test scores for first grade students who attended Pre-K ( $M = 372.71$ ,  $SD = 27.04$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 379.68$ ,  $SD = 21.12$ );  $t = -0.62$ ,  $p = 0.56$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black first grade students on a standardized iReady math assessment in the middle of the school year based on whether or not they went to Pre-K.

**First Grade iReady Math End of the Year**

The analysis revealed that the iReady math test scores for first grade students who attended Pre-K ( $M = 393.67$ ,  $SD = 16.74$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 382.55$ ,  $SD = 25.01$ );  $t = 1.26$ ,  $p = 0.26$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less

than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black first grade students on a standardized iReady math assessment at the end of the school year based on whether or not they went to Pre-K.

**NH4: There is no difference between the academic success of Black first grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of students in reading. The researcher analyzed data from the site's standardized test database to compare the test scores of first grade students who attended Pre-K ( $n=7$ ) and those who did not attend Pre-K ( $n=23$ ). The researcher conducted *t*-tests of two independent means comparing the scores of Black first graders on a standardized reading test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

#### **First Grade iReady Reading Beginning of the Year**

The analysis revealed that the iReady reading test scores for first grade students who attended Pre-K ( $M = 396.17$ ,  $SD = 46.78$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 387.61$ ,  $SD = 30.08$ );  $t = 0.55$ ,  $p = 0.59$ . The researcher failed to reject the null hypothesis because the two-tailed *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic

success of Black first grade students on a standardized iReady reading assessment at the beginning of the school year based on whether or not they went to Pre-K.

### **First grade iReady Reading Middle of the Year**

The analysis revealed that the iReady reading test scores for first grade students who attended Pre-K ( $M = 372.71$ ,  $SD = 27.04$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 379.68$ ,  $SD = 21.12$ );  $t = -0.62$ ,  $p = 0.56$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black first grade students on a standardized iReady reading assessment in the middle of the school year based on whether or not they went to Pre-K.

### **First Grade iReady Reading End of the Year**

The analysis revealed that the iReady reading test scores for first grade students who attended Pre-K ( $M = 434.33$ ,  $SD = 60.14$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 425.09$ ,  $SD = 34.74$ );  $t = 1.36$ ,  $p = 0.73$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black first grade students on a standardized iReady reading assessment at the end of the school year based on whether or not they went to Pre-K.

**NH5: There is no difference between the academic success of Black second grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of students in math. The researcher analyzed data from the site's standardized test database to compare the test scores of second grade students who attended Pre-K ( $n=11$ ) and those who did not attend Pre-K ( $n=14$ ). The researcher conducted  $t$ -tests of two independent means comparing the scores of Black second graders on a standardized math test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

### **Second Grade iReady Math Beginning of the Year**

The analysis revealed that the iReady math test scores for second grade students who attended Pre-K ( $M = 399.18$ ,  $SD = 15.78$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 394.79$ ,  $SD = 14.70$ );  $t = 0.71$ ,  $p = 0.49$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black second grade students on a standardized iReady math assessment at the beginning of the school year based on whether or not they went to Pre-K.

### **Second grade iReady Math Middle of the Year**

The analysis revealed that the iReady math test scores for second grade students who attended Pre-K ( $M = 415.82$ ,  $SD = 19.05$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 409.5$ ,  $SD = 16.86$ );  $t = 0.87$ ,  $p = 0.41$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was

insufficient evidence to support the claim that there is a difference between the academic success of Black second grade students on a standardized iReady math assessment in the middle of the school year based on whether or not they went to Pre-K.

### **Second Grade iReady Math End of the Year**

The analysis revealed that the iReady math test scores for second grade students who attended Pre-K ( $M = 427.73$ ,  $SD = 21.87$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 416.23$ ,  $SD = 16.41$ );  $t = 1.44$ ,  $p = 0.18$ . The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black second grade students on a standardized iReady math assessment at the end of the school year based on whether or not they went to Pre-K.

**NH<sub>6</sub>: There is no difference between the academic success of Black second grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of students in reading. The researcher analyzed data from the site's standardized test database to compare the test scores of second grade students who attended Pre-K ( $n=11$ ) and those who did not attend Pre-K ( $n=14$ ). The researcher conducted  $t$ -tests of two independent means comparing the scores of Black second graders on a standardized reading test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

**Second Grade iReady Reading Beginning of the Year**

The analysis revealed that the iReady reading test scores for second grade students who attended Pre-K ( $M = 476$ ,  $SD = 36.89$ ) were significantly different from those of students who did not attend Pre-K ( $M = 437.5$ ,  $SD = 35.00$ );  $t = 2.65$ ,  $p = 0.02$ . The researcher rejected the null hypothesis because the two-tailed  $p$ -value was less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was sufficient evidence to support the claim that there is a difference between the academic success of Black second grade students on a standardized iReady reading assessment at the beginning of the school year based on whether or not they went to Pre-K.

**Second grade iReady Reading Middle of the Year**

The analysis revealed that the iReady reading test scores for second grade students who attended Pre-K ( $M = 515.55$ ,  $SD = 29.78$ ) were significantly different from those of students who did not attend Pre-K ( $M = 471.21$ ,  $SD = 25.27$ );  $t = 3.95$ ,  $p < .01$ . The researcher rejected the null hypothesis because the two-tailed  $p$ -value was less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was sufficient evidence to support the claim that there is a difference between the academic success of Black second grade students on a standardized iReady reading assessment in the middle of the school year based on whether or not they went to Pre-K.

**Second Grade iReady Reading End of the Year**

The analysis revealed that the iReady reading test scores for second grade students who attended Pre-K ( $M = 517.91$ ,  $SD = 29.89$ ) were not significantly different from those of students who did not attend Pre-K ( $M = 480.54$ ,  $SD = 32.56$ );  $t = 2.91$ ,  $p < .01$ . The researcher rejected the null hypothesis because the two-tailed  $p$ -value was less



than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was sufficient evidence to support the claim that there is a difference between the academic success of Black second grade students on a standardized iReady reading assessment at the end of the school year based on whether or not they went to Pre-K.

**NH7: There is no difference between the frequency of disciplinary infractions and suspensions of Black kindergarten students based on whether or not they went to Pre-K.**

The researcher gathered data from the site's school-wide disciplinary referral tracking system and used a weighted scoring guide (see Table 2) to complete this analysis. The researcher conducted a *t*-test of two independent means to compare the number of disciplinary infractions of kindergarten students who attended Pre-K ( $n=12$ ) and those who did not attend Pre-K ( $n=25$ ).

The analysis revealed that the number of disciplinary infractions for kindergarten students who attended Pre-K ( $M = 7.08$ ,  $SD = 9.68$ ) was not significantly different from those of students who did not attend Pre-K ( $M = 15.08$ ,  $SD = 21.16$ );  $t = -1.58$ ,  $p = 0.14$ . The researcher failed to reject the null hypothesis because the two-tailed *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the number of disciplinary infractions of Black kindergarten students based on whether or not they went to Pre-K.

**NH8: There is no difference between the frequency of disciplinary infractions and suspensions of Black first grade students based on whether or not they went to Pre-K.**

The researcher gathered data from the site's school-wide disciplinary referral tracking system and used a weighted scoring guide (see Table 2) to complete this analysis. The researcher conducted a *t*-test of two independent means to compare the number of disciplinary infractions of first grade students who attended Pre-K ( $n=7$ ) and those who did not attend Pre-K ( $n=23$ ).

The analysis revealed that the number of disciplinary infractions for first grade students who attended Pre-K ( $M = 6.14$ ,  $SD = 5.90$ ) was not significantly different from those of students who did not attend Pre-K ( $M = 12.63$ ,  $SD = 16.18$ );  $t = -1.63$ ,  $p = 0.16$ . The researcher failed to reject the null hypothesis because the two-tailed *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the number of disciplinary infractions of Black first grade students based on whether or not they went to Pre-K.

**NH<sub>9</sub>: There is no difference between the frequency of disciplinary infractions and suspensions of Black second grade students based on whether or not they went to Pre-K.**

The researcher gathered data from the site's school-wide disciplinary referral tracking system and used a weighted scoring guide (see Table 2) to complete this analysis. The researcher conducted a *t*-test of two independent means to compare the number of disciplinary infractions of second grade students who attended Pre-K ( $n=11$ ) and those who did not attend Pre-K ( $n=14$ ).

The analysis revealed that the number of disciplinary infractions for second grade students who attended Pre-K ( $M = 3.00$ ,  $SD = 7.42$ ) was not significantly different from

those of students who did not attend Pre-K ( $M = 12.57$ ,  $SD = 28.56$ );  $t = -1.20$ ,  $p = 0.26$ .

The researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the number of disciplinary infractions of Black second grade students based on whether or not they went to Pre-K.

### Research Questions

**RQ1: What factors impact whether or not Black parents and guardians decide to send their children to a Pre-K program?**

Table 3.

*Decision-making factors for parents who chose Pre-K*

Theme	Number of responses	Percentage of Respondents
Educational “head start”	14	67%
Social aspect	6	29%
Free/affordable compared to daycare	2	10%
Needed support	2	10%

#### ***RQ1 Theme 1: Educational Head-Start***

Participants whose children attended Pre-K felt that Pre-K was best for their child academically to prepare for kindergarten and subsequent grades. Sixty-seven percent

(n=21) of participants named this as a contributing factor for sending their child to Pre-K, and many participants specifically mentioned that they felt their child would get a “head start with their learning” compared to those that did not attend Pre-K so they wanted them to begin as soon as possible. One participant said, “Education is important, so I decided to start my child as soon as school was available; the earlier, the better.” The researcher concluded that academic success was the most important decision-making factor for parents who chose Pre-K. It is clear that most participants who chose Pre-K believe that Pre-K programs that align with the conventional school setting provide more educational opportunities for three- and four-year-olds than daycare or FFN care. This decision-making factor aligned with the research design of this study because the researcher examined the academic impact of attending Pre-K on students in subsequent grades.

### ***RQ1 Theme 2: Social Skills***

Participants whose children attended Pre-K also noted that gaining social skills was an important part of attending Pre-K. Gaining social skills and providing an educational head start are similar in that they were both linked to preparing children for kindergarten, according to participants. Twenty-nine percent (n=21) of participants mentioned Pre-K was the best choice for their child because they wanted them to be more social with same-aged peers as well as adults with whom they were not familiar. When children attend kindergarten, they are expected to spend approximately eight hours a day with children and adults outside of their families. Pre-K provided parents with an opportunity to help their children get comfortable with this before formal schooling began. Participants also mentioned that they wanted their children to learn

communication, understanding, and sharing skills in the Pre-K setting. One parent noted that they noticed a lot of improvement in their child’s verbal communication skills after they began Pre-K and concluded that it must have been from being around other children their age. This decision-making factor aligned with the research design of this study because the researcher examined the behavioral impact of attending Pre-K on students in subsequent grades.

Table 4.

*Decision-making factors for parents who did not choose Pre-K*

Theme	Number of responses	Percentage of Respondents
Safety concerns	4	17%
COVID	4	17%
Unaware of options	4	17%
Lack of attention/care	2	8%
Work/Pick-up schedule	2	8%

***RQ1 Theme 3: Safety Concerns***

Participants whose children did not attend Pre-K noted safety concerns with sending their children to a school setting at a young age. One survey participant noted, “I did not enroll my child in Pre-K because I felt my child was too young to be around other people and/or children without my supervision and/or presence.” While people did not specify what they were scared of when it came to their child’s safety in a school setting,

17% (n=24) of participants mentioned safety as a concern. Another participant added, “my fears of school outweighed the benefits.” COVID-19 was also a health safety concern for many families. Many of the parents and guardians who responded to the survey had to make these decisions in the midst of the pandemic, and 17% (n=24) named it as a reason they chose not to send their child to Pre-K. Of the people who named COVID-19 as a decision-making factor, all of them chose to keep their children at home between the ages of three and four. It is unclear whether these participants would have chosen to send their children to Pre-K if the pandemic had not been happening when making this decision.

***RQ1 Theme 4: Lack of Awareness***

According to the survey, 17% (n=24) of participants whose children did not attend Pre-K struggled to find a free, quality Pre-K program in the city. Two participants noted that not knowing other families in the city made it more difficult because they were not able to ask for school recommendations. A lack of ties to others in the community was a barrier to finding a program that they could trust. Another participant responded, “There were no free options and paying would have put a significant financial strain on the family.” This response was coded under the “Unaware of options” theme because there are free public Pre-K options in the city of Saint Louis that the participant may not have been aware of when making this decision. Saint Louis Public Schools offers a full-day, full-week Pre-K program for children up to the age of five who reside in the city. Head Start and other similar programs also offer free Pre-K for families that meet household income qualifications. Parents and guardians’ lack of awareness around

quality, trustworthy, and affordable early childhood education programs kept many participants from enrolling their children in Pre-K.

**RQ 2: How do parental demographics such as age, marital status, income, education, and employment impact the decision regarding early childhood education?**

The researcher collected demographic information in the survey regarding the participant's employment status, level of education, age of the adults living in the household, and the age when their child was three years old. Although each of these questions was included in the same survey, a varying number of participants answered each question. The researcher chose to allow participants to leave questions unanswered in case they were uncertain or uncomfortable about providing certain information. The following data shows their responses.

Table 5.

*Employment Status of Participants*

Full-time		Part-time		Unemployed	
Pre-K	No Pre-K	Pre-K	No Pre-K	Pre-K	No Pre-K
18	19	2	1	0	2

The researcher concluded that participants who worked full-time or part-time sent their children to Pre-K or something other than Pre-K at similar rates. Although there were only two participants who responded that they were unemployed, 100% of those participants did not send their children to Pre-K.

Table 6.

*Educational Level of Participants*

Some HS		HS degree		College courses		Associate's/ Bachelor's		Master's/ Doctorate	
Pre-K	No	Pre-K	No	Pre-K	No	Pre-K	No	Pre-K	No
	Pre-K		Pre-K		Pre-K		Pre-K		Pre-K
0	0	4	6	2	7	10	7	5	3

This table shows the parents' choice regarding Pre-K in relation to their level of education. The data showed that 60% (n=10) of parents with a high school degree did not choose Pre-K. Seventy-eight percent (n=9) of parents who took some college courses did not choose Pre-K. Fifty-nine percent (n=17) of parents with an associate's or bachelor's degree chose Pre-K, and 63% (n=8) of parents with a master's or doctorate degree chose Pre-K. According to the survey data, the researcher concluded that parents with less formal education were less likely to send their children to Pre-K, while those with a higher level of formal education were more likely to choose a Pre-K setting when their child was three or four years old.



Table 7.

*Additional Adults Living in Household*

Relatives (aunts/uncles/grandparent)		Non-relatives		None	
Pre-K	No Pre-K	Pre-K	No Pre-K	Pre-K	No Pre-K
1	5	1	1	18	17

In households where there were additional adult family members living in the home, such as aunts, uncles, and grandparents, 83% (n=6) of parents chose not to send their children to Pre-K. Of those 83%, 67% (n=6) of those families chose FFN care during that time. Having additional adults in the household made families more likely to keep their children home longer. Having a non-relative living in the house or having no additional adults living in the house besides parents and guardians was nearly an equal split between children attending Pre-K and not attending Pre-K.

Table 8.

*Parents' Age When Child Was Three*

21-25		26-30		31-35		36-40		41-45	
Pre-K	No Pre-K	Pre-K	No Pre-K	Pre-K	No Pre-K	Pre-K	No Pre-K	Pre-K	No Pre-K
3	4	6	11	4	2	4	2	3	4

The table shows the early childhood care choices for parents based on age. According to the survey data, 65% (n=17) of parents aged 26 to 30 chose not to send their children to Pre-K, and 67% (n=12) of parents between the ages of 31 to 35 and 36 to 40 chose to send their children to Pre-K. The researcher concluded that parents who were 20 to 30 years old (n=24) were more likely to choose daycare or FFN care, while parents 31 to 40 years old (n=12) were more likely to choose Pre-K. Once parents were 41 or older, they had nearly the same likelihood of choosing Pre-K or another early childhood care option.

**RQ 3: In what ways do Black parents and guardians feel that their early childcare decisions affected their child's success in school?**

Table 9.

*Parent perception of the impact of attending Pre-K*

Theme	Number of responses	Percentage of Respondents
Positive effect	15	71%
No effect or unsure	2	10%
Positive and Negative effects	2	10%

***RQ 3 Theme 1: Perceived Positive Effects***

Approximately 71% (n=21) of participants who responded to this question felt as though enrolling their child in Pre-K had a positive effect on their future success in school. Nine participants mentioned that Pre-K had a positive effect on their children's

academic success and provided early exposure to content that would be helpful in kindergarten. Eight participants also said that Pre-K had a positive impact on their child behaviorally and socially because they were able to have social interactions with same-aged peers in a controlled environment. One person said, “I believe Pre-K had a huge impact, I witnessed my child blossom and develop skills only he could receive from a school environment. He got to experience and see new things and behaviors.” Another participant discussed how their child looks back on her experience in Pre-K with fond memories and engaged well in the structure which provided her with a good foundation for her academic success.

While the majority of participants felt as though Pre-K had a positive effect on their child’s success in school, two participants said there were also negatives that came with attending Pre-K. One of these participants discussed the vast differences among Pre-K-aged children, which had an impact on their children. They talked about how some children are ready for school and learning while others are not. They said:

You have kids who just want to play and don’t listen, and you have kids that want to learn and get [what’s being taught] at that age, then you have the kids that can’t comprehend what’s [being taught] or might have some type of learning disability. At times it’s hard to choose the next step to take for your kids . . . I wanted to give them a smaller school setting or [fewer] kids in a classroom.

Table 10.

*Parent perception of the impact of not attending Pre-K*

Theme	Number of responses	Percentage of Respondents
Positive effect	9	75%
Negative effect	2	17%
No effect or unsure	1	8%

Only 12 participants whose children did not attend Pre-K answered this question on the survey. According to their responses, 75% (n=12) of participants who responded to this question felt that not attending Pre-K had a positive impact on their child. One participant said that staying home with a parent or guardian during the ages of three to four years old was a good choice for their child. The participant said, “He seems to have principles and a moral foundation that I’m not sure is taught specifically for African American children. There aren't as many Black teachers in our school choices. Especially Black male educators and professionals.” Another participant echoed the idea that staying in the home had a positive impact on their child’s moral compass by saying, “I have been able to personally curate, monitor and confirm his developmental progress, shape his habits and morale according to our family’s own moral codes and value systems, and build up his confidence and character in a safe and loving space.” About half of the respondents whose children attended daycare instead of Pre-K said that they felt daycare was sufficient in preparing their child academically for kindergarten. One participant said that the decision to not attend Pre-K did not have an impact on their child, and two

participants thought that not attending Pre-K may have stifled their child academically and socially when they first attended school, but over time, they have adjusted.

The researcher concluded that most Black parents and guardians perceived their choice regarding early childhood care had a positive impact on their child regardless of the decision that they made. This could be due to them having a positive experience and noticing specific positive outcomes that would not have been present with another choice or simply the participant not having another early childhood care experience to compare it to.

**RQ 4: What are Black parents and guardians looking for in an early childhood program?**

Table 11.

*What Parents Whose Children Attended Pre-K Are Looking for in an Early Childhood Program*

Theme	Number of responses	Percentage of Respondents
Learning goals/Education	16	76%
Safety	7	33%
Quality Caregivers (educated/experienced/loving)	6	29%

Table 11. Continued

Social Skills (communication/confidence/ emotional)	3	14%
Reliability/Reputation	3	14%
Proximity to home	2	10%
Organized/Clean	2	10%
Cost/Budget friendly	2	10%
Diversity	1	5%
Full-day Childcare	1	5%
Small class sizes	1	5%
Fun	1	5%
More time spent outdoors	1	5%

***RQ 4 Theme 1: Learning Goals/ High-Quality Education***

While there were many different things participants were looking for in a Pre-K program, 76% (n=21) of participants whose children attended Pre-K said they were looking for learning goals and the educational support a program offered. This aligned with the feedback regarding decision-making factors in Research Question 1. While education and learning goals were the most common theme for parents and guardians

who enrolled their children in Pre-K, only 20% of participants who did not choose Pre-K listed it as a contributing factor in their choice of an early childhood care program. The researcher concluded that participants' priorities differed based on the decisions they made for their child's early childhood care. Families who valued educational outcomes were much more likely to choose a Pre-K program for their child's early childhood care.

While some research shows that Pre-K programs are typically higher-quality than daycares and leave children more ready for kindergarten, Bartik and Hershbein (2018) did not find statistically significant evidence of average state Pre-K programs having an effect on the average student's future success (Magnuson et al., 2007). They found that states with high-quality Pre-K programs had a positive effect on math scores for all students, and school districts with a majority of Black students had significant positive effects on math and reading test scores (Bartik & Hershbein, 2018).

#### ***RQ 4 Theme 2: Safety***

Ensuring the safety of their children is a priority for many families whose children attended Pre-K when choosing an early childhood program. Thirty percent (n=21) of participants who enrolled their children in Pre-K mentioned safety as a contributing factor to their choice as well. Thirteen percent of participants who were parents and guardians who did not choose Pre-K also mentioned safety as something they were looking for in an early childhood care program. Safety is a common theme amongst participant responses, as shown by Research Question 1 Theme 1. Parents and guardians are scared to allow people they do not know and trust to care for their young children. This is especially true for Black parents when the majority of teachers and principals are White and not racially or culturally representative of their children, which leads to

implicit biases (Schaeffer, 2021; Tefera et al., 2017). This aligns with the theoretical framework of Choice Theory and CRT because Black parents and guardians must consider many different factors when weighing their options about education compared to White people due to systemic racism (Cao, 2022; Posey-Maddox et al., 2021). Young children are also a more vulnerable demographic because they are less likely to have the communication skills to let others know if something is wrong. Children's health and COVID-19 are also contributing factors to safety worries for families making choices regarding their child's wellbeing.

Table 12.

*What Parents Whose Children Did Not Attend Pre-K Are Looking for in an Early Childhood Program*

Theme	Number of responses	Percentage of Respondents
Quality Caregivers	7	47%
Safety	3	20%
Learning goals/Education	3	20%
Build Social Skills	1	7%
Positive Environment	1	7%
More time spent outdoors	1	7%



***RQ 4 Theme 3: High-Quality Caregivers***

High-quality caregivers were a common theme for families, regardless of whether their child attended Pre-K. Of the participants who answered this question, 47% (n=15) of caregivers who chose daycare or FFN care were looking for caregivers who were patient, kind, attentive, and honest with them. Only 29% (n=21) of participants who chose Pre-K, however, said they were looking for quality caregivers at a facility, specifically mentioning qualifications such as staff members who were educated, had experience caring for children, and were loving. The researcher concluded that parents and guardians who chose Pre-K were more concerned with caregivers being educated, while families who did not choose Pre-K did not mention caring about providers having strong academic teachings. This observation aligns with their choices regarding formal versus informal early childhood education and care. While they ultimately made different decisions about where their child would go during the ages of three and four, having quality individuals caring for children was a common theme amongst both groups of participants.

**RQ 5: What factors would increase Black parents' interest in sending their kids to Pre-K?**

Table 13.

Factors That Would Increase interest in Pre-K for *Parents Whose Children Attended**Pre-K*

Theme	Number of responses	Percentage of Respondents
High-Quality Programs	4	50%
Cost	2	25%
Transportation	1	13%
Smaller Class Sizes	1	13%
Opportunity to Attend at 3 years old	1	13%

***RQ 5 Theme 1: High Quality Programs***

Many of the participants who chose Pre-K did not provide an answer to this question because they said they would choose Pre-K again in the future. Of those who answered, 50% (n=8) of parents whose children attended Pre-K and 63% (n=8) of parents whose children did not attend Pre-K mentioned high-quality programs as a way to increase families' interest in Pre-K. High-quality education was a major theme for all parents, and it aligned with previous research questions. Two participants who said the quality of education could increase their interest in sending their children to Pre-K also mentioned that more transparency in what children learn in Pre-K could influence their decision. The desire for more transparency coincides with the research that shows the

results of attending an average Pre-K program compared to a high-quality program vary greatly.

Table 14.

Factors That Would Increase interest in Pre-K for *Parents Whose Children Did Not Attend Pre-K*

Theme	Number of responses	Percentage of Respondents
Quality of Education	5	63%
High-Quality Staff	3	38%
Nothing	3	38%
Cost	2	25%
Safety	1	13%
Transportation	1	13%

As discussed in Research Question 4, programs that followed the SAFE programming structure yielded significant increases in positive social behaviors, academic achievement, and youth self-perceptions (Williams, 2021). Parents and guardians want to know which programs align with their goals for their child in order to make an informed decision.

***RQ 5 Theme 2: High Quality Staff***

Of the eight participants who answered this question, 38% (n=8) noted that a more supportive staff would increase their interest in sending their children to Pre-K.

This was similar to the responses for Research Question 4. According to respondents, supportive staff would include emotional support and support with special needs students. One parent expressed a desire for more emotional support while learning. The desire for caring and supportive caregivers reflects the research regarding biases toward Black children in schools and how Black families have a difficult time trusting the educational system for many reasons (Cao, 2022; Posey-Maddox et al., 2021). This also coincides with the 10 participants who mentioned safety as a main factor in their early childhood care decisions. Due to the lack of trust and other various reasons, 38% (n=8) of participants whose children did not attend Pre-K said that there was nothing that could convince them to send their children to Pre-K. Whether it be due to trauma from racial inequality or the lack of trust between Black parents and the U.S. education system, Black communities continue to come together to take care of each other, and for many, that means choosing FFN care or a daycare provider they know personally (Horsford et al., 2021). Ultimately, families want high-quality programs with high-quality staff members that are accessible to everyone regardless of household income and transportation needs. It is also important to note that no matter how robust a program is, there is no way to convince everyone that something is the right choice because everyone has different priorities and experiences that shape their decisions (Glasser (2010; Levin & Milgrom, 2004).

### **Summary**

Chapter 4 included the qualitative and quantitative results from this research study. This study aimed to examine the decision-making factors of Black parents and guardians regarding early childhood care and provide further insight into how Pre-K

affects Black students' academic and behavioral success in kindergarten, first, and second grade. Data collected from an open-ended survey and interviews revealed common themes in relation to the research questions. Quantitative data was collected in order to test the researcher's hypotheses. Standardized math and reading test scores and behavioral infraction data were collected and analyzed to determine if there was sufficient evidence to show that attending Pre-K affected Black students' academic or behavioral success. The researcher found that the only hypothesis with sufficient evidence to reject was comparing second-grade reading scores. The *t*-test showed a difference between the academic success of Black second-grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K. The following chapter will draw conclusions and implications based on the study results. The researcher will also include recommendations for future studies.

## **Chapter 5: Conclusions and Implications**

The purpose of this study was to examine the choices surrounding early childhood education and Pre-K for Black parents and guardians, as well as analyze if attending Pre-K significantly affects the academic and behavioral success of Black students in kindergarten, first, and second grades. The researcher collected and analyzed various forms of qualitative and quantitative data. Qualitative data in the form of surveys and interviews were analyzed to find themes. These themes provided insight into the decision-making factors of Black parents and what they are looking for in terms of early childhood education and care. This study also included a quantitative analysis, which determined if there was sufficient evidence to support the claim that attending Pre-K results in different academic and behavioral outcomes in subsequent grades. This study highlighted what Black families are looking for in Pre-K programs and identified shortcomings that could increase community interest and buy-in to these programs. In this chapter, the researcher will review the research questions and hypotheses that guided the study, go over findings and interpretation of the results, draw conclusions based on findings, determine implications for practice, and give recommendations for future research in the field.

### **Null Hypotheses**

NH<sub>1</sub>: There is no difference between the academic success of Black kindergarten students on a standardized iReady math assessment based on whether or not they went to Pre-K.

NH<sub>2</sub>: There is no difference between the academic success of Black kindergarten students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

NH<sub>3</sub>: There is no difference between the academic success of Black first grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.

NH<sub>4</sub>: There is no difference between the academic success of Black first grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

NH<sub>5</sub>: There is no difference between the academic success of Black second grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.

NH<sub>6</sub>: There is no difference between the academic success of Black second grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.

NH<sub>7</sub>: There is no difference between the frequency of disciplinary infractions and suspensions of Black kindergarten students based on whether or not they went to Pre-K.

NH<sub>8</sub>: There is no difference between the frequency of disciplinary infractions and suspensions of Black first grade students based on whether or not they went to Pre-K.

NH<sub>9</sub>: There is no difference between the frequency of disciplinary infractions and suspensions of Black second grade students based on whether or not they went to Pre-K.

### **Research Questions**

RQ1: What factors impact whether or not Black parents and guardians decide to send their children to a Pre-K program?

RQ 2: How do parental demographics such as age, marital status, income, education, and employment impact the decision regarding early childhood education?

RQ 3: In what ways do Black parents and guardians feel that their early childcare decisions affected their child's success in school?

RQ 4: What are Black parents and guardians looking for in an early childhood program?

RQ 5: What factors would increase Black parents' interest in sending their kids to Pre-K?

### **Findings**

Nine hypotheses and five research questions served as a guide for this study. The researcher gathered quantitative data using the school's standardized testing database, iReady. This included both math and reading scores from the beginning, middle, and end of the academic year for Black students in kindergarten, first, and second grade.

Secondary data was also collected and analyzed from the site's school-wide behavioral referral log to compare the number of behavioral infractions of students in the study based on whether they attended Pre-K. The researcher used inferential statistics, known as hypothesis testing, to evaluate claims about a population based on information obtained from samples (Bluman, 2008). A *t*-test of two independent means was used to test data for each null hypothesis. The researcher also completed a thematic analysis by coding the qualitative data in order to find common themes from participant survey



responses. Quantitative results will be discussed first, followed by qualitative findings and themes.

**NH<sub>1</sub>: There is no difference between the academic success of Black kindergarten students on a standardized iReady math assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of kindergarten students in math. The researcher analyzed data from the site's standardized test database to compare the test scores of kindergarten students who attended Pre-K (n=12) and those who did not attend Pre-K (n=25). The researcher conducted *t*-tests of two independent means comparing the scores of Black kindergarteners on a standardized math test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

The first analysis revealed that the iReady math test scores at the beginning of the school year for kindergarten students who attended Pre-K were not significantly different from those of students who did not attend Pre-K. The second analysis revealed that the iReady math test scores in the middle of the school year for kindergarten students who attended Pre-K were not significantly different than those of students who did not attend Pre-K. A third analysis revealed that the iReady math test scores at the end of the school year for kindergarten students who attended Pre-K were not significantly different than those of students who did not attend Pre-K.

The researcher failed to reject the null hypothesis because each *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was

insufficient evidence to support the claim that there is a difference between the academic success of Black kindergarten students on a standardized iReady math assessment based on whether or not they went to Pre-K. Although there was a difference in means of kindergarten math test scores, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, kindergarten students who attended Pre-K were equally successful in math as those who did not attend Pre-K.

The results were contrary to previous studies performed (Bartik & Hershbein, 2018; McCormick et al., 2022; Perry, 1999), which found that kindergarten students who attended Pre-K outperformed their classmates, who did not attend Pre-K, in mathematics. This could be due to the smaller sample size used in this study. While Bartik and Hershbein (2018) did not find statistically significant evidence of average state Pre-K programs having an effect on the average student's test scores, they did find that states with high-quality Pre-K programs had a positive effect on math scores for all students. They also found that school districts with a majority of Black students had significant positive effects on math and reading test scores for students who attended Pre-K (Bartik & Hershbein, 2018). This study, however, does not support those findings. Using larger sample sizes in future studies would help provide more accurate results.

**NH2: There is no difference between the academic success of Black kindergarten students on a standardized iReady reading assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of kindergarten students in reading. The researcher

analyzed data from the site's standardized test database to compare the test scores of kindergarten students who attended Pre-K (n=12) and those who did not attend Pre-K (n=25). The researcher conducted *t*-tests of two independent means comparing the scores of Black kindergarteners on a standardized reading test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

The analysis revealed that the iReady reading test scores at the beginning of the school year for kindergarten students who attended Pre-K were not significantly different from those of students who did not attend Pre-K. The second analysis revealed that the iReady reading test scores in the middle of the year for kindergarten students who attended Pre-K were not significantly different than those of students who did not attend Pre-K. The final analysis revealed that the iReady reading test scores at the end of the year for kindergarten students who attended Pre-K were not significantly different from those of students who did not attend Pre-K.

The researcher failed to reject the null hypothesis because each *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black kindergarten students on a standardized iReady reading assessment based on whether or not they went to Pre-K. Although there was a difference in means of kindergarten reading test scores, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, kindergarten students who attended Pre-K were equally successful in reading as those who did not attend Pre-K.

**NH3: There is no difference between the academic success of Black first grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of first grade students in math. The researcher analyzed data from the site's standardized test database to compare the test scores of first grade students who attended Pre-K ( $n=7$ ) and those who did not attend Pre-K ( $n=23$ ). The researcher conducted *t*-tests of two independent means comparing the scores of Black first graders on a standardized math test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

The first analysis revealed that the iReady math test scores at the beginning of the year for first grade students who attended Pre-K were not significantly different than those of students who did not attend Pre-K. The second analysis revealed that the iReady math test scores in the middle of the year for first grade students who attended Pre-K were not significantly different than those of students who did not attend Pre-K. A third analysis revealed that the iReady math test scores at the end of the year for first grade students who attended Pre-K were not significantly different than those of students who did not attend Pre-K.

The researcher failed to reject the null hypothesis because each *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black first grade students on a standardized iReady math assessment based on

whether or not they went to Pre-K. Although there was a difference in means of first grade math test scores, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, first grade students who attended Pre-K were equally successful in math as those who did not attend Pre-K.

**NH4: There is no difference between the academic success of Black first grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of first grade students in reading. The researcher analyzed data from the site's standardized test database to compare the test scores of first grade students who attended Pre-K (n=7) and those who did not attend Pre-K (n=23). The researcher conducted *t*-tests of two independent means comparing the scores of Black first graders on a standardized reading test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

The first analysis revealed that the iReady reading test scores at the beginning of the year for first grade students who attended Pre-K were not significantly different from those of students who did not attend Pre-K. The second analysis revealed that the iReady reading test scores in the middle of the year for first grade students who attended Pre-K. The third analysis revealed that the iReady reading test scores at the end of the year for first grade students who attended Pre-K were not significantly different than those of students who did not attend Pre-K.

The researcher failed to reject the null hypothesis because each  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black first grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K. Although there was a difference in means of first grade reading test scores, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, first grade students who attended Pre-K were equally successful in reading as those who did not attend Pre-K.

**NH5: There is no difference between the academic success of Black second grade students on a standardized iReady math assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of second grade students in math. The researcher analyzed data from the site's standardized test database to compare the test scores of second grade students who attended Pre-K ( $n=11$ ) and those who did not attend Pre-K ( $n=14$ ). The researcher conducted t-tests of two independent means comparing the scores of Black second graders on a standardized math test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

The first analysis revealed that the iReady math test scores at the beginning of the year for second grade students who attended Pre-K were not significantly different from those of students who did not attend Pre-K. The second analysis revealed that the iReady math test scores in the middle of the year for second grade students who attended Pre-K

were not significantly different from those of students who did not attend Pre-K. The final analysis revealed that the iReady math test scores at the end of the year for second grade students who attended Pre-K were not significantly different than those of students who did not attend Pre-K.

The researcher failed to reject the null hypothesis because each  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the academic success of Black second grade students on a standardized iReady math assessment based on whether or not they went to Pre-K. Although there was a difference in means of second grade math test scores, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, second grade students who attended Pre-K were equally successful in math as those who did not attend Pre-K.

**NH6: There is no difference between the academic success of Black second grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K.**

The researcher gathered data from the beginning, middle, and end of the academic school year in order to provide further information and analyze whether attending Pre-K impacted the academic success of second grade students in reading. The researcher analyzed data from the site's standardized test database to compare the test scores of second grade students who attended Pre-K ( $n=11$ ) and those who did not attend Pre-K ( $n=14$ ). The researcher conducted  $t$ -tests of two independent means comparing the scores of Black second graders on a standardized reading test at the beginning, middle, and end of the school year in relation to whether they went to Pre-K.

The analysis revealed that the iReady reading test scores at the beginning of the year for second grade students who attended Pre-K were significantly different than those of students who did not attend Pre-K. The next analysis revealed that the iReady reading test scores in the middle of the year for second grade students who attended Pre-K were significantly different than those of students who did not attend Pre-K. The final analysis revealed that the iReady reading test scores at the end of the year for second grade students who attended Pre-K were significantly different than those of students who did not attend Pre-K.

The researcher rejected the null hypothesis because each  $p$ -value was less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was sufficient evidence to support the claim that there is a difference between the academic success of Black second grade students in a standardized iReady reading assessment based on whether or not they went to Pre-K. The difference in the beginning, middle, and end of second grade was large enough to be statistically significant at the 95% confidence level. In other words, second grade students who attended Pre-K were more successful in reading compared to their classmates who did not attend Pre-K. These findings were interestingly contrary to previous studies, which show that the largest differences between the academic success of students based on Pre-K attendance happen immediately following Pre-K. According to McCormick et al. (2022), four-year-olds who attended Pre-K score higher on assessments and academic skills when they begin kindergarten than those who did not, but these academic gaps begin to close as early as that same year due to fade out. The researcher theorized that these results could be unique to the specific group of students in second grade that year.



**NH7: There is no difference between the frequency of disciplinary infractions and suspensions of Black kindergarten students based on whether or not they went to Pre-K.**

The researcher gathered data from the site's school-wide disciplinary referral tracking system and used a weighted scoring guide (see Table 2) to complete this analysis. The researcher conducted a *t*-test of two independent means to compare the number of disciplinary infractions of kindergarten students who attended Pre-K ( $n=12$ ) and those who did not attend Pre-K ( $n=25$ ).

The analysis revealed that the number of disciplinary infractions for kindergarten students who attended Pre-K was not significantly different than those of students who did not attend Pre-K. The researcher failed to reject the null hypothesis because the *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the rate of disciplinary infractions for students based on whether or not they went to Pre-K. Although there was a difference in means of disciplinary infractions, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, kindergarten students who attended Pre-K had equal rates of disciplinary infractions as those who did not attend Pre-K. Due to the fact that the school demographic was nearly 100% Black, the disciplining of Black students may look differently when compared to a school with a majority White population. For this purpose, the researcher only chose to compare the disciplinary infractions of Black students. It is important to note that the mean number of disciplinary infractions for kindergarten students who did not attend Pre-K was more than double the mean number

of those who attended Pre-K. The researcher concluded that the lack of statistical significance despite these drastic differences was due to the small sample sizes.

Conducting this study again using multiple school sites would help to increase the sample sizes and provide more meaningful results.

**NH8: There is no difference between the frequency of disciplinary infractions and suspensions of Black first grade students based on whether or not they went to Pre-K.**

The researcher gathered data from the site's school-wide disciplinary referral tracking system and used a weighted scoring guide (see Table 2) to complete this analysis. The researcher conducted a *t*-test of two independent means to compare the number of disciplinary infractions of first grade students who attended Pre-K ( $n=7$ ) and those who did not attend Pre-K ( $n=23$ ).

The analysis revealed that the number of disciplinary infractions for first grade students who attended Pre-K was not significantly different from those of students who did not attend Pre-K. The researcher failed to reject the null hypothesis because the *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the rate of disciplinary infractions for first grade students based on whether or not they went to Pre-K. Although there was a difference in means of disciplinary infractions, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, first grade students who attended Pre-K had equal rates of disciplinary infractions and suspensions as those who did not attend Pre-K. The mean number of disciplinary infractions for first grade students who did not attend Pre-K was also more

than double the mean number of those who attended Pre-K. The researcher concluded that the lack of statistical significance despite these drastic differences was due to the small sample sizes.

**NH9: There is no difference between the frequency of disciplinary infractions and suspensions of Black second grade students based on whether or not they went to Pre-K.**

The researcher gathered data from the site's school-wide disciplinary referral tracking system and used a weighted scoring guide (see Table 2) to complete this analysis. The researcher conducted a *t*-test of two independent means to compare the number of disciplinary infractions of second grade students who attended Pre-K ( $n=11$ ) and those who did not attend Pre-K ( $n=14$ ).

The analysis revealed that the number of disciplinary infractions for kindergarten students who attended Pre-K was not significantly different than those of students who did not attend Pre-K. The researcher failed to reject the null hypothesis because the *p*-value was not less than the level of significance ( $\alpha = .05$ ). The researcher concluded that there was insufficient evidence to support the claim that there is a difference between the rate of disciplinary infractions for second grade students based on whether or not they went to Pre-K. Although there was a difference in means of disciplinary infractions, the difference was not large enough to be statistically significant at the 95% confidence level. In other words, second grade students who attended Pre-K had equal rates of disciplinary infractions and suspensions as those who did not attend Pre-K. The mean number of disciplinary infractions for second grade students who did not attend Pre-K was more than four times the mean number of those who attended Pre-K. The researcher concluded

that the lack of statistical significance despite these drastic differences was due to the small sample sizes.

**RQ1: What factors impact whether or not Black parents and guardians decide to send their children to a Pre-K program?**

***RQ1 Theme 1: Educational Head-Start***

The most common theme that arose in support of sending children to Pre-K was the desire to provide them with an educational head start. According to Sedgwick and Stothard (2018), “Up to 50% of children starting mainstream school have speech, language and communication needs which are linked to poor academic performance and social, emotional and mental health needs” (p. 361). With so many children experiencing these substantial needs, Pre-K is the first structured place outside of the home for interventions to be implemented (Zigler, 2003). It has been suggested that learning should begin as early as possible, with some advocating that it should begin in infancy (Miner, 2019). Three interview participants mentioned choosing Pre-K, because it would create a strong foundation for academics at an early age. Research shows that Pre-K programs are typically higher-quality than daycare or center-based programs and leave children more ready for kindergarten (Magnuson et al., 2007). With the national push for Pre-K centered around kindergarten readiness and academic achievement, it is not surprising that 67% of participants named academics as a contributing factor to their choice to send their children to Pre-K.

***RQ1 Theme 2: Social Skills***

Participants also considered the development of social skills to be an integral part of an early childhood care experience. Many participants who chose Pre-K, daycare, or

FFN care all mentioned doing so for a social aspect. Those who chose Pre-K were more focused on playing and learning with other children and adults outside of the family unit in order to prepare them to do so in kindergarten. Research shows that high-quality youth programs support development in many ways, including keeping kids in safe environments, fostering the development of healthy relationships with peers and mentors, and teaching positive skills, beliefs, and behaviors (Karoly et al., 2005). Participants also mentioned that they wanted their children to learn communication, understanding, and sharing skills in the Pre-K setting. One parent noted that they noticed a lot of improvement in their child's verbal communication skills after they began Pre-K and concluded that it must have been from being around other children their age. Children in kindergarten are expected to spend eight hours a day with children and teachers, and it can be a difficult transition for many. Pre-K can be thought of as a bridge between home and traditional school that would help aid in a smooth transition.

### ***RQ1 Theme 3: Safety Concerns***

Families who chose FFN prioritized the social impact in a different way than those who chose Pre-K. Nearly half of the participants who chose FFN care mentioned that they had fears surrounding the idea of Pre-K, whether it be for health or safety reasons. They felt as though their child was too young to be around other adults and children outside of the family without parental supervision. Pre-K aged children are three and four years old and at a very young and impressionable age. It is understandable that parents and guardians would be protective of their young children and want to ensure that they are safe and treated fairly. This could be because they had a negative experience with children or adults outside of the home when they were younger, had a negative

experience with another child in a Pre-K program, or because they are simply worried that their young child would not be able to advocate for themselves without their support. Research shows that racial inequality in U.S. school disciplinary policies is a major civil rights issue and disproportionately affects students of color (Dutil, 2020; Ford, 2021; Tefera et al., 2017). One study found that 93% of Black respondents reported that the increased visibility of White supremacy and police violence in the past few years negatively impacted them and made them increasingly worried about their safety and the safety of loved ones (Horsford et al., 2021).

Students of Color, particularly Black students, are also referred, suspended, and expelled from K-12 public schools at significantly higher rates than White students (Tefera et al., 2017). A study by the U.S. Department of Education found that Black students made up more than 70% of the school-related incidents referred to law enforcement (Elias, 2013). Tefera et al. (2017) argue that although these policies appear racially neutral in design, research shows a correlation between particular discipline approaches and racially disproportionate outcomes because of the way these policies are enacted in the classroom, school, and school system. This is true far sooner than many think; while only 18% of the children enrolled in Pre-K are Black, Black children make up 48% of the students receiving out-of-school suspensions (Tefera et al., 2017). Black youth are disciplined sooner and more harshly than their White counterparts for similar infractions because research shows that Black students are more likely to be monitored, scrutinized, and suspected by school staff due to implicit biases (Ford, 2021). Black families are concerned that public schools are not equipped to meet the intellectual, social, or emotional needs of their children, and it has caused many parents to lose trust in

the education system (Horsford et al., 2021). According to research, the hesitations and fears of Black parents and guardians when it comes to the educational system are justified.

COVID-19 was also a health safety concern for many families. Across the country, COVID-19, along with racial violence, has had an overwhelmingly disproportionate and traumatic impact on Black students, families, and communities (Horsford et al., 2021). Many of the parents and guardians who responded to the survey had to make these decisions in the midst of the pandemic, and 17% named it as a reason they chose not to send their child to Pre-K. The widespread loss and uncertainty accompanied by the further racial and political polarization in American society directly affects Black families and education (Horsford et al., 2021). Of the people who named COVID-19 as a decision-making factor, all of them kept their children at home between the ages of three and four. While it is unclear whether these participants would have chosen to send their children to Pre-K if COVID-19 was not a factor, many Black parents experience constant worry about their child's safety when they leave the house (Horsford et al., 2021). Either way, trusting individuals you do not know with the well-being of your child is a big step for many families. According to Early and Burchinal (2001), Black parents are more likely than White or Hispanic parents to choose FFN options for their infants and toddlers. Despite the effects of COVID-19, trauma from racial inequality, and the lack of trust between Black parents and the U.S. education system, Black communities continue to come together to take care of each other (Horsford et al., 2021). Ultimately, some families' fears of school outweighed the benefits and caused them to choose FFN care for their children.

***RQ1 Theme 4: Lack of Awareness***

Lack of awareness of quality program options was another theme for those who did not enroll their children in Pre-K. According to the survey, 17% of participants struggled to find a free, quality Pre-K program in the city. A lack of ties to family or others in the community was a barrier to finding a program that they could trust because they were not able to ask others for recommendations or rely on word-of-mouth. This also includes families not knowing about all of their options in terms of quality, affordability, and resources. COVID likely played a role in this as well because, since the pandemic, people are more likely to be isolated from others in the community. Parents and guardians' lack of awareness around quality, trustworthy, and affordable early childhood education programs kept many participants from enrolling their children in Pre-K.

**RQ 2: How do parental demographics such as age, marital status, income, education, and employment impact the decision regarding early childhood education?**

According to a comprehensive study conducted comparing the participation of three- and four-year-olds in Pre-K programs from 1991 to 2005, there are a few common factors that affect participation, including the child's race, family income, mother's education, age, and employment (Barnett & Yarosz, 2007). Based on this information, the researcher collected demographic information in the survey regarding employment status, education, adults living in the household, and the participant's age when their child was three years old.



### ***Employment Status***

The survey showed that participants who worked full-time or part-time sent their children to Pre-K, or something other than Pre-K, at similar rates. Although there were only two participants who responded that they were unemployed, none of them chose to send their children to Pre-K. The findings were interesting because a study in 2019 found that families who worked more hours were more likely to enroll their children in center-based early childhood care and decreased the use of informal care options such as FFN care (Carlin et al., 2019). It is important to note that this study only compared the likelihood that families chose Pre-K versus something other than Pre-K, so the results could have looked different if daycare and FFN care had been compared separately.

### ***Level of Formal Education***

The researcher then looked at the choice of Pre-K in relation to a parents' level of formal education. Only 40% of parents with a high school degree and 22% of parents that took some college courses chose to enroll their children in Pre-K, while 59% of parents with an associate's or bachelor's degree and 63% of parents with a master's or doctorate degree chose Pre-K. According to the survey data, parents with less formal education were less likely to send their children to Pre-K, while those with a higher level of formal education were more likely to choose a Pre-K setting when their child was three or four years old. This coincides with Carlin et al. (2019), who found that parents who completed higher levels of education were also more likely to choose center-based care options, such as Pre-K, while lower-income households more often chose FFN care.

A national survey from 1995 found that families with incomes that are at least twice the poverty line are more likely to choose non-parental childcare options for their

children than lower-income households (Early & Burchinal, 2001). According to Fairman et al. (2016), children from lower-income families still have lower Pre-K participation rates than those from average-income families, and the highest participation rates are for children whose mothers have a bachelor's degree or higher. Low SES families tend to have limited options for childcare, quality early childhood education programs, and resources to support parents' efforts as their child's first teacher (Williams, 2021). While the researcher chose not to ask participants about their income level, it is reasonable to assume that the level of education and the income level would be similar in relation to other participants.

### *Additional Adults Living in the Household*

In households where there were additional adult family members living in the home, such as aunts, uncles, and grandparents, 83% of parents chose not to send their children to Pre-K. Of those 83%, 67% of those families chose FFN care during that time. Having additional adults in the household made families more likely to keep their children home longer. Having a non-relative living in the house or having no additional adults living in the house besides parents and guardians did not impact the likelihood that a child would attend Pre-K. Having additional family members to look after and help raise the children made families less likely to rely on early childhood care options outside of the household. Some participants mentioned grandparents giving one-on-one attention to their children during the ages of three to four years old, and they would rather have them learn from a relative than someone they do not know. This also supports the claim that Black communities continue to come together to take care of each other and would

be more likely to have a family member living in the home who would be willing to care for a child during the day (Horsford et al., 2021).

### *Age*

The researcher found that 35% of parents aged 26 to 30 chose to send their children to Pre-K, while 67% of parents between the ages of 31 and 35 and 36 and 40 chose to send their children to Pre-K. The results suggest that parents who were 20 to 30 years old were more likely to choose daycare or FFN care, while parents 31 to 40 years old were more likely to choose Pre-K. Once parents were 41 or older, they were nearly the same, with slightly more choosing something other than Pre-K. It is unclear why the age of the participants impacted their decision regarding Pre-K enrollment.

### **RQ 3: In what ways do Black parents and guardians feel that their early childcare decisions affected their child's success in school?**

#### ***RQ 3 Theme 1: Perceived Positive Effects***

There was a universal theme that participants believed their choice had a positive impact on their child regardless of what that choice was. According to the survey, approximately 71% of participants who chose Pre-K and 75% of participants who did not choose Pre-K felt as though their choice had a positive effect on their child's future success in school.

Fifteen participants mentioned that Pre-K had a positive effect on their child's academic success and provided early exposure to content that would be helpful in kindergarten. Nine participants also said that Pre-K had a positive impact on their child behaviorally and socially because they were able to have social interactions with same-aged peers in a controlled environment. One person recalled witnessing their child

blossom and develop skills only he could receive from a school environment. Another participant discussed how their child looks back on her experience in Pre-K with fond memories and engaged well in the structure which provided her with a good foundation for her academic success.

Participants who did not send their children to Pre-K also noted that their choice had a positive impact on their child. One participant said that staying at home helped develop principles and a moral foundation that they aren't sure is taught in schools for African American children, due to the lack of diversity in the educational field. Research shows that a large contributing factor to the inequitable discipline of students of color in schools is that staff members are often not representative of student populations (Tefera et al., 2017). Schaeffer (2021) notes that U.S. K-12 public school teachers are considerably less racially and ethnically diverse than the students they teach, and a similar diversity pattern is also found with school principals. Table 1 shows the discrepancies between teachers' and students' racial demographics as a nation (National Center for Education Statistics, 2022). Tefera et al. (2017) argue that these implicit biases stem from the lack of meaningful contact with other racial, ethnic, and social groups prior to teaching students of color, which leads to racial anxiety and stereotyping in the classroom, which is what many parents are trying to avoid. Black students with teachers of the same race were rated as less disruptive by their teachers and suspended less often compared to those with teachers of a different race (Wright, 2015). Another participant noted being able to create a safe and loving place for their child to learn and grow allowed him or her to build up their confidence and character.

The perception of a positive impact, regardless of what was chosen, is complex. First, participants may not have a frame of reference for the outcome that another choice may have produced. If someone has only ever sent their child to Pre-K because they thought it was the best choice or because they needed to, due to a work schedule, they may believe it was a great option for their child because they have not experienced anything else. This can also be said for parents and guardians who kept their children at home out of fear of Pre-K. If someone has never known anything else, they may believe that it had positive implications even though they have nothing to compare it to. This can also come into play when in relation to Choice Theory. In this study, parents were asked to reflect on their educational decision-making and recognize how their decisions were influenced by generational habits, life experiences, and personal perceptions. If Choice Theory is accurate, parents tend to follow traditions based on what they have experienced, such as choosing preschool, daycare, or FFN care simply because that is what they did growing up (Glasser, 2010). This could also apply if parents' apprehension towards Pre-K comes from a negative educational or life experience they had. Due to systemic racism, Black parents must take many things into consideration that White families do not in order to make sure that their child receives a high-quality education (Dutil, 2020; Ford, 2021; Posey-Maddox et al., 2021; Tefera et al., 2017). In the context of this study, parents would need to take a step back and analyze this decision regarding their child's early education from an objective lens rather than their own viewpoint. However, the perception of a positive impact without a relevant comparison is solely based on the participant's viewpoint.

**RQ 4: What are Black parents and guardians looking for in an early childhood program?**

***RQ 4 Theme 1: Learning Goals/ High-Quality Education***

The most common theme for families who chose Pre-K was that they were looking for learning goals and the educational support a program offered. This aligned with the theme regarding decision-making factors in Research Question 1. While academics were the most common goal for parents and guardians who enrolled their children in Pre-K, only 20% of participants who did not choose Pre-K listed it as a contributing factor in their choice of an early childhood care program, compared to 76%. Depending on parents' experiences as well as ethnic and cultural backgrounds, many have differing goals around their child's early learning experiences (Curry, 2018). For some, academics are at the top of the list of priorities when it comes to preparing for school, while others have different concerns. While some research shows that Pre-K programs are typically higher-quality than daycares and leave children more ready for kindergarten, Bartik and Hershbein (2018) did not find statistically significant evidence of average state Pre-K programs having an effect on the average student's future success (Magnuson et al., 2007). They found that states with high-quality Pre-K programs had a positive effect on math scores for all students, and school districts with a majority of Black students had significant positive effects on math and reading test scores (Bartik & Hershbein, 2018). Programs that followed the SAFE programming structure (sequenced, active, focused, and explicit) yielded significant increases in positive social behaviors, academic achievement, and youth self-perceptions (Williams, 2021). Based on the research surrounding the differing results of Pre-K programs, a clear distinction between

average and high-quality programs in their area would be helpful for parents and guardians who prioritize educational outcomes.

***RQ 4 Theme 2: Safety***

Ensuring the safety of their children is a priority for many families when choosing an early childhood program. Approximately 33% of participants who enrolled their children in Pre-K and 20% of participants of parents and guardians who did not choose Pre-K mentioned safety as something they were looking for in an early childhood care program. Safety is a common theme amongst participant responses, as shown by Research Question 1, Theme 1. Parents and guardians are scared to allow people they do not know and trust to care for their children when they are at a young age. This is especially true for Black children who experience higher rates of racial trauma (Cao, 2022; Posey-Maddox et al., 2021). Young children are a more vulnerable demographic because they are less likely to have the communication skills to let others know if something is wrong. This is particularly true for Black students, because they are disciplined sooner and more harshly than their White counterparts for similar infractions (Ford, 2021; Tefera et al., 2017). Higher disciplinary rates, harsher punishments, and the lack of Black teachers and administrators in schools are causing many Black families to lose trust in the educational system and prioritize their child's safety over academic achievement at a young age (Schaeffer, 2021; Tefera et al., 2017).

***RQ 4 Theme 3: High-Quality Caregivers***

High-quality caregivers were a common theme for families, regardless of whether their child attended Pre-K. Common characteristics of caregivers that would make them be considered high-quality included: patient, kind, attentive, honest, educated,

experienced, and loving. Only participants who chose Pre-K mentioned being educated as a high-quality characteristic, which makes sense because they are more concerned with the academic aspect of education. Families who did not choose Pre-K continue to show that they are more concerned with their child's safety and how they are treated than about what schooling a caregiver has had. This aligns with the fact that some families choose FFN care to keep their child with a familiar and trusted adult rather than a program out of the home. While they ultimately made different decisions, having quality individuals caring for children was a common factor among all participants

**RQ 5: What factors would increase Black parents' interest in sending their kids to Pre-K?**

***RQ 5 Theme 1: High Quality Programs***

The overarching theme was that Black families want high-quality programs in order to increase interest in Pre-K. Participants said that more transparency in the Pre-K experience and what children are learning could influence their decisions. Research shows that the vast differences in outcomes depend on the quality of Pre-K programs, and families want to be able to make informed decisions. If families are unsure about what is being taught and who is teaching it, many are deciding the risk is not worth the reward and choosing other options. Due to the distrust between many Black families and the education system, a more open partnership between schools and families is important to bridge the gap. A concerted effort to provide transparency and build trust is the only way to increase interest in Pre-K programs.



***RQ 5 Theme 2: High Quality Staff***

Participants also mentioned the desire to have more supportive staff members. This also mirrors the research that there is a lack of trust between schools and families. According to participants, supportive staff includes emotional support, clearer communication, openness about academic and behavioral support, and support for special needs students. Families have an overwhelming desire to trust and believe that their children are being taken care of when they are not there. This is difficult to do in the current climate, especially when research continues to prove that Black children are not being treated fairly in educational settings. This is a barrier that will likely take time and many community outreach opportunities that allow families to get to know staff members and form meaningful relationships. Ultimately, families want high-quality programs with trustworthy personnel that are accessible to everyone regardless of household income and transportation needs.

**Conclusions**

Ultimately, there was only sufficient evidence to support the claim that there was a difference between the academic success of Black second-grade students on a standardized iReady reading assessment based on whether or not they went to Pre-K. The results were contrary to previous studies performed, which found that kindergarten students who attended Pre-K outperformed their classmates who did not attend Pre-K in mathematics (Bartik & Hershbein, 2018; McCormick et al., 2022; Perry, 1999). According to McCormick et al. (2022), four-year-olds who attended Pre-K score higher on assessments and academic skills when they begin kindergarten than those who did not. However, these academic gaps begin to close as early as that same year due to fading out.

The phenomenon of fadeout led the researcher to collect math and reading scores from the beginning, middle, and end of the academic school year. The researcher found, however, that the results were the same regardless of the time of the year.

Although there was insufficient evidence to prove all but one of the hypotheses, it is important to note that the mean scores for students who attended Pre-K were consistently higher across academic subjects and grade levels. According to the data, each mean score for math and reading for students in kindergarten, first, and second grade was higher for students who attended Pre-K than those who did not throughout the entire school year. The researcher concluded that the lack of statistical significance despite the drastic differences in means was due to the small sample size. The researcher is confident that replicating this study with larger sample sizes would produce different results more aligned with previous research.

While Bartik and Hershbein (2018) did not find statistically significant evidence of average state Pre-K programs affecting the average student's test scores, grade retention, or referral to special education programs, they did find that states with high-quality Pre-K programs had a positive effect on math scores for all students. They also found that school districts with a majority of Black students had significant positive effects on math and reading test scores, even in states with high-quality Pre-K programs (Bartik & Hershbein, 2018). Parents and guardians in this study determined whether to classify their child's early childhood care experience as FFN, daycare, or Pre-K. This could have been a limitation because there is some gray area between daycare and Pre-K providers. Some daycares market their daycare as a learning center and incorporate some academic content into their day to increase interest in their services. Based on surveys

and interview responses, there was some uncertainty on how to classify certain providers, and participants may believe that their child attended Pre-K, because they were taught some academics when the facility was technically a daycare. This could have skewed the results if students' scores and behavioral data were not in the correct category. Research shows that Pre-K programs are typically higher quality than daycare or center-based programs, leaving children more ready for kindergarten (Magnuson et al., 2007). A study in 2006 tested this idea when they compared the impact of attending a universal Pre-K program in Georgia with the Head Start program and found that those who attended the Pre-K program showed higher developmental outcomes and teacher rating scores than those who attended Pre-K (Henry et al.). However, time, education, or resource limitations may limit a caregiver's ability to support their children (Issacs, 2012). Further, parents may have different goals around their child's early learning experiences. Differing goals may especially come into play when considering the parents' ethnic and cultural backgrounds (Curry, 2018). While every program is unique and not one way works for every family, it is reasonable to conclude that the program's quality could affect the impact it has on students (Bartik & Hershbein, 2018; Henry et al., 2006).

Studies show that programs that followed the SAFE programming structure (sequenced, active, focused, and explicit) yielded significant increases in positive social behaviors, academic achievement, and youth self-perceptions (Williams, 2021). Students who attended high-quality programs, like those that follow the SAFE model, would be more likely to show a significant increase in standardized test scores and a decrease in disciplinary infractions. Depending on the quality of Pre-K or alternative early childhood care programs students attended before entering kindergarten, their academic and

behavioral growth levels would differ and, therefore, have different impacts on their success in subsequent years. Underserved children, including low SES and children of color, are less likely than their peers to have access to these learning opportunities (Wright, 2015). More than half of the students at the study site are considered economically disadvantaged, and more than 90% of students are children of color. According to research, this would make them less likely to have access to high-quality learning opportunities.

Studies show that children from low socioeconomic (SES) households begin school further behind their more privileged peers in basic knowledge and social skills, and these gaps typically widen over time (Karoly et al., 2005). According to Issacs (2012), “Fewer than half (48 percent) of poor children are ready for school at age five, compared to 75 percent of children from families with moderate and high income, a 27 percentage point gap” (p. 1). This directly affects Black children because they are more than twice as likely as their White peers to attend high-poverty schools (García, 2020). According to García (2020), “In America, race and poverty are intertwined, further disadvantaging Black students” (p. 2). Bartik and Hershbein (2018) found that school districts with a majority of Black students, like the one in this research study, had significant positive effects on math and reading test scores even in states with high-quality Pre-K programs. A similar study found that higher state spending per student in Pre-K significantly increased English Language Arts test scores for all fourth graders, especially Black students, which subsequently decreased the achievement gap between Black and White students (Pendola et al., 2022). If most students in the study did not attend a high-quality Pre-K program, it could explain why there was insufficient evidence

to support the claim that attending Pre-K affected the academic and behavioral success of students in all grades tested.

The researcher also found that the mean number of disciplinary infractions was lower for students who attended Pre-K than those who did not, across all grade levels. Although there was no significant difference based on the  $\alpha = .05$  significance level, it is important to note that students who attended Pre-K had fewer disciplinary infractions than those who did not, on average. The mean number of disciplinary infractions for kindergarten and first-grade students who did not attend Pre-K was more than double the mean number of those who attended Pre-K. Even more surprisingly, the mean number of disciplinary infractions for second-grade students who did not attend Pre-K was more than four times the mean number of those who attended Pre-K. Despite these vast differences, the researcher failed to reject the null hypothesis because the two-tailed  $p$ -value was not less than the level of significance ( $\alpha = .05$ ). This is important to note because the mean number of disciplinary infractions based on Pre-K attendance is not statistically significant even though there is a noticeable pattern.

While the survey results showed 23 parents and guardians whose children attended Pre-K and 23 parents and guardians whose children did not attend Pre-K, the secondary data collected was much different. Based on the school's record, there were 26 children in kindergarten, first, and second grade who attended Pre-K and 71 children who did not attend Pre-K. While the survey included parents of children in kindergarten through fifth grade, the ratio of the survey responses being 1:1 and data showing 26:71 is far off. The researcher concluded that this may be due to the COVID-19 pandemic

affecting children in lower grades (kindergarten, first, and second grade) more than it did when parents of older children had to make their early childhood care decisions.

### **Implications for Practice**

While the results of attending Pre-K on standardized test scores and behavioral success in subsequent years may be statistically insignificant in many cases, including the majority of this study, it does not mean that families cannot successfully utilize Pre-K in the future. The research raised several issues that should be addressed in the future.

Before investing an enormous amount of money into Pre-K programs, the educational system needs to understand what kind of education they want to provide to our youngest learners and how they will do it. There are conflicting results on the effectiveness of Pre-K, and all the contradicting information can make a decision more challenging for families.

First and foremost, families need to be asked and listened to regarding their desires for public education. This is especially true for families of color because, in the push for racial equity, the education system cannot be overlooked (Noguera & Alicea, 2020). There needs to be meaningful dialogue and data collection regarding the current barriers surrounding early childhood education. In an attempt to be more inclusive and better serve students of color, school districts across the nation are implementing various anti-racism and equity professional development (Horsford et al., 2021). While culturally responsive teaching and anti-bias training are helpful, they overlook the large issue of how racially separate and unequal schools continue to be almost 70 years after the *Brown v. Board of Education* ruling (Johnson & Nazaryan, 2019). While these trainings can have an impact on interpersonal racism, they overlook structural racism that has been

compounding for centuries. Findings regarding equity at a state and local level should be thoughtfully shared with families, as well as improvement plans. There is a need for accountability regarding efforts to close the educational gap.

Historically, the United States has not invested in Black schools and communities (Horsford et al., 2021). Policies such as unequal access to healthy food, health care, clean water and air, redlining, and unfair bank lending all continue to impact this structural racism, because they continue to disadvantage communities of color (Noguera & Alicea, 2020). Local property taxes determining school funding, inexperienced teachers being hired to teach at the most disadvantaged schools, overcrowding, poor school building infrastructure, and lack of extracurricular activities and Advanced Placement (AP) classes lead to further inequality in low-income schools, which are often attended by students of color (Horsford et al., 2021). Many Black parents worry that low expectations, racially biased teaching and curriculum, and funding going towards the surveillance of Black further exacerbates the issues (Horsford et al., 2021). If this concerns Black families, then it needs to be a concern for public education as a whole.

Investing in counselors and social workers rather than law enforcement personnel in schools. If a school has a security guard or officer on duty, they should also have a counselor and social worker. Helping to prevent issues from arising and truly helping students in crisis should be the priority in order to lower the inequities in disciplinary practices based on race. Schools nationwide, including the one in this research study, do not have counselors and social workers, due to budget cuts. Money needs to be reallocated in order to provide students with these supports. This is especially true for students of color and children from low SES households because they are the ones most

adversely affected by the disciplinary policies in the public education system (Dutil, 2020; Ford, 2021; Tefera et al., 2017).

Next, states with high-quality Pre-K programs but lacking diversity should prioritize accessibility and increased enrollment for students of color. Pre-K needs to be made accessible to all three-to four-year-old children in the United States. Accessibility includes cost, transportation, and geographical location. For a state to truly have universal Pre-K, at least 70% of four-year-olds would have to be enrolled, and only four states and the District of Columbia were meeting that criteria before the COVID-19 pandemic (Stanford, 2023). Missouri had only 7% of four-year-olds enrolled in Pre-K during the 2019-2020 school year, which is one of the lowest in the nation (Friedman-Krauss et al., 2021). Research suggests that although there are a variety of different Pre-K programs available, oftentimes the children who would benefit the most from these programs do not enroll (Barnett & Yarosz, 2007; Fairman et al., 2016). Increasing the public awareness of Pre-K programs and options for families with different goals and needs could potentially increase the likelihood that more families would choose to enroll their children in Pre-K because they would be able to make a more informed decision that they would feel comfortable with. Participants in this study reported that not being aware of their options, including free options, impacted their decision regarding early childhood care. Lack of transportation also kept some families from enrolling. If families do not have access to transportation, getting their children to school is difficult, if not impossible. If they are already struggling with transportation, they will likely forgo signing their children up for Pre-K if they are already navigating rides or bus fare for other children or their personal work, health, and needs. If everyone has the right to an



education, Pre-K should make learning accessible regardless of SES, transportation, or geographical location.

After making Pre-K accessible for all families, the priority can be put on creating high-quality Pre-K programs for all children, not just those from high SES families. Priority of program improvement should be in areas serving the largest percentage of Black children and children of color because they continue to face the largest opportunity gaps throughout the educational journey. Generalizing the effects of Pre-K on children's academic and behavioral success in elementary school and beyond is difficult because Pre-K programs differ so greatly. While some Pre-K programs create safe places for children to learn, grow, and make mistakes, others can do the opposite and be the catalyst for negative ideas about school and learning. Research shows that the quality of a Pre-K program directly impacts the effect it has on students (Bartik & Hershbein, 2018). Studies show that programs that followed the SAFE programming structure (sequenced, active, focused, and explicit) yielded significant increases in positive social behaviors, academic achievement, and youth self-perceptions (Williams, 2021). Providing more structure and training for Pre-K facilities in child development could positively impact the quality of programs students attend.

There are many aspects that create a high-quality program. Arguably, the most important thing would be the quality of the caregivers. If people want high-quality staff in Pre-K classrooms, then those teachers deserve to be paid fairly. Many Pre-K teachers do not make as much money as they would if they were in K-12 classrooms. There has been a push to increase the professional requirements of early childhood teachers (Mahnken, 2019). Considering the growing costs of college education and the fact that

many community-based childcare centers earn less than minimum wage in some states, many early childhood educators cannot afford to further their degrees. While approximately 68% of K-12 teachers are female, 98% of preschool teachers are female, and there is more than double the number of people of color teaching preschool than there are K-12 teachers (Mahnken, 2019). Efforts need to be made to support Black educators in promoting more representation and equity in education. Elementary teachers are almost always required to have a college education and are paid nearly twice as much as preschool teachers. While the money, time, and professional constraints of earning a degree would burden many preschool teachers who wish to make more money, more effort can be made to provide support and initiatives to further education. Districts, states, and even the nation should provide further financial assistance to educators to continue their education. This would allow more professionals to avoid having to choose between what grade they should teach and how much money they could make. If the nation wants to show the importance of Pre-K, then the nation needs to work to obtain and support high-quality Pre-K teachers and compensate them properly.

Impacting the future academic and behavioral outcomes of students in later grades does not have to be the sole metric of success for Pre-K programs. Reframing the purpose of Pre-K could help set more meaningful and achievable expectations for these programs. Rather than looking at Pre-K as only being successful if students' test scores are improved in elementary or middle school, it may be more enjoyable and beneficial for Pre-K to simply be a place for positive and engaging experiences for young children. Substantial research shows that important academic, social, and emotional development takes place outside of the traditional K-12 classroom setting, including during early

childhood, before and after school, and during the summer months (Williams, 2021). High-quality programs and activities support youth development in many ways, including keeping kids in safe environments, fostering healthy relationships with peers and mentors, and teaching skills, beliefs, and behaviors (Karoly et al., 2005). Underserved children, including low SES and children of color, are less likely than their peers to have access to these learning opportunities (Wright, 2015). Rather than focusing on how many letters children can memorize or how high they can count before coming to kindergarten, focus on building empathy, positive relationships, and perseverance. While memorizing information may seem like it puts them ahead at the moment, these things can set children up for success far beyond standardized tests.

Lastly, Whitehurst (2018) suggests that a policy shift from a focus on school readiness to family support is another possible path. This is a vital time for many families to begin their relationship with the educational system. Many teachers complain that families are uninvolved or uninterested in their children's education when, in reality, they have been conditioned to be that way. Black families are concerned that public schools are not equipped to meet the intellectual, social, or emotional needs of their children, and this has caused many parents to lose trust in the education system (Horsford et al., 2021). According to research, including in this study, the hesitations and fears of Black parents and guardians when it comes to the educational system are justified. Building positive relationships with families and providing support while they are trying to raise young children can help set children up for success beyond the classroom and provide families with resources and tools to help their children for many years to come. If these

relationships are built and families' wants and concerns are heard, it may help more families become invested in the early childhood education process (Isaacs, 2012).

### **Recommendations for Future Research**

Several gaps were identified in the review of current literature and research regarding Pre-K. Further research should be conducted to provide more insight and clarity around the effects of Pre-K attendance. Further research on the effects of Pre-K on students based on SES, race, and gender would also be a meaningful contribution. Research shows that the program's quality affects the impact it has on students (Bartik & Hershbein, 2018; Henry et al., 2006). While there can be high-quality programs and caregivers in various early childhood care options, it would be important to differentiate findings based on the program's quality. Further research comparing the impact of Pre-K based on its quality would be beneficial. This could include the academic content, quality, and experience of caregivers, as well as resources that the program has access to.

While this study included behavioral data for kindergarten through second-grade students, results were based on secondary data from January through May. In future studies, collecting behavioral data from the beginning of the school year could be more beneficial because that would be the first time some participants would have been in school. Collecting in the second half of the school year meant that students had already had nearly five months of school experience and exposure, which would impact the number of times they were excluded from the classroom. The impact of not attending Pre-K before entering a traditional school setting would likely be more prominent at the beginning of a school year.

Future studies should also be done with students beyond second grade. The researcher chose to focus on kindergarten through second-grade students because of their proximity to early childhood. This decision was also due to some studies showing fadeout, making the effects of Pre-K obsolete within a few years (Hershbein, 2018; McCormick et al., 2022). However, the results showed that the only group of students who had a significant impact from Pre-K attendance was second graders in reading. While this could have been unique to this group of students, it would have been helpful to see results into third grade and beyond to determine if any other ages showed significant differences.

Lastly, more research needs to be done specifically on Black families. Black parents and guardians have unique educational experiences that impact their decisions, and it is important to differentiate between their viewpoints.

### **Summary**

While there is still uncertainty about how to accomplish it, more needs to be done to close the racial and socioeconomic gap that exists in the educational system. In recent years, policymakers have further emphasized the importance of supporting child development through high-quality early childhood education and childcare (Henly & Adams, 2018). While the government urges families to get children into schools as soon as possible so they do not fall behind, other studies show a different story (Bassok et al., 2016; Durkin et al., 2022).

The qualitative aspect of this research study focused on the thoughts and opinions of Black parents and guardians regarding Pre-K education. This study focuses on the unique shared experience of navigating U.S. early childhood education systems as a

Black parent while recognizing Black individuals' vastly different lived experiences. The researcher explored the decision-making factors for families when choosing early childhood care for their children and found some common themes. Black parents and guardians are ultimately looking for high-quality programs and caregivers. While families that chose Pre-K were more interested in the educational and social head-start Pre-K could provide, families that did not choose Pre-K were worried about the safety of their children and the lack of kind and compassionate caregivers.

In addition, the researcher analyzed academic and behavioral data of students in kindergarten, first, and second grade. The researcher found that the differences in academic performance and behavioral infractions were not significantly different based on whether they attended Pre-K for kindergarten or first-grade students. Students in second grade who attended Pre-K showed a statistically significant increase in reading test scores than those who went to daycare or FFN care. This was contrary to previous studies, which mainly showed differences in early kindergarten that began to fade as years passed. The study leaves researchers with more questions than answers, which is why research into early childhood education continues to be important.

Gaining insight into the decision-making factors of Black parents and the effects that Pre-K has on Black children can help make early childhood care options more transparent, accessible, and representative of all families. The goal is to increase access to high-quality Pre-K programs for all families regardless of race and socioeconomic status. The first step to increasing public awareness and support around Pre-K education is to understand where the educational system is falling short for students and their families.

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## **Appendix A**

### **Survey Research Information Sheet**

You are being asked to participate in a survey conducted by Anna “Grace” Barnes at Lindenwood University. I am conducting this study to understand parents and guardians’ choices surrounding early childhood care and to determine if attending Pre-K predicts children's academic and social/behavioral outcomes. It will take about 10-15 minutes to complete this survey.

Your participation is voluntary. You may choose not to participate or withdraw at any time by simply not completing the survey or closing the browser window.

There are no risks from participating in this project. We will not collect any information that may identify you. There are no direct benefits for you participating in this study.

#### **WHO CAN I CONTACT WITH QUESTIONS?**

If you have concerns or complaints about this project, please use the following contact information:

Anna “Grace” Rollins                      grollins@biomesteam.org

Dr. Mitch Nasser                              Rnasser@lindenwood.edu

If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu.

By clicking the link below, I confirm that I have read this form and decided that I will participate in the project described above. I understand the purpose of the study, what I

will be required to do, and the risks involved. I understand that I can discontinue participation at any time by closing the survey browser. My consent also indicates that I am at least 18 years of age.

You can withdraw from this study at any time by simply closing the browser window.

Please feel free to print a copy of this information sheet.

[https://lindenwood.az1.qualtrics.com/jfe/form/SV\\_ac8JfmLwa3PKssu](https://lindenwood.az1.qualtrics.com/jfe/form/SV_ac8JfmLwa3PKssu)

**Appendix B**

## Anonymous Survey

Q1: Do you have a child that attends the Biome School?

(If participant selects no, they will be brought to the end of the survey)

Q2: Ethnicity

(If participant selects multiracial, they will be brought to question 3; if participant selects Black or African American, they will be skipped to question 4; if participant selects something other than Black, African American, or multiracial, they will be brought to the end of the survey.)

Q3: Does your multiracial identity include Black or African American?

Q4: Please select the option that best describes your employment status:

Q5: What is the highest degree or level of school you have completed?

Q6: Please select the other adults that live in your household. (Select all that apply)

Q7: Your age when your child was 3:

Q8: What did your child(ren) do between the age of 3-4? Please check more than one if you have more than one child and the answer would be different.

Q9: How and why did you make the decision whether or not to enroll your child(ren) in Pre-K?

Q10: What other child care options did you consider?

Q11: Do you think your choice regarding Pre-K had a positive or negative impact on your child(ren) academic and behavioral success? Why?

Q12: How did your experience in school impact your decision to send your child to Pre-K?

Q13: What were you looking for in the childcare option you chose?

Q14: What would increase your interest in sending your child(ren) to Pre-K?

Q15: If you would be willing to participate in a brief interview, please leave your email address:

## Appendix C

### Interview Questions

1. What factors impacted your decision regarding early childhood care?
2. What early childhood education options were you aware of when making your decision?
3. What were you looking for when you were considering an early childhood care program?
4. How did your own educational experience impact your decision?
5. How do you think early childhood education could be improved?
6. What would have increased your interest in sending your child to Pre-K?