The Impact of Enrollment in a Pre-Kindergarten Program on the Social-Emotional Development of Young Children

Thomas M. Sowers
B.S ED., Southwest Missouri State University, 2005
M.A., University of Missouri Kansas City, 2010

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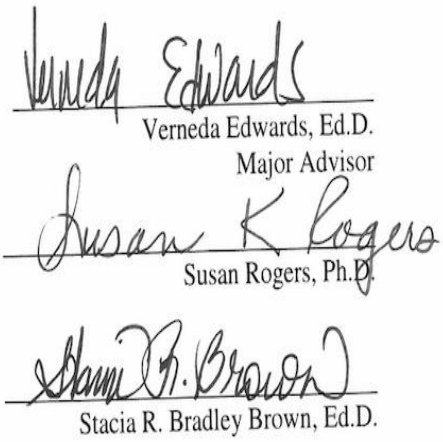

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Abstract

The purpose of this quantitative study was to determine the difference in social-emotional development among students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program, as measured by the Kindergarten Readiness Assessment (KRA). The research also examined the impact that various types of pre-kindergarten programs had on social-emotional development. Finally, the study was designed to determine whether differences in the social-emotional development of young children, based on the type of pre-kindergarten program attended, were affected by learning ability, gender, English Learner (EL) status, and ethnicity. The sample included all kindergarten students who had attended District X between 2015 and 2018. A total of 5,200 kindergarten students' archived KRA results were reviewed. This study provided additional educational research to contribute to the current field of findings regarding the impact of early education on the social-emotional development of young children. The results from this study were mixed. Enrollment in a pre-kindergarten program as well as type of pre-kindergarten program were shown to have made an impact on the social-emotional competence of the students in the sample. The demographics from the research study were also shown to have have been impacted by not only attendance in an early education program, but by type of pre-kindergarten program as well. The results of the testing revealed that learning ability did affect differences in the social-emotional development of the sample based on the type of pre-kindergarten program attended. Additional study was conducted to

determine the extent the difference in social-emotional development among students enrolled in different pre-kindergarten programs was affected by gender. The results of the study revealed that gender did affect differences in the social-emotional development of the sample based on the type of pre-kindergarten program attended. Further testing was conducted to determine the extent of the difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by EL status. The results of the analysis showed that EL status affected differences in the social-emotional development of the sample used during the study. The final results of the study showed that the extent of the difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by ethnicity. Results of the analysis revealed that ethnicity affected differences in the social-emotional development of the sample based on the type of pre-kindergarten program attended.

Dedication

To my beautiful and amazing wife Liz for your unwavering commitment to our family throughout this lengthy process and your motivation to keep me moving forward. You have been my constant beacon of doctoral support over the last three years and I could not have made it to this point without your patience and love. Having a young child during this process has not been easy as I had a fear of missing out, but you, without missing a beat, made sure everyone was taken care of each day, especially on Wednesday nights. You were and continue to be the foundation and source of strength for our growing family. Fortunately for our next child, who is due to make his or her debut to the world in March of 2019, I will not have to feel guilty and shut the office door for any additional nightly writing time. I am so very excited to meet you and be with you for all of your milestones! To my son Miles for even at five-years-old giving me pep talks saying things like, "You can do it, daddy!" (M. Sowers, personal communication, July 11, 2018). Miles, I hope that my perseverance throughout this process has shown you that if you devote the time to something you wish to complete, anything is possible. Daddy is looking forward to more family time with you and your baby brother or sister. To my amazing parents, Terry and Vickie, for never letting me leave the house as a child and young man without saying how proud you were of me and continuing this same tradition today. Thank you for always being open to welcoming Miles to Windmill Valley for some Grammy and Grampy time while I worked feverishly on my writing. A big thanks to my mom for our endless latenight conversations about anything and everything early

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Chapter 1

Introduction

Early childhood education opportunities support the development of foundational skills for the youngest of students. These skills include social-emotional competency. Yates et al. (2008), with The Center on the Social Emotional Foundations for Early Learning (CSEFEL) identified social-emotional development as

> Developing capacity of the child from birth through 5 years of age to form close and secure adult and peer relationships; experience, regulate, and express emotions in socially and culturally appropriate ways; and explore the environment and learn—all in the context of family, community, and culture. (p. 2)

The ability to form healthy relationships with others and express emotions in socially acceptable ways, as outlined in this definition of social-emotional development, are critical aspects of maturity for all children regardless of age. Later success in life is dependent on each of these social-emotional skills and character traits including establishing and maintaining effective relationships as well as managing strong emotions to name a few. As young children journey through adolescence into adulthood, these life skills serve them as they interact with other members of society, encounter struggles, and have interactions with law enforcement (Darling-Churchill & Lippman, 2016). The importance of young students having high-quality experiences through early formal education has become significant in their development towards kindergarten or school readiness (Barnett, Carolan, Squires, & Brown, 2014; Clifford et al., 2005). The National Association for the Education of Young Children (NAEYC, 2016) identified and

conveyed that school readiness is "more than basic knowledge of language and math, important as these are. Readiness expectations should include all areas: physical, cognitive, social, and emotional competence as well as positive attitudes toward learning" (p. 1).

Pre-kindergarten programs, specifically those for three to five-year-olds, were created to offer young children opportunities for early learning in many of these areas. Current types of pre-kindergarten programs include but are not limited to in-home, faith-based, for-profit, and district-based settings (Karoly, 2016). Although not available to all, these programs have the potential to develop young children holistically. When a child has a strong social-emotional foundation, other developmental areas including approaches to learning, communication, literacy, and mathematical knowledge can be strengthened (Sadler, 2007).

Background

Most research regarding pre-kindergarten experiences has focused primarily on academic skills with social-emotional development outcomes being consequential (Allen, 2009; Hughes, 2015; Lee, Zhai, Brooks-Gunn, & Han, 2014; Taylor, Gibbs, & Slate, 2000; Weiland & Yoshikawa, 2013). The development of a young child's social-emotional functioning has been secondary to other public concerns (Jones, Greenberg, & Crowley, 2015). Increased exposure to trauma caused by loss, violence, neglect, and abuse of all forms in childhood is in direct correlation to this increased need for additional research. The increase in the prevalence of these trauma, which are stressors on the mental health of children over time has provided the need for research on the impact that pre-kindergarten has upon the social-emotional development of incoming

kindergarten students. Access to early education opportunities could support the social-emotional development of all young children.

In the 1930s, Vygotsky made observations that indicated the development of self-regulation and other social-emotional characteristics takes place over a process. Bodrova and Leong (2007) argued that

> Physical, cognitive, and social-emotional [development] are considered part of a whole. Although they are parts of a whole, physical, cognitive, and emotional self-regulation do not all develop at the same rate. Children first learn to regulate their physical behaviors, then their emotional ones. (p. 128)

To add to this point, Sadler (2007) and Chazan-Cohen and Kisker (2013) shared the idea that young children involved in early education opportunities experience more accomplishments in and out of school when compared to students who do not have the opportunity to participate in early education. The lack of social-emotional competence of students at a young age and the impacts on other areas of development supports the importance of increased opportunities for further strengthening social-emotional development (Chazan-Cohen & Kisker, 2013).

Young children who have an opportunity to interact with and problem solve with other children could potentially help with the development of their social-emotional awareness. Ashdown and Bernard (2012) exemplified the implications of these necessary character traits and indicated, "The development of social-emotional competence is an important foundation for young children's later success and well-being" (p. 397). Darling-Churchill and Lippman (2016) highlighted this point stating, "young children [infants to 5-year-olds who] are able to develop prosocial relationships, feel confident in

themselves, and express and manage their emotions, they are more likely to be prepared to learn and succeed in school" (p. 2). This statement reinforces the connectedness of social-emotional development as it relates to student achievement. Without a strong sense of self, students may struggle to engage in education which would result in the detriment to their success in other developmental areas.

The subjects for this causal-comparative study were kindergarten students from one urban school district in the Midwest. Archival data from students attending kindergarten in 30 different elementary schools in an urban school district were used. Data indicated the student's attendance prior to entering kindergarten. The variables included no pre-k, district pre-k/Head Start, and other pre-k programs. Table 1 shows the percentage of the population based on ethnicity in the community used for the study.

Table 1

Population Percentages for District X Community Based on Ethnicity

Ethnicity	Percentage of Population
Asian	3.60
Black/African American	23.30
Hispanic	27.60
Other	2.69
White	42.00

Note. Adapted from *Percentage for District X Community Based on* Ethnicity, by United States Census Bureau, 2017, p. 1.

Statement of the Problem

Nationally, school leaders strive to become better equipped to support students' social-emotional development. Additional research is needed to determine how early education impacts the social-emotional development of young children. A perspective

across time must be considered to determine if impacts exist. Barnett & Yarosz (2007) wrote an article in which they discussed the inequality among America's youngest students stating that American children are enrolled in a pre-kindergarten program at early ages, but the highest percentage of enrollees were four-year-olds at around 65%. According to The National Center for Education Statistics (NCES, 2014), the number of three, four, and five-year-olds enrolled in an early childhood program has remained static over the past 15 years. NCES (2017) data showed that 38% of three-year-olds, 67% of four-year-olds, and 87% of five-year-olds were enrolled in an early education program, which included kindergarten required in only 15 states (Barnett et al., 2017). The number of four-year-olds enrolled in an early education program had risen by 40,131 four-year-olds since 2002 based on the 2017 data (Barnett et al., 2017). Further research must be completed to determine how social-emotional development is impacted by the experiences gained through enrollment in a pre-kindergarten program. Across the nation, young children continue to miss the opportunity that a pre-kindergarten program could provide in situating them for future success and equipping them to overcome any challenges in life.

Purpose of the Study

The purpose of this study was to determine the effects of pre-kindergarten enrollment on kindergarten readiness in the area of social-emotional development as measured by the Kindergarten Readiness Assessment (KRA). The focus of the study centered around determining the effects of pre-kindergarten enrollment on the mastery of four different components of social-emotional development within the KRA. The components within the social-emotional development area in the KRA consider the

extent to which young children are able to display appropriate interactions with adults, their understanding of what it means to be a friend, their ability to state personal information, and manage transitions. These social-emotional skills are those that support young children with interactions with others and overcoming challenges that they might encounter in life (Burger, 2015). A purpose of this study was to determine the differences among students enrolled in a pre-kindergarten program and those who were not enrolled. Additionally, the results of this research helped to determine any differences in social-emotional development among students enrolled in different pre-kindergarten programs.

Significance of the Study

This study could determine the effects that pre-kindergarten program enrollment has on social-emotional development. Results from this study could add to the research determining if young children are social-emotionally impacted by enrolling in a pre-kindergarten program. Further, this research study could provide additional literature on the value that pre-kindergarten has within the PK-12 society as it relates to social-emotional development.

Delimitations

Delimitations are defined by Lunenburg and Irby (2008) as "self-imposed boundaries set by the researcher on the purpose and scope of the study" (p. 134). Several delimitations should be considered in this study.

- Data were collected from a single urban Midwest school district.
- Data were collected using the district developed Kindergarten Readiness Assessment (KRA).

- Data were collected during the first three weeks of the 2015-2016, 2016-2017, and 2017-2018 academic years.
- Data were collected from students with various educational backgrounds prior to the start of kindergarten.
- Data were collected from students of only specific ethnicities which included students identified as Black, Hispanic, White, or Other. The category labeled Other included Asian, Hawaiian/Pacific Islander, Indian/Alaska Native, Multi-Racial, and Unknown or Declined to Identify.

Assumptions

Assumptions within research are the aspects out of the control of the researcher but ground the study in relevancy (Lunenburg & Irby, 2008, p. 135). The assumptions that impacted this study were:

- Data collected was both accurate and complete.
- Kindergarten teachers completed the Kindergarten Readiness Assessments within the first three weeks of school.
- The proctoring of the Kindergarten Readiness Assessment occurred with fidelity.
- Students demonstrated their best effort when completing the Kindergarten Readiness Assessment.

Research Questions

To determine to what extent enrollment in a pre-kindergarten program affects social-emotional competence in incoming kindergarten students, the following research questions were developed:

RQ1. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program?

RQ2. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs)?

RQ3. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by learning ability (students with specialized needs and students without specialized needs)?

RQ4. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) as affected by gender (students identified as male and students identified as female)?

RQ5. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) as affected by English Learner (EL) status (students identified as EL and students identified as non-EL)?

RQ6. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) as affected by ethnicity (students identified as Black, Hispanic, White, or Other)?

Definition of Terms:

To assist the reader in understanding this study and its contents, various terms have been identified. The following definitions are of critical importance to understanding this study:

Early childhood education. This term refers to the earliest of experiences of young children before the start of what society identifies as formal K-12 education (Manigo & Allison, 2017).

English learner (EL). Kansas State Department of Education (KSDE, 2018) defines ELs as students from "every age, grade level, and socioeconomic class who may or may not have received formal education prior to enrolling in American Schools and may or may not be literate in their home language" (p. 2).

Ethnicity. This term is categorical in the way persons identify themselves and with others based on commonalities including language, culture, or heritage (U.S. Department of Education, 2015). For this study, the ethnic groups that will be used are those that were indicated by legal guardians on the student's enrollment sheet. The ethnic groups identified were Black, Hispanic, White, and Other. The category labeled Other included Asian, Hawaiian/Pacific Islander, Indian/Alaska Native, Multi-Racial, and Unknown or Declined to Identify.

Kindergarten readiness. This term is often used interchangeably with school readiness and refers to a degree of learning achieved, prior to experience in a conventional school environment when a young child is equipped and ready for kindergarten education (Stewart, 2016).

Pre-kindergarten. Any experiences that young children (3 to 5-year-olds) have prior to beginning kindergarten were referred to as pre-kindergarten (Case, Early, In, & Kids, 2007).

School readiness. Maxwell and Clifford (2004) refer to school readiness as the level at which a young child is equipped for learning in a conventional school environment.

Social-emotional competence. Durisic and Gajic (2016) refer to social-emotional competence as the overall understanding of a variety of social-emotional skills in young children. Interactions and effective communication with peers and adults and the ability to self-monitor feelings and actions are the basis of social-emotional competence.

Social-emotional development (SED). Cohen, Onunaku, Clothier, & Poppe (2005) defined this term as the process by which young children develop their abilities to "experience, manage and express the full range of positive and negative emotions; develop close, satisfying relationships with other children and adults; and actively explore their environment and learn" (p. 2).

Students with specialized needs. This term is used to refer to students who have been identified as requiring specialized educational services (Holahan & Costenbader, 2000).

Students without specialized needs. This term is used to refer to students who have not been identified as requiring specialized educational services (Holahan & Costenbader, 2000).

Organization of the Study

Chapter 1 provided the reader with background and foundational knowledge regarding early childhood opportunities and their potential to provide the most foundational of skills to the youngest of students. The significance of the study, delimitations, assumptions, research questions, the definition of terms, and the organization of the study were also found in this initial chapter. Chapter 2 is the review of literature related to the social-emotional development and early educational opportunities. Historical background, developmental theories, and the benefits of social-emotional development are all referred to in this chapter. Chapter 3 consists of the methodology of the study including the research design, participants, measurement, data collection, limitations, and the procedures used to test the hypotheses. Chapter 4 includes the results of the testing of the hypotheses for all research questions. Lastly, Chapter 5 consists of a summary of this study as well as an interpretation of the results of the analysis of the data, significant findings that related to the literature and the conclusions.

Chapter 2

Review of Literature

The review of literature for this study provides the reader with perspectives of early childhood experiences in the United States and an account of the evolution of intended outcomes for such programs. Theories of how social-emotional development impact young children are also discussed. The Center on the Social Emotional Foundations for Early Learning (CSEFEL, 2008) maintains that social-emotional development occurs in the youngest of children from infancy to age five, a time when young children form relationships with others within their environment. During this time, they are learning how to manage emotions acceptably based on specific social and cultural settings (Yates et al., 2008). Social-emotional developmental differences among children of varying ethnicities and socioeconomic statuses are also addressed.

History of Early Childhood Experiences and Methods of Education

Various forms of pre-kindergarten programs have existed to support the youngest of children in developing the skills crucial for school readiness. Each of the varying early education programs had differing concentrations based upon the length of schedule, curriculum resources, or philosophy. While some programs concentrated solely on academically developing young children, others also emphasized the importance of social-emotional development as a precursor to future successes. Across time there has been an evolution in the types of pre-kindergarten programs offered to young children. Many shared philosophies while others had variances in their purpose and focus.

Within the history of early educational experiences, the first offerings were provided during the colonial period. The Puritans viewed education and religion to be in collaboration with each other. In Colonial America, young children began to attend

school after they had turned eight years old and during this time in American Education the role of the family was crucial for children younger than eight as families had the "responsibility for the welfare of young children, rather than community or public responsibility" (Hewes, 1989, p. 7). Certain classes, based on wealth and ethnicity, were excluded from education during this period, which caused many young children to be provided an informal in-home education in a privatized manner. Education in colonial America favored males allowing them to attend in higher numbers than females (Hewes, 1989). Over the course of time opportunities for early education continued to increase for many.

Private for-profit and non-profit opportunities for early education have been available for families dating back to 1835 (Neugebauer, 2006). In 1854 the first nursery schools were opened and available for young children. These schools were noted to focus on offering primarily child-care and nursery services including the bathing and feeding of young children (Neugebauer, 2006). With the continued increase in maternal employment a need for additional nursery schools arose. In the decades that followed, hundreds of nursery schools began to open across the nation. By 1912, 500 nurseries had opened to help aid with the continued demand for child care (Virginia Commonwealth University Libraries, 2013). As time continued, Congress enacted the child care tax deduction in 1954 for families to deduct child care service costs of up to $600 per year. This tax option supported the ability for families to be able to afford for-profit early education programs being offered across the nation. The focus of this move was not only to provide financial support to families but to also stimulate the growth of child care opportunities throughout the United States (Michel, 2017).

Opportunities for Faith-Based education have been in existence since 1782 and were initially developed to educate young children in academia rooted in various religions. These schools were also made available to provide shelter, education, and health services to children living in poverty (United States Conference of Catholic Bishops, 2018). The ages of students who attended programs provided by these organizations were difficult to determine, but primarily younger children were cared for in the home independent of faith-based programs. Faith-based pre-kindergartens most commonly today are meant as an opportunity to promote choice towards various faiths but also to provide a source of revenue for faith-based organizations (United States Conference of Catholic Bishops, 2018).

Influential educators, writers, and psychologists of the past have found other types of pre-kindergarten programs. Montessori established her first school in Rome in 1907. Initially, she had a strong focus on early childhood, but as time progressed she felt compelled to work with adolescents. Early in her life, she believed that the youngest students "learn through sensory-motor activities, working with materials that develop their cognitive powers through direct experience: seeing, hearing, tasting, smelling, touching, and movement" (American Montessori Society, 2018b, p. 1). The focus outlined by the Montessori Method of Education is one of holistic maturation where all aspects of development: cognitive, emotional, physical, and social are crucial to the whole child (American Montessori Society, 2018b). Montessori believed that through these natural experiences children build on academic knowledge which situates them for future success in life skills (American Montessori Society, 2018a).

Steiner founded the Waldorf approach to education in 1919, which centered around catering to the interests and needs of the individual child to support social-

emotional development. Much like Montessori, Steiner believed that children learn through hands-on activities that promote student learning. The focus of the whole child was another similarity to the Montessori Method of education. Steiner believed firmly in the importance of instilling a love for learning in the youngest of students; a critical feature of the Waldorf approach defined by the International Association for Steiner/Waldorf Early Childhood Education (IASWECE, 2018). The Waldorf method of education seeks to create "an atmosphere of loving warmth and guidance that promotes joy, wonder, and reverence [and] supports such healthy development" (IASWECE, 2018, p. 1)

The Reggio Emilia approach to education formed from the work developed by Malaguzzi in Reggio Emilia, Italy throughout the 1940s. This approach to learning celebrated children's exploration of their environments (North American Reggio Emilia Alliance, 2018). Guided by five principles, the Reggio Emilia approach seeks to unlock the hidden potentials of all children, help them to be a part of a community, involve families in the educational practice and uses learning to expand knowledge of the world. The overarching focus of the Reggio Emilia approach was to help support children to be engaged in exploratory learning that enabled them success in the future. Child-centered learning was the essence of this approach to education with students engaging in project-based learning that supported individual interests and needs (North American Reggio Emilia Alliance, 2018).

The educational opportunities of young children became more emphasized and were further demanded during the Presidency of Lyndon B. Johnson. The argument for early childhood experiences stemmed from his focus on remedying the issue of poverty across the country (Peters & Woolley, 2018). With the introduction of Project Head

Start in 1965, vital importance was placed on providing young children with access to early educational opportunities. Project Head Start, the spark for changing pre-kindergarten availability, was created to serve the needs of the whole child during development. Head Start was made available to disadvantaged children as young as three years old and was meant to heighten learning in an effort for them to begin school at the same level as other students (Currie, 2001). These sentiments and pieces of evidence made clear that many believed in the importance of young children having access to holistic educational opportunities. According to the U.S. Department of Health and Human Services (2018), the focus of this pre-kindergarten program was to aid in the growth of a variety of developmental areas including cognition and social-emotional development. Students receiving Head Start services were provided with supports in mental health and physical skills including medical and dental care (Peters & Woolley, 2018). Alongside young children, families of students were offered various supports including social-emotional awareness and health and nutritional education (Peters & Woolley, 2018). President Johnson reiterated the importance of collective responsibility from the nation stating that Project Head Start would not succeed without, "the willing and enthusiastic cooperation of Americans throughout the country" (Peters & Woolley, 2018, p. 1). Furthermore, the primary importance of early childhood education in the United States was meant to address the need of supporting American society through an "awakening in America [where] we are recognizing that poverty perpetuates itself" (Peters & Woolley, 2018, p. 1). Project Head Start was created during this time as an opportunity to redirect the future for disadvantaged students across the nation.

During this same era in educational history, California became the first state to offer a school-based preschool program in 1965. This program was named the California

State Preschool Program (CSPP), which was developed to support students who were identified as being of high risk from external influences including abuse and neglect, subjects of violence in the home, homelessness, as well as designations under child welfare protections. Put into context, the primary focus of the program is to provide these students with an added layer of support to ensure their future success. As time progressed, additional components of learning were embedded into the program to support students' academic gains, specifically in becoming literate. CSPP continues operating to support students meeting various eligibility guidelines including socioeconomic status (Barnett et al., 2017).

Historical data from The National Institute for Early Education Research (2016) indicated that from 1965 to 2005 there was a significant rise in the number of three, four, and five-year-olds who had attended a pre-kindergarten program. Data collected in 1965 showed that 60% of 5-year-olds, 16% of 4-year-olds, and 5% of 3-year-olds were involved in some form of early education. Each of these figures increased during the early 1980s with 5-year-olds reaching over 83% of students enrolled. These numbers continued to grow to reach over 90% of 5-year-olds, nearly 70% of 4-year-olds, and over 40% of 3-year-olds as recorded in 2005 (Barnett & Yarosz, 2007). Figure 1 shows how the percentages of students from 1965 to 2005 who attended pre-kindergarten programs had increased over the course of 40 years.

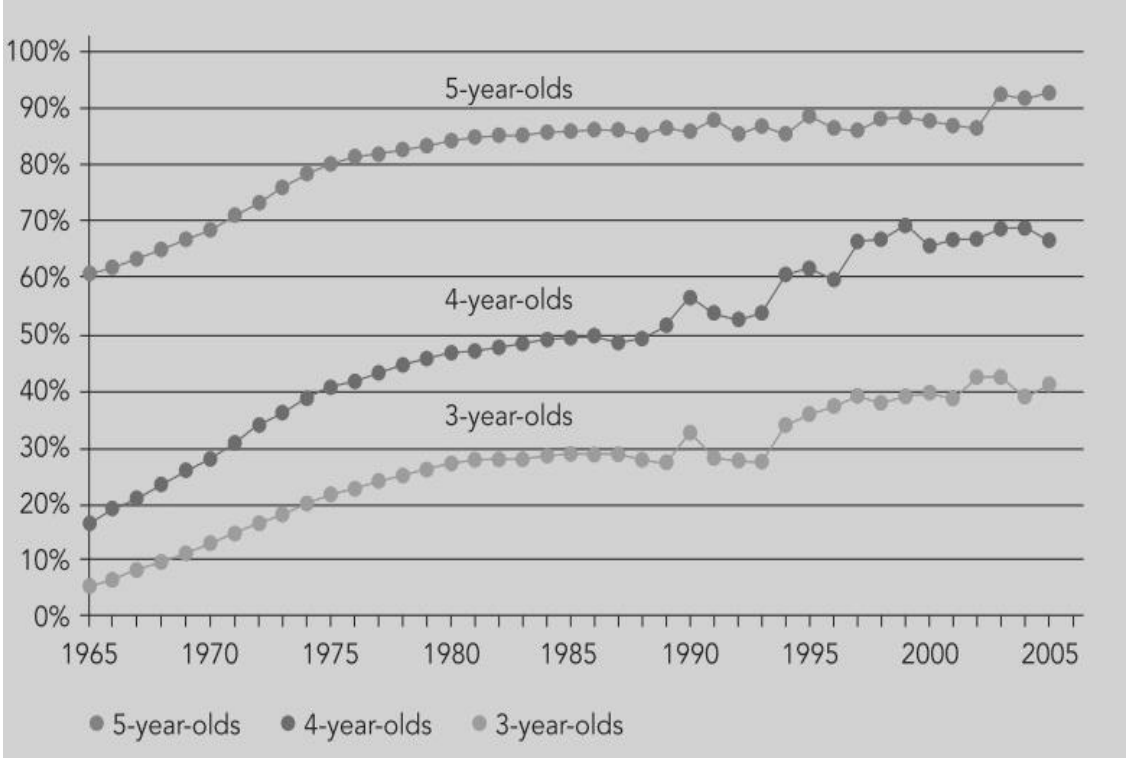


Figure 1. Chart of the percentage of 3, 4, and 5-year-old children attending pre-kindergarten programs from 1965 to 2005. Adapted from "Who Goes to Preschool and Why Does it Matter?" by Barnett and Yarosz (2007), *Preschool Policy Matters, 11*(15), 3.

When President Barack Obama insisted on the expansion of improved quality for early education and increased opportunities through his "Preschool for All" initiative, the desire was for an influx in the enrollment numbers of America's 4-year-old students (Cascio & Whitmore-Schanzenbach, 2013). The Obama administration invested over one billion dollars to support 20 states as they worked to increase the quality and opportunity in early education (Cascio & Whitmore-Schanzenbach, 2013). A 2016 report from the United States Department of Education indicated that from the time these funds were dispersed many more thousands of children, most notably those from low socioeconomic households, were discovered to have been enrolled in early educational experiences, including state pre-kindergarten, between the years 2010 and 2015 (Barnett

et al., 2017). Enrollment was shown to have increased by 5% since 2011 due in part to the support of this initiative (Barnett et al., 2017).

Public pre-kindergarten has become more common across the nation as many states have begun to provide adequate funding. Public pre-kindergarten programs must meet a set of criteria to be considered a part of the state preschool program. A state preschool program must provide an educational program to a minimum of 1% of the three or four-year-olds in the state at least two times in a week according to Barnet et al. (2017). Currently, seven states continue to provide no pre-kindergarten experiences and fifteen states now educate less than 5% of their four-year-old population. With the continued funding of pre-kindergarten programs enrollment is expected to continue to rise, but "unless teachers are supported in achieving (culturally sensitive early learning and development standards), such standards are unlikely to lead to effective practice" (Barnet et al., 2017, p. 9). The historical perspective of early childhood experiences shows an evolution in availability and opportunity to support kindergarten readiness for all students.

The Crucial Components of Kindergarten/School Readiness

School readiness research consists of an extensive list of considered variables including attendance, literacy scores, language acquisition, mathematical knowledge, program quality, and social-emotional competence. The position statement on school readiness from NAEYC (2018) has remained unchanged since its last revision in 1995 where it was stated that

> Traditionally, the construct of school readiness has been based on the assumption that there is a predetermined set of capabilities that all children need before entering school. The National Education Goals Panel, however, recognizes that

> children's early learning and development is multidimensional, complex, and influenced by individual, cultural, and contextual variation. Therefore, any discussions of school readiness must consider at least three critical factors: the diversity of children's early life experiences as well as inequity in experiences; the wide variation in young children's development and learning; and the degree to which school expectations of children entering kindergarten are reasonable, appropriate, and supportive of individual differences. (p. 1)

This statement conveys the complexities that exist when considering what is meant for the youngest of students to possess kindergarten readiness skills. The disproportionality and diversity in pre-kindergarten experiences combine to promote different sets of expectations across the nation. This variance in early educational experiences further depicts the struggle for continuity in determining what constitutes school readiness.

The expansion of opportunities for supporting school readiness in early education across the country has been determined to impact student success as well as to be a sound investment for various stakeholders. These experiences provide students with a strong foundation for future learning, not only academically, but physically and socially. Children who have attended early education programs have been found to be more prepared for additional schooling and are able to find and sustain lasting careers (U.S. Department of Education, 2015, p. 2). These facts provided by the Department of Education indicated a benefit to investing in early education.

The 2018 NAEYC position statement on school readiness expanded on and detailed the impact that such variance in expectations had and continues to have in determining school readiness for young children. Establishing expectations for school readiness in young children was further discussed with NAEYC (2018) stating that

> expectations of the skills and abilities that young children bring to school must be based on knowledge of child development and how children learn. A basic principle of child development is that normal variability includes a wide range of competence within an age group. Children's social skills, physical development, intellectual abilities, and emotional adjustment are equally important areas of development, and each contributes to a child's adaptation to school life. (p. 1)

The overarching principle that NAEYC affirmed through these statements is that social-emotional development is held in the same regard as traditional academic knowledge and should be considered when determining school readiness for young children.

The essence of pre-kindergarten education has evolved over the course of time. As early as 1965, much attention was targeted towards opportunities for students lacking resources to be provided the chance to close the gap between the more advantaged students of their same age. Across time, various programs have been developed to increase the number of young children impacted by early learning opportunities. In a 2007 publication, centered on those that are affected by early learning experiences Barnett and Yarosz indicated that

> The federal government provides Head Start to children in poverty. State and local education agencies offer preschool and pre-kindergarten programs. Private-for-profit, nonprofit, and faith-based organizations operate under all these names. These programs vary in extent to which they are designed to meet…the educational needs of young children. (p. 2)

The type of program in which young children may be enrolled vary significantly due to the differing philosophies of developmental theorists.

Development Theories about Young Children

Several developmental theorists have identified ways in which they believed young children develop. Furthermore, many theorists have developed stages by which this maturation occurs. Suizzo (2000) wrote about Piagetian research, which regarded the development of young children and indicated the amount of social and emotional assistance provided impacts their cognition. Explicit support for social-emotional development offers young children the ability to execute tasks (Suizzo, 2000). Vygotsky, Piaget, Erikson, and Bronfenbrenner together make up the most prominent theorists in early child development having conducted research and analyses.

Capossela (2000) examined Vygotskian theory and indicated that Vygotsky believed in the importance of young children being social. Vygotsky theorized that these shared experiences were vital to a young child's development of cognition and emotional interaction with the environment (Yasnitsky & Ferrari, 2008). Vygotsky saw the educator as merely a facilitator of learning and believed in the importance of student centeredness in the context of education. In the 1930s, Vygotsky made several observations of young children and generated conclusions about imagination and how the mind impacted creativity. Vygotsky indicated through his analysis of childhood behaviors that experiences at young ages affect a child's capacity for invention (Capossela, 2000). Vygotsky also coined the idea of the "zone of proximal development" where young children can learn more in a social setting than they could alone (Wertsch, 1988). Yasnitsky and Ferrari (2008) wrote that in Kharkov, Ukraine during the early 1930s, Vygotsky, along with his students and colleagues, engaged in research and the development of theories. Yasnitsky and Ferrari (2008) elaborated on one such

partnership with Luria and Leontiev where together they conducted various studies that focused on a wide range of topics in research. They studied metacognition and how young children learn through exploration within their environments. The expansion of a child's memory, ability to attend to tasks and connection of concepts were additional topics researched by this team and others (Yasnitsky & Ferrari, 2008). Vygotsky was said to have made a significant imprint on psychology.

The essence of Vygotsky's research can be summarized into various aspects of human development. Yasnitsky and Ferrari (2008) indicated that Vygotsky, along with his colleagues, studied the process of human development from infancy into adulthood. Further, the researchers studied "human thinking, speech, and practical activity including their interrelations and relations to other psychological functions at different stages of human development" (p. 130). The historical perspective and accounts of Vygotskian research provided a clear indication of the foundation for his life's work.

Levy (1976) wrote about Piaget and his theory that children's cognitive development and interactions with their environment occur across several stages. Piaget constructed this ideal through multiple observations of his young children. Through these observations, Piaget strived to remain objective and detailed (Levy, 1976). As a result of 2,337 individual accounts of behaviors and interactions, Piaget established a sequence of four stages that he believed to occur throughout a child's development into adolescence (Simatwa, 2010). These stages begin at birth and end at age 15 for all children and follow the same pattern. Cognitive development of the youngest of children occurs in the sensorimotor stage from birth to age two. During this time of cognitive development, a child is beginning to discover an awareness of self and the immediate

environment. At the same time, a young child in the sensorimotor stage of cognitive development is discriminating between him or herself and other things and internalizes learning based on previous knowledge (Levy, 1976). Between the ages of 2 to 4 years-old, the preoperational stage of cognitive development occurs (Simatwa, 2010). This stage occurs with young children being impacted through hands-on interactions within their environment. Simatwa (2010) conjectured that Piaget believed that when young children are provided with opportunities for social interaction, they are also able to develop the understanding of others' perspectives. These social interactions lead them to begin to make more sense of their surroundings and to label both physical and abstract items or concepts around them. During the concrete operations stage of cognitive development, which takes place between the ages of 7 to 11, children start to conceptualize and think in a much more theoretical way. The final stage in Piaget's stages of cognitive development is the formal operations stages, which occurs between 11 and 15 years of age. During this time, young adults can make connections in their environment without physical objects (Simatwa, 2010). The observations that Piaget collected between the 1930s and the late 1940s were compiled in three texts to support others in making sense of cognitive development in young children (Levy, 1976). These stages that Piaget outlined suggest an intricate process when considering a young child's cognitive development.

Fleming (2004) noted that Erikson, much like Piaget, believed social-interactions to be critical to child development. Erikson identified eight stages of development toward the attainment of one's identity. Erikson (1964) stressed the importance of identity when stating

> The growing child must derive a vitalizing sense of reality from the awareness that his individual way of mastering experience is a successful variant of a group identity and is in accord with its space-time and life plan. Minute displays of emotion…transmit to the human child the outlines of what really counts in his world. (p. 30)

This statement reiterates Erikson's commitment to the belief that one's identity is developed through social and emotional interactions and individual experiences through several stages of development. These stages were believed to take place across a person's entire life. For the context of the current study, only the first three stages are discussed as they relate to a young child's cognitive development. First, during infancy, the concept of trust vs. mistrust is at the center of a young infant's thinking. During this time the child is experiencing interactions with adults in his or her environment. Depending on these exchanges, either trust or mistrust will be developed (Fleming, 2004). Next, as an 18-month-old to a 3-year-old, young children are introduced to experiences that support them in the development of both autonomy and shame. As a child is beginning to build on previous knowledge and better understand appropriate interactions in the world the child is developing a sense of autonomy. During this stage young children often conflict with their environment, which can lead to a sense of humiliation (Fleming, 2004). As a 3 to 5-year-old, the young child next begins to mimic experiences from his or her background and may infuse these into scenarios of play. During this time in a child's life, the child develops a strong sense of wonder and becomes very inquisitive while navigating the environment. To establish these stages of

development, Erickson made clear the importance of social interactions as related to the development of identity (Fleming, 2004).

Bronfenbrenner (1977) indicated propositions for further research in human development. As he provided proposals for additional research, he included the following rationale.

> My purpose in presenting the foregoing proposals here is not to advocate their implementation but...to stimulate new, ecological directions of thought and activity in developmental research. Moreover, the aim is to expand our conceptions, not to substitute them for other, already existing, and valuable approaches. Nor is there any implication that investigation at one system level is more important or logically prior to research at another. As scientists, we must work from different perspectives in different ways. A variety of approaches are needed if we are to make progress toward the ultimate goal of understanding human development in context. (Bronfenbrenner, 1977, p. 529)

Within this text, he explained what he believed to be a model for development based on four ecological systems that all people experience across time. The first system, the Microsystem, centers around the relationships that humans develop through interactions with others in their environment (Bronfenbrenner, 1977). The next order is titled the Mesosystem which focuses on how a person's diverse life settings interrelate with one another (Bronfenbrenner, 1977). The Exosystem is the next ecological system that Bronfenbrenner conceptualized. In this system, there are aspects of the microsystem that are present, but they may impact an individual in an unintended manner (Bronfenbrenner, 1977). Lastly, the Macrosystem of Bronfenbrenner's ideology of ecological systems is

considered inclusive of each of the other methods. This layer consists of the beliefs and customs of a society or culture that has both direct and indirect influence on one's development (Bronfenbrenner, 1977). These systems can have impacts on the developmental research of young children, and Bronfenbrenner (1977) believed that they should be considered.

Developmental theorists have determined ways in which they believe young children develop. Each of these theorists provided additional analysis of understanding the growth of young children including their social-emotional development. The research and reports of Vygotsky, Piaget, Erikson, and Bronfenbrenner have made an impact and have shaped the availability and offering of pre-kindergarten programs today.

The Current State of Pre-Kindergarten Opportunities

As of 2018, opportunities for pre-kindergarten experiences are widely available. Pre-kindergarten education and its place in the educational landscape stems from the need to compete in a global society. Barnett and Yarosz (2007) expanded on this notion stating, "There is a growing awareness that early learning's impacts persist across children's life spans, affecting educational achievement, adult earning and even crime and delinquency" (p. 1). Without a strong early educational foundation, children continue to struggle to grow into productive members of society. Pre-kindergarten opportunities continue to be unavailable to many students and, in many cases, are unbalanced based on geographic location and income level (Barnet et al., 2017; Cascio, 2010).

Case et al. (2007) presented the need for more investments into pre-kindergarten through twelfth-grade education. Additionally, support for equitable funding in PK-12 education was offered, and was stated that "public investments will not cure all the

challenges facing America in meeting the needs of our youngest children. But it will go a long way in making the most of the major challenges easier to solve" (p. 6).

The inequity that exists regarding access to pre-kindergarten opportunities is further promoted by the difficulties that are present in analyzing the economic returns of such programs. Albritton, Anhalt, and Terry (2016) wrote about this inequity stating there are "disparities between racial, ethnic, and socioeconomic groups related to educational outcomes and access to high-quality preschool instruction" (p. 238). Karoly (2016) found that additional research is needed to determine the best methods for assessing the economic returns and benefits related to the cost of early education. Karoly (2016) reviewed various types of pre-kindergarten programs on a per child cost analysis to make connections to each program's benefits, which provided benefit-cost ratio findings. The author considered the costs of operating state preschool programs for low-income students, Head Start services, universal pre-kindergarten programs, and full and part-day offerings. The results of this analysis showed that each type of program was linked to a significant return on investment regardless of one or two-years of enrollment in a pre-kindergarten program (Karoly, 2016). Additionally, the results of this study showed that both Head Start and other state and district pre-kindergarten programs had a statistically significant impact on both achievement tests and graduation rates (Karoly, 2016). Variances in the overall costs of pre-kindergarten programs across the nation were shown from this cost-benefit analysis. Karoly (2016) noted that the pre-kindergarten programs utilized in her review ranged from $5,200 to $10,500 for a single year of schooling. Karoly (2016) summarized the analysis with a statement that focused on the need to develop a measurement for the attainment of cognitive, social-emotional, and behavioral skills at the pre-kindergarten level. Having an established measure for

such skills would indicate a pre-kindergarten program's impact. Access to pre-kindergarten opportunities for young children was shown to have implications on investment in that

> participation in a high-quality early childhood education program can enhance children's development, reduce achievement gaps at kindergarten entry, and even have long-term benefits for children's school trajectories. However, access to high-quality pre-K in the United States remains quite low and highly unequal. (Friedman-Krauss, Barnett, & Nores, 2016, p. 1)

In determining the development and offering of pre-kindergarten programming, one must consider the development of kindergarten programs and when they were first introduced. Cascio (2010) expanded on this connection between pre-kindergarten and kindergarten availability in a study centered on the effects that followed kindergarten becoming universal. Figure 3 shows throughout the 1960s, 1970s, and 1980s how various states including Florida, Georgia, Texas, and Arizona began to provide funding for kindergarten programs.

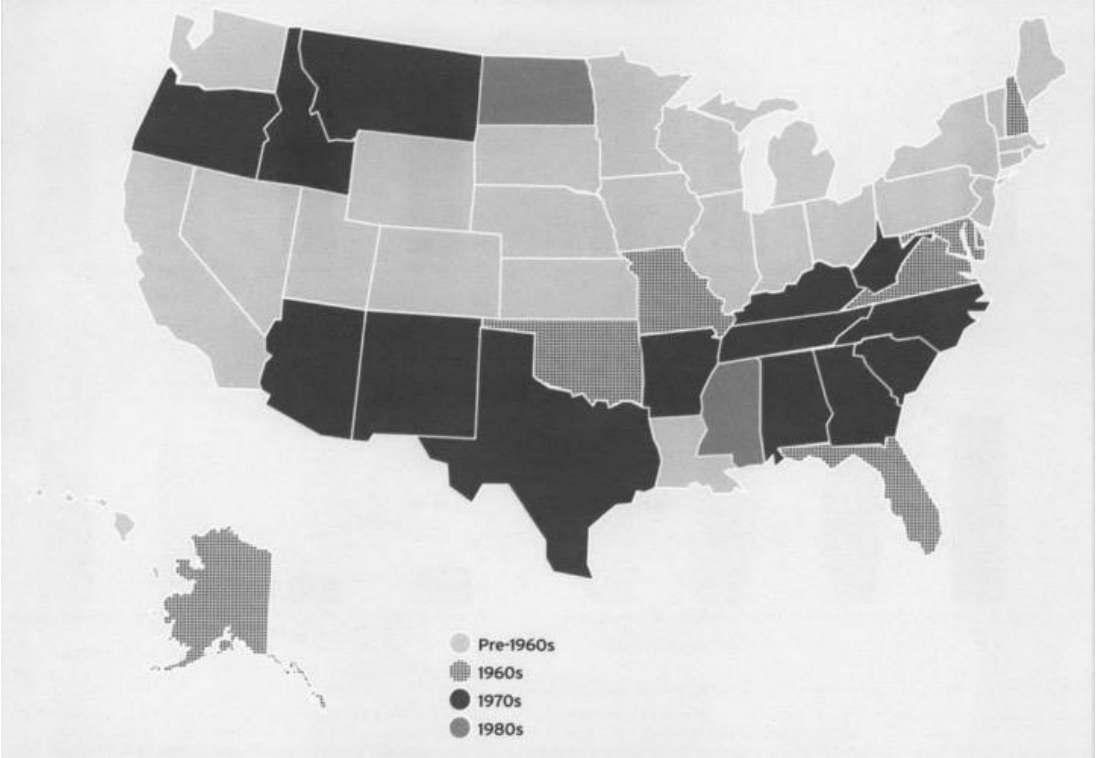


Figure 2. Graphic of states that began to provide additional funding for kindergarten prior to 1960 leading up through the 1980s. Adapted from "What Happened When Kindergarten Went Universal?", by Cascio (2010), *Education Next*, 10(2), 62-69.

The supports provided were in the form of grants to incorporate kindergarten classrooms into their schools (Cascio, 2010). During this analysis of archival data, Cascio (2010) utilized historical records from these states to determine the differences in a variety of outcomes between 5-year-old students before and after kindergarten funding was made available. The data that were studied were the kindergarten enrollment rate, incarceration, and high school dropout rate. After kindergarten began to be offered across the nation, it was shown that the average state's enrollment numbers raised by 15% in the first year and 33% by the second (Cascio, 2010). Also, the results of the study showed that in the case of additional state funding for kindergarten there were no impacts on grade retention, employment, or earnings (Cascio, 2010). However, long-

term effect that was linked back to funding for kindergarten was a decreased dropout rate only among White students in the sample (Cascio, 2010). Additionally, there was no impact found on potential wage, employment, number of public assistance requests, or grade retention. The continued evolution of the availability for pre-kindergarten programs has provided various researchers the opportunity to ascertain associated longitudinal effects.

Longitudinal Effects of Pre-Kindergarten Programs

Several studies have been conducted to determine the impact of pre-kindergarten programs have had varying impacts on the continued development of young children into adolescence and adulthood. Research examples indicated a wide array of outcomes being either positive or neutral. The smallest variances in the lives of young children and occurrences throughout their educational journey can have an impact on retention of learning and can be difficult to track. Karoly (2016) reiterated this point stating,

> a full accounting of potential benefits would require projecting outcomes from preschool participation into the future, beyond the point of the last follow-up. To connect outcomes measured at younger ages with expected outcomes at older ages, we need to make assumptions about the causal relationships through time. (p. 40)

Social-emotional development in young children has been shown to be impactful on further success in school. Sadler (2007) in her public forum policy statement indicated the need for quality early education. Sadler (2007) believed quality programs support the social-emotional development of young children and referenced Gormley (2005) as related to the movement for universal pre-kindergarten. Quality early childhood experiences have the potential to help a child through all areas of

development. Increased assessment outcomes in literacy and mathematics, heightened language competence, decreased instances of grade retention and drop-out rates, and reduced participation in crime and displayed acts of negative behavior all have been linked to the involvement in quality early education (Sadler, 2007).

Sound social-emotional development has been shown to have various short-term and long-term benefits (Cascio, 2010). Several advantages of social-emotional development exist, which serve to convey its overall importance in the maturation of young children. Benefits of social-emotional development for young children were further expounded on by Englander (2018) stating that when teachers see students on a frequent basis, they are more apt to notice concerns regarding a student's emotional needs. As a result, they can more naturally and promptly provide the needed help. Being more aware of the social-emotional development of students in early childhood classrooms has severe implications on future outcomes. Studies have been conducted across time whose results show the positive effects on a variety of skills including parenting skills, social-emotional competency, mathematical knowledge, literacy, and physical development (Cascio, Whitmore, & Schanzenbach, 2013; Chazan-Cohen & Kisker, 2013; Lee, Brooks-Gunn, Schnur, & Liaw, 1990; Stanley et al., 2016; Whitmore-Schanzenbach & Bauer, 2016).

Whitmore-Schanzenbach and Bauer conducted a longitudinal study that began in 1979 and continued until 2016. The researchers utilized a sample of 13,000 people, both male and female, who were interviewed every fourth year (Whitmore-Schanzenbach & Bauer, 2016). The participants were surveyed about a variety of facets of their development including social-emotional and behavioral development until they reached thirty years of age (Whitmore-Schanzenbach & Bauer, 2016). The results of the research

showed that the parents involved in Head Start enrollment displayed lasting impacts, which lingered beyond their participation including parental investment in their child's well-being. This impact was measured using the National Longitudinal Survey of Youth (NLSY), which indicated the regularity in various parenting practices. These practices included:

> the frequency of a parent reading aloud to their child; whether the parent reported teaching their child numbers, the alphabet, colors, and shapes at home; whether the parent reported in the past week praising the child, showing physical affection, and spending time with the child doing one of the child's favorite activities; and whether the parent reported not spanking the child in the past week. (Whitmore-Schanzenbach & Bauer, 2016, pp. 6-7)

The results of this study showed that parenting was positively impacted for families involved in Head Start. The implications for the future that resulted from this study highlighted the importance of these increased practices in positive parenting and support for generations to come (Whitmore-Schanzenbach & Bauer, 2016).

Lee et al. (1990) conducted a study consisting of 969 disadvantaged four and five-year-old students that examined the effect size of Head Start enrollment on various dimensions of child development. The researchers found that young students who had been enrolled in Head Start benefitted more than similar peers who had been exposed to either no pre-kindergarten or other pre-kindergarten experiences. This growth came in the form of social-emotional competence, which contributed to their success in school and everyday life (Lee et al., 1990). One of the single most significant conclusions that resulted from this study was that "Head Start appeared to work best for students who

needed it most (i.e., the most socially and cognitively disadvantaged)" (Lee et al., 1990, p. 497).

Cascio and Whitmore-Schanzenbach (2013) conducted a meta-analysis that utilized data from Georgia and Oklahoma's state-funded pre-kindergarten programs. These states were considered models for the nation as their Obama-era quality indicator scores were significantly higher than others across the United States. This analysis was meant to determine the impacts that these programs had on various outcomes in a child's life including social-emotional skills. This study considered various skills in child development including vocabulary, literary and numerical literacy, self-control, and effective interactions with peers (Cascio & Whitmore-Schanzenbach, 2013). While this research could not indicate all the effects that early childhood education has on the development of young children, it was found that male and female students involved in the study were affected differently. These programs were shown to have had a low amount of effects on both males and females, but legal infractions in females were positively impacted (Cascio & Whitmore-Schanzenbach, 2013).

Early educational programming has the potential to support the development of the whole child, including physically. Stanley et al. (2016) found students that were more physically active in the earliest years of their lives experienced positive impacts on their development physically, cognitively, and social-emotionally. In an Australian study (Stanley et al., 2016), 658 young children in 44 early childhood centers were examined to determine the degree to which physical activity and an intervention program, titled Jump Start, had effects on various health and wellness indicators. The participants were randomly assigned to either a control or intervention group. Stanley et al. (2016) studied the level of physical activity, weight, bone strength, and self-regulatory skills for this

research. Stanley et al. (2006) concluded that physical activity had lasting impacts including stronger cognitive processing and an increased ability for behavioral self-regulation. Support for the development of physical skills in the youngest of children has been linked to exposure through early education opportunities. Early education has implications for the physical development of young children and further impresses upon other areas of development. Stanley et al. (2016) determined that

> Engagement in physical activity during the early years has critical health and developmental implications that can persist across the life course. It has been shown that engaging in physical activity stimulates neurocognitive processes and promotes children's capacity to regulate their behavioral actions. (p. 2)

The importance of physical health in young children cannot be overlooked as a determining factor in future success. Opportunities for kinesthetic movement in pre-kindergarten programs can support healthy development in young children. Stork and Sanders (2008) stated that physical activity held great significance to the development of the whole child. Enrollment in a pre-kindergarten program has been shown to have implications for the physical development of young children given that opportunities for movement are provided.

Pre-kindergarten program enrollment has the additional opportunity to support the cognitive development of young children. Stork and Sanders (2008) found that the success of a child impacts attitude, which in turn helps the development of cognition and social skills. Exposure to literacy and mathematics in the early years provides young students with foundational knowledge that will continue to support their educational journey as they move through varying grade levels. Research has shown neutral effects

of pre-kindergarten enrollment on a student's retention of learning and social-emotional development.

Chazan-Cohen and Kisker (2013) studied the impacts of various programming on students' cognitive and social-emotional development. With a sample that consisted of infants to five-year-old children, the research was initiated to determine the difference in students' social and emotional competencies based on early educational experiences (Chazan-Cohen & Kisker, 2013). The sample was broken into two groups based on educational background and included those from birth to age three and then from three to five-years-old. The infant to age three group was identified as those students having been exposed to early education in infancy as well as Head Start by five years of age. From the data, Chazan-Cohen and Kisker (2013) concluded that exposure to schooling was beneficial to the academic progress of the youngest students in the sample. The evidence for early educational exposure in infancy showed little impact on social-emotional outcomes for these students (Chazan-Cohen & Kisker, 2013).

Lee et al. (2014) concluded from an analysis of prior research that several vital factors impacted a student's path to education. Environment, facets of one's self, learning ability, parental education level, and early enrollment in school were found to be critical indicators of future success. These factors were challenging to monitor and to determine their influence on student achievement and success. Furthermore, Lee et al. (2014) indicated that through additional investigation the impacts from Head Start participation were short-lived. The analysis of data from exposure to Head Start instruction showed that retention of learning in kindergarten and first-grade was not evident (Lee et al., 2014). Each of these studies conveyed how pre-kindergarten programs continue to have varying impacts, both positive and neutral. These impacts

affect all aspects of the growth in young children and provide insight into the importance and benefit of social-emotional development and the implications on school readiness.

The Importance and Benefit of Social-Emotional Development

Research has been conducted that report the social-emotional development in young children. These studies have indicated both positive and neutral effects. A variety of developmental areas in the most inexperienced of students were impacted during these studies including social-emotional competency, literacy, mathematical knowledge, and communication.

A 2000 study by Taylor et al. followed 171 kindergarten students. The educational backgrounds of these students were determined, and they were placed into two subgroups: preschool and non-preschool attendance. The Georgia Kindergarten Assessment Program (GKAP) was utilized to determine effect size on school readiness between the two groups. The students who had been present in a pre-kindergarten program outscored their counterparts on the GKAP in the physical and personal subgroups. Additionally, during this study, a higher effect size of preschool attendance was indicated for females only in the area of social-emotional development.

In 2001, Currie wrote an article that detailed the findings from various studies and reviewed the pieces of evidence to make conclusions from the data. The primary outcome presented was specific to early childhood education programs stating that they provided "significant short and medium-term benefits and that the effects [were] often greater for more disadvantaged children" (Currie, 2001, p. 213). The effects identified in this study conveyed decreases in occurrences of such events as grade retention, arrests, and high school dropout rates.

Allen (2009) led a study to examine the impact that early educational experiences had on kindergarten readiness. The Developmental Indicators for the Assessment of Learning (DIAL-3) was used to measure this impact. Out of the sample, made up of 540 kindergarteners through twelfth-grade students, only the kindergarten students were assessed and scored in their level of kindergarten readiness. The difference in kindergarten readiness scores based on gender was also considered a variable for the study. The results of the study indicated that the students who had an early education experience had a higher mean score than those having no early education. Additionally, in the case of early education's effect size based on gender, it was determined that female percentage points were higher than the male percentage points when kindergarten readiness was considered.

Weiland and Yoshikawa (2013) conducted research that determined to what extent teaching a variety of skills in a pre-kindergarten program have an impact on cognition and social-emotional competency. This study took place in the pre-kindergarten program of Boston Public Schools. Across two phases and over two years, this 2013 study started with the treatment of a curriculum program then was evaluated the following year. During the treatment year, 2,018 four-year-old children were exposed to the Opening the World of Learning (OWL) curriculum (Weiland & Yoshikawa, 2013). The OWL curriculum exemplified early literacy and language skills as well as social-emotional development (Weiland & Yoshikawa, 2013). The second year of this study was the evaluation year, and from data collected during this period, the findings indicated significant impacts on language and mathematics skills but minor effects on executive functioning skills of working memory, inhibitions, ability to shift attention, and recognition of emotions (Weiland & Yoshikawa, 2013).

Goldstein, Warde, and Peluso (2013) conducted research to determine the extent to which communication, cognition, and social-emotional skill development were impacted in young children enrolled in various early education programs. The types of pre-kindergarten programs varied from public to private programs. With a sample from one of Florida's largest counties, 132 students ranging in age from three to four-years-old, they were assessed with two instruments. First, communication, cognition, and social-emotional development were measured at the beginning and end of the year through the implementation of the Developmental Assessment of Young Children (DAYC) instrument. Receptive vocabulary was also assessed with the Peabody Picture Vocabulary Test (PPVT-4). Data indicated that the four-year-olds in the sample

> significantly increased their standard scores (SS) in cognitive, receptive vocabulary and social-emotional development, [while] no change in SS was reported on the communication subtest. There was no statistically significant change in SS of the 3-year-olds in any of the areas assessed. (Goldstein et al., 2013, p. 1)

A study by Bloom et al. (2015) was conducted to determine to what degree young children's participation in Head Start impacted cognition and social-emotional competency. The sample of 4,440 young children was randomly placed into two subgroups: treatment and control. After months of exposure to the Head Start curriculum, which focused on cognition and social-emotional skills, various assessments were administered to determine the effect size on all the considered developmental areas. The findings from this study revealed that Head Start had an incremental effect size on receptive vocabulary, early reading, early numeracy, and externalizing skills" (Bloom & Weiland, 2014, p. A-4). Two indicators of social-emotional development were

measured. These skills were externalizing behavior problems and self-regulation. It was concluded that the social-emotional outcomes that were measured showed statistically significant impacts in only the females involved in the study (Bloom & Weiland, 2014).

Bloom and Weiland (2015) conducted a study in which 3,785 children were placed into various educational settings including; Head Start, non-Head Start, child-care environments, or parental/relative care settings. Out of this sample, 3,255 students from 22 states were enrolled in a Head Start program for a single year. During this time, the learning experiences centered around six developmental areas: receptive vocabulary, early reading, oral comprehension, early numeracy, externalizing, and self-regulation behaviors (Bloom & Weiland, 2014). The results of this study showed discrepancies in the effects of different Head Start programs when social-emotional and cognition skills were assessed. Bloom and Weiland (2014) indicated that these differences in outcomes were due to "individual children, across policy-relevant subgroups of children, and across Head Start centers" (p. 28). At the conclusion of their study, Bloom and Weiland (2014) found that Head Start had zero to minor impacts on each of the areas of development.

Lee et al. (2014) analyzed young children's achievements in mathematics, literacy, and social outcomes. These skill areas were assessed to determine effects on school readiness from having been exposed to various early educational settings. The prior educational experiences of the students were determined from a questionnaire completed by families. From this data, all the kindergarten students were categorized based on educational background including Head Start, pre-kindergarten, center-based care, non-parental care, and parental care (Lee et al., 2014). The areas of learning focused on were mathematics, literacy, language, prosocial behaviors, inattention, and

conduct problems (Lee et al., 2014). The analysis of previous research as well the additional study of 6,950 kindergartners determined that literacy and mathematics scores increased as well as scores related to conduct problems for the Head Start group (Lee et al., 2014).

Hughes (2015) studied the differences in literacy scores of young students who had attended various early educational programs. The subgroups within the study were those who attended public pre-kindergarten, Head Start, or no pre-kindergarten. The study took place during the 2014-2015 school year where random sampling was utilized with 136 young students. This study used archived data from literacy assessment scores taken at the end of each school year. The results of this research showed that Head Start and public pre-kindergarten had an impact on children's literacy scores with public pre-kindergarten having significantly higher effects (Hughes, 2015).

Hemmeter, Snyder, Fox, and Algina (2016) studied 494 preschool children from Tennessee and Florida using a randomized model to create an intervention group. This group was exposed to the Pyramid Model which served to support teachers in using effective methods towards developing strong relationships with their students. Additionally, this model was meant to create strong social-emotional competence in young children by helping classroom teachers incorporate various practices into their instruction including engaging in play and holding a conversation by providing feedback and encouragement. The results of the data analysis conveyed that children who had been exposed to the intervention "had better social skills and fewer challenging behaviors relative to children in [other] classrooms" (Hemmeter et al., 2016, p. 1). A connection was made through these findings between incidences of problem behavior and social skills. Research studies have also shown neutral effects on various

developmental areas including social-emotional development, communication, cognition, literacy, and mathematical knowledge.

In a 2015 study conducted in Mississippi, Hughes compared literacy scores of young children entering kindergarten with various backgrounds. These students were divided into three groups to analyze effect size. The three groups were identified as students who had attended state pre-kindergarten, students who had not attended state pre-kindergarten, and students who had participated in a Head Start program. With a Head Start subgroup sample size of 41 students, a school-based subgroup of 64, and an additional group of 31 students who had no prior educational experience, it was determined that children enrolled in Head Start had less growth than others who had been involved in differing pre-kindergarten programs much like Lee et al. (2014) had found.

Bierman, Heinrichs, Welsh, Nix, and Gest (2017) conducted a study that used an intervention and control group to determine the impacts on students as they advanced to other grade levels. With a sample size of 556 children, 393 were exposed to a specific classroom intervention. The remaining 163 children were enrolled in a Head Start program. The intervention that was implemented over the course of one year used a variety of teaching modalities (i.e., books, pictures, puppets, and dramatic play scenarios) to support the learning of social-emotional skill sets. The students who had received the intervention were studied across time over the following three years. Bierman et al. (2017) indicated that the results of this study showed statistically significant effects on social-emotional skills, classroom participation, increased relationships between students, peers, and teachers as well as higher social competences for students who had been exposed to the classroom intervention when compared to peers receiving traditional Head Start education. Bierman et al. (2017) indicated that

"preschool…for low-income children have the potential to build early cognitive and social-emotional skills, reducing the disparities in school readiness that perpetuate the cycle of poverty" (p. 129).

Friedman-Krauss et al. (2016) added to the significance of supporting school readiness for all students including those with various risk factors stating, "Achievement gaps based on race/ethnicity and income start early and persist" (p. 6). The fact that the achievement gap develops at the earliest ages of a child's life reinforces the potential need for a pre-kindergarten program to support each area of development for all young children. Friedman-Krauss et al. (2016) reported that Hispanic and African American children were found to be on average between 7 to 12 months behind White children at the entrance into kindergarten. These findings conveyed the small likelihood that these students would catch up and the direct implications on their future successes (Friedman-Kraus et al., 2016).

The magnitude of the difference in the opportunity that exists based on ethnicity and socioeconomic status alone is enough to necessitate change. The inequality for access to pre-kindergarten transcends these factors. In conversation with Dr. Randy Watson, Commissioner of Education for the State of Kansas, he stated a belief that much of the inequity in access is due to geographic location and low funding for such areas in Kansas for example. Kansas, like other states, publicly funds state pre-kindergarten, but Dr. Watson also stated, "We have to put some more money into pre-k, but first we have to coordinate all the programming and money that we are getting" (R. Watson, personal communication, November 21, 2016). The first step to what he identified as coordinating the efforts for pre-kindergarten funding is to look at kindergarten readiness data across the state and "look at each community…what's the snapshot of how many

kids come to kindergarten ready to learn: emotionally, socially, and academically, then analyze for those that come ready and where did they come from" (R. Watson, personal communication, November 21, 2016). Taking the opportunity to look at what various schools are doing across the state and beyond to support academic and social-emotional development in young children can provide a basis for future supports to pre-kindergarten programs.

Summary

This literature review provided an overview of research regarding the social-emotional growth of young children. The first section offered a glimpse into the history of pre-kindergarten programs in America. Next, the reader was introduced to the crucial components of school readiness and how it has evolved. The different types of pre-kindergarten programs available were then shared. Next, longitudinal effects of pre-kindergarten were discussed. The current state of pre-kindergarten opportunities in the United States was then the focus. Next, the theories of child development of young children were shared. The reader was then introduced to the importance and benefits of social-emotional development in young children. This chapter concluded with a discussion of the differences in social-emotional development based on ethnicity and socioeconomic status. Chapter 3 presents the methodology utilized for this research study and identifies specific components of this study including the selection of participants, sampling procedures, measurement, data collection procedures, data analysis and hypothesis testing, and limitations.

Chapter 3

Methods

This research was conducted to determine if there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in a pre-kindergarten program and those who were not. Also, this study served to determine to what extent there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs. Lastly, this research was conducted to reveal to what extent there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs as affected by learning ability, gender, EL status, and ethnicity.

Chapter 3 includes the research design and the process used to address the research questions and hypotheses for this study. This chapter also includes an overview of how the participants were selected. The measurement tool, data collection procedures, and an explanation of how the data and hypotheses were analyzed and tested are included. Finally, the limitations of the study are discussed.

Research Design

A quantitative research design was used for this study. A causal-comparative research method using archival data was implemented to measure the relationship between variables (Lunenburg & Irby, 2008). Archival data was utilized to determine the differences in the social-emotional development of incoming kindergarten students based upon their early educational experiences. For this study, enrollment in a pre-kindergarten program included district-based, faith-based, and for-profit programs. The independent

variables examined within this study were enrollment in a pre-kindergarten program, type of pre-kindergarten, learning ability, gender, EL status, and ethnicity. The study's dependent variables were the scores on the four components of social-emotional development as measured by the KRA. These social-emotional development skills are character development traits centered on developing core ethical and performance principles, creating a caring community, self-awareness, and organizing personal time by managing own responsibilities effectively.

Selection of Participants

The target population for this causal-comparative study was kindergarten students from one urban school district, identified as District X, in the Midwest during their first three weeks of kindergarten. Purposive sampling was employed to include all incoming kindergarten students from the district. The entirety of the sample in this study was made up of 5,262 kindergarten students from across 30 district elementary schools between the 2015-2016 and 2017-2018 academic years.

Measurement

The KRA measures 23 skills in five diverse learning domains: approaches to learning, physical health and development, social-emotional development, communication and literacy, and mathematical knowledge. From problem-solving and personal hygiene to character development and number recognition, varying skills are measured to determine kindergarten readiness (District X, 2012). The KRA skills found within the developmental area of approaches to learning are engagement and attention, persistence, and problem solving. Fine motor, large motor, and personal hygiene are the assessed skills under physical health and development (District X, 2012). The

components within the social-emotional development area in the KRA consider the extent to which young children are able to display appropriate interactions with adults, their understanding of what it means to be a friend, their ability to state personal information and manage transitions (District X, 2012). The skills assessed within communication and literacy are key ideas and details, craft and structure, print concepts, phonological awareness, word recognition, emergent writing, writing, and speaking and listening (District X, 2012). Mathematical knowledge assessed on the KRA involves counting and cardinality, number recognition, one-to-one correspondence, and attribute sorting. Each of the 23 skills in the KRA are notated with either a one for yes and a zero for no to indicate if a child has mastery for each concept (District X, 2012). For each of the five learning domains, an overall score is provided. This study utilized only the data from the social-emotional developmental domain to address the research questions.

District X developed a kindergarten readiness committee which was tasked with the creation of a measurement tool. Design of the KRA took place after the committee determined how the standards from kindergarten and pre-kindergarten aligned. This committee also came to a consensus on which skills were the best indicators of kindergarten readiness. The team then ensured that there were various skills represented across each of the five-learning areas. The final steps in the design of the measurement tool were to clarify a description of each assessed item, provide a clear expectation of how each assessed skill would appear, make recommendations for how the data was to be collected and reported and provide additional ideas for using the data for extension and future instruction. This team ensured that the KRA was valid and measured what it was intended to measure through its careful consideration of each skill's indicator,

expectation, and method to collect data (Director of Assessment, personal communication, March 20, 2018).

The KRA was developed with a foundation of the Kansas Early Learning Standards (KELS) (Kansas State Department of Education) (KSDE, 2017). The KELS outcomes were considered on a continuum from 8-month-old behaviors through the beginning of first-grade skills (KSDE, 2017). The development of the KRA, with stakeholder input, was intended to determine the extent to which students were kindergarten ready (Director of Assessment, personal communication, March 20, 2018). More specifically, this instrument was created to quantify the effectiveness of the district-based pre-kindergarten program in preparing young children to be successful when beginning kindergarten. With the support of curriculum experts, the committee was provided with ongoing feedback and direction throughout the process of development (Director of Assessment, personal communication, March 20, 2018). Curriculum representatives involved in the process of creating the KRA guided the committee to make certain that the instrument aligned to state standards. The director of assessment (personal communication, March 20, 2018) stated that this committee came together on multiple days and evenings to ensure that crucial skills were identified, and each member shared a consensus that the assessment gauged kindergarten readiness as intended.

The assessment was to be administered during the first three weeks of each school year in each kindergarten classroom in District X (Director of Assessment, personal communication, March 20, 2018). Included in the KRA was a section devoted to how to report the data which provided additional strength in safeguarding the validity of the instrument. This section meant to ensure that anyone administering the assessment

would capture and report the data as intended (District X, 2012). The director of assessment (personal communication, March 20, 2018) indicated that the kindergarten readiness committee ensured that the KRA was reliable through careful consideration of the data collection methods for teachers to follow so that it could provide the same results. According to the director of assessment (personal communication, March 20, 2018) all data were to be collected through teachers' observations on a recording table at various points during the school day. Each of these skills was assessed while students were naturally engaged in learning opportunities. Times of student engagement in learning were used to collect anecdotal evidence of communication of wants and needs, having reciprocal conversations, stating personally identifiable information about self, and successful management of transitions (Director of Assessment, personal communication, March 20, 2018). The KRA contained specific indicators that helped teachers through the administration of the assessment and provided them with particular student behaviors to observe for that indicated the student had mastered a particular skill (Director of Assessment, personal communication, March 20, 2018). An example of this procedure was a teacher observing a student who is listening to peers, taking turns, or having a conversation with classmates. As a result of this observation, the teacher indicated with a yes or no on the data summary sheet if the child was able to demonstrate what it meant to be a friend. The same procedure would be followed for each of the 23 skills of the KRA (District X, 2012). Kindergarten teachers administered the assessment, and the data was then provided to the director of evaluation, research, and assessment to be compiled. This data was included on data cards that were distributed to each

elementary school after the first quarter of the school year (Director of Assessment, personal communication, March 20, 2018).

In RQ1, the extent to which there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in a pre-kindergarten program and those who were not was considered. The four individual components of social-emotional development from the KRA were scored separately. This variable was categorical because the teacher indicated a score of either yes, the skill was mastered, or no, the skill was not mastered. The independent variable of previous educational experience was also a categorical variable with two categories: enrolled in a pre-kindergarten program and not enrolled in a pre-kindergarten program.

RQ2 focused on the extent to which there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs. The dependent variable of the four components of social-emotional development was again determined to be categorical as these skills are indicated with either a yes or no. Different pre-kindergarten programs had varying categories including faith-based, for-profit, and district-based pre-kindergarten programs. Types of pre-kindergarten programs in which a young child was enrolled was a categorical variable as well. To determine the type of pre-kindergarten program that students were enrolled, there was a record of prior education experience. The indication of unknown for prior educational experience could indicate a multitude of occurrences including either a student had been enrolled in a pre-kindergarten program or a student had not been enrolled in a pre-kindergarten program. This aspect of the research was

considered a limitation of this study. Each student had both an individual and an overall score for each concept across all five learning domains.

RQ3 focused on the extent to which there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs as affected by learning ability. The social-emotional development components within the KRA were scored separately. The categorical variable of learning ability is classified by students with specialized needs and students without specialized needs. Identifications of learning ability were disaggregated by these categories to add to the data needed for RQ3.

RQ4 was written to determine the extent to which there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs as affected by gender. The social-emotional development components within the KRA were scored separately. This research question consisted of the dichotomous variable of gender with students identified as either male or female.

RQ5 was specified to determine the extent to which there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs as affected by EL status. The social-emotional development components within the KRA were scored separately. The variable of EL status was categorical because it was indicated with students identified as either EL or non-EL.

In RQ6, the extent to which there was a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different

pre-kindergarten programs as affected by ethnicity was specified. The dependent variable of the four components of social-emotional development was a factor which continued to be classified by either a yes or no. The categorical variable of ethnicity, which included students identified as Black, Hispanic, White, or Other, was another aspect considered in the study. The category of Other was a combination of Asian, Hawaiian/Pacific Islander, Indian/Alaska Native, Multi-Racial, and Unknown/Refused to Indicate as these were smaller percentages of the whole sample.

Data Collection Procedures

The initial step in the process of this study was to receive permission from the district used for the research. Access to this data and sample for this quantitative study were obtained through the support of the district's director of evaluation, research, and assessment. Personal communication took place with the director of evaluation, research, and assessment of District X on December 18, 2017. This correspondence occurred through electronic email at which time the researcher was provided with an informal statement of intent to provide data after a research proposal (see Appendix A) had been submitted through the district. The research proposal was submitted on May 15, 2018 to the director of evaluation, research, and assessment of District X. Access to District X's data was approved, and an agreement for utilization of the data was signed (see Appendix B). The researcher submitted a proposal for research to the Baker University Institutional Review Board (IRB) (see Appendix E) on June 1, 2018. The researcher was granted permission from the IRB and was notified on June 7, 2018 (see Appendix D). Archival data from the KRA was gathered from academic years 2015-2016 through 2017-2018 to determine social-emotional development scores for each data collection period. The data

from the district's database were compiled and organized, then imported into IBM SPSS Statistics 25.

Data Analysis and Hypothesis Testing

Six research questions and hypotheses were tested for statistically significant differences in the social-emotional development among kindergarten students who had been enrolled in a pre-kindergarten program. Additionally, research questions and hypotheses were examined to determine the differences in social-emotional development based on learning ability, gender, and ethnicity.

RQ1. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

H1. There is a difference in the ability to display appropriate interactions with adults between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

H2. There is a difference in the understanding of what it means to be a friend between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

H3. There is a difference in the ability to state personal information between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

H4. There is a difference in the ability to manage transitions between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

Four chi-square tests were conducted to test H1-H4. The two categorical variables that were cross-tabulated for each test were enrollment in pre-kindergarten and social-emotional development status. The level of significance was set at .05.

RQ2. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs)?

H5. There is a difference in whether students display appropriate interactions with adults among students who were enrolled in different pre-kindergarten programs.

H6. There is a difference in the understanding of what it means to be a friend among students who were enrolled in different pre-kindergarten programs.

H7. There is a difference in the ability to state personal information among students who were enrolled in different pre-kindergarten programs.

H8. There is a difference in the ability to manage transitions among students who were enrolled in different pre-kindergarten programs.

Four chi-square tests were conducted to test H5-H8. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The level of significance was set at .05.

RQ3. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by learning ability (students with specialized needs and students without specialized needs)?

***H9*.** The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by learning ability.

***H10*.** The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by learning ability.

***H11*.** The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by learning ability.

***H12*.** The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by learning ability.

For each of the hypotheses, H9-H12, data was disaggregated by learning ability into two subsamples: students with specialized needs and students without specialized needs. Four chi-square tests were conducted using the sample with specialized needs. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample without specialized needs. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The level of significance was set at .05.

RQ4. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by gender (students identified as male and students identified as female)?

***H13*.** The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by gender.

***H14*.** The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by gender.

***H15*.** The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by gender.

***H16*.** The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by gender.

For each of the hypotheses, H13-H16, data was disaggregated by gender into two subsamples: students identified as female and students identified as male. Four chi-square tests were conducted using the students identified as the female sample. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the students identified as the male sample. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The level of significance was set at .05.

RQ5. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by EL status (students identified as EL and students identified as non-EL)?

H17. The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by EL status.

H18. The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by EL status.

H19. The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by EL status.

H20. The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by EL status.

For each of the hypotheses, H17-H20, data was disaggregated by EL status into two subsamples: students identified as EL and students identified as non-EL. Four chi-square tests were conducted using the students identified as EL sample. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the students identified as the non-EL sample. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The level of significance was set at .05.

RQ6. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by ethnicity (students identified as Black, Hispanic, White, or Other)?

H21. The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by ethnicity.

H22. The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by ethnicity.

H23. The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by ethnicity.

H24. The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by ethnicity.

For each of the hypotheses, H21-H24, data was disaggregated by ethnicity into four subsamples: students identified as Black, students identified as Hispanic, students identified as White, and students identified as Other. The category labeled Other included Asian, Hawaiian/Pacific Islander, Indian/Alaska Native, Multi-Racial, and Unknown or Declined to Identify. Four chi-square tests were conducted using the sample identified as students identified as Black. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample identified as students identified as Hispanic. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample identified as students identified as White. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample identified as students identified

as Other. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The level of significance was set at .05.

Limitations

Limitations are out of the control of the researcher and should be indicated if they might potentially influence the study results (Lunenburg & Irby, 2008). The limitations of this study included:

- The reliability (or fidelity) of Kindergarten teachers proctoring the KRA.
- The training for the Kindergarten teachers who were administrating the KRA.
- The teacher administering the KRA had varying years of experience.
- The variation in how teachers implemented the social-emotional curriculum resource based on their prior experiences.
- The accuracy of enrollment data in other pre-kindergarten programs.
- The indication of unknown prior educational experience could indicate either a student had been enrolled in a pre-kindergarten program or a student had not been enrolled in a pre-kindergarten program. For the purpose of this study these student were removed from the sample.

Summary

Chapter 3 included the methods and procedures used to collect data used for the study. The design of the research was identified and discussed as a quantitative research design using causal comparative analysis. The process regarding the selection of the participants for this study was identified. The method of measurement for the KRA was

conveyed which included the procedures for the collection of the data for this study. The data were analyzed, and hypotheses were tested for statistical significance. This chapter concluded with any limitations of the study which could influence the findings. Chapter 4 consists of the results of the analysis of the data.

Chapter 4

Results

The primary purpose of this study was to determine to what extent social-emotional development of incoming kindergarten students, as measured by the KRA, was impacted by enrollment in a pre-kindergarten program. The social-emotional skills measured for the study were the ability to display appropriate interactions with adults, the understanding of what it means to be a friend, the ability to state personal information, and how to manage transitions. The researcher examined data from the KRA administered during the 2015-2016, 2016-2017, and 2017-2018 school years to incoming kindergarten students within the first three weeks of enrollment. The results of this study were used to determine the differences among students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program. Additionally, the research was used to determine the extent to which there was a difference in social-emotional development, as measured by the KRA, among students enrolled in different types of pre-kindergarten programs. Lastly, the study was used to determine the extent to which there were differences in social-emotional development scores, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs was affected by learning ability, gender, EL status, and ethnicity.

Descriptive Statistics

Three years of archived data from one urban school district in the Midwest, District X, were used for this study. Prior to 2010 District X has offered a pre-kindergarten program which is both state and federally funded and provides enrollment to young children based on various eligibility requirements. EL status, household income,

parental education, and learning ability are some of the various considerations for placement in the district pre-kindergarten program. The current research was comprised of data from students having varied learning abilities: students with and without specialized needs (see Table 2).

Table 2

District X Percentages of Population Based on Learning Ability

Learning Ability	*N*	%
Students without specialized needs	4,725	89.8
Students with specialized needs	537	10.2
Total	5,262	100.0

This study also used data based on gender. The sample consisted of students identified as either male or female (see Table 3).

Table 3

District X Percentages of Population Based on Gender

Gender	*N*	%
Students identified as female	2,563	48.7
Students identified as male	2,699	51.3
Total	5,262	100.0

The current research study involved the use of data from students based on EL status. The sample for this research comprised of students identified as either EL or non-EL (see Table 4).

Table 4

District X Percentages of Population Based on EL status

EL Status	*N*	%
Students identified as non-EL	2,858	54.3
Students identified as EL	2,404	45.7
Total	5,262	100.0

This study included students of various ethnicities. For this study the ethnicities of Asian, Hawaiian/Pacific Islander, Indian/Alaska Native, Multi-Racial, and Unknown or Declined to Identify were combined to create an Other category when the hypothesis testing was conducted (see Table 5).

Table 5

District X Percentages of Population Based on Ethnicity

	Ethnicity		
	Frequency	Percentage	Cumulative Percent
Asian	428	8.1	8.1
Black	1,298	24.7	32.8
Hawaiian/Pacific Islander	14	0.3	33.1
Hispanic	2,419	46.0	79.0
Indian/Alaska Native	13	0.2	79.3
Multi Racial	289	5.5	84.8
Unknown/Refused	164	3.1	87.9
White	637	12.1	100.0
Total	5,262	100.0	

The data used for the current study were from students having been enrolled in different types of pre-kindergarten programs. The types of pre-kindergarten programs that were used for the data analysis in this study were district-based, faith-based, and for-profit (see Table 6). The category identified as unknown was developed to represent the portion of the sample which consisted of insufficient information that was provided to the director of evaluation, research, and assessment regarding pre-kindergarten type.

Table 6

District X Percentages of Population Based on Pre-Kindergarten Enrollment Type

	Pre-Kindergarten Type		
	Frequency	Percentage	Cumulative Percent
District-Based	2,971	56.5	56.5
Faith-Based	46	0.9	57.3
For-Profit	108	2.1	59.4
No Preschool	726	13.8	73.2
Unknown	1,411	26.8	100.0
Total	5,262	100.0	

Hypothesis Testing

Six research questions were written, and twenty-four hypotheses were tested for statistical significance. The research hypotheses were developed to determine the differences in the social-emotional development among young children who had been enrolled in a pre-kindergarten program and those who had not been enrolled in a pre-kindergarten program. Additionally, the differences in impacts on social-emotional development based on pre-kindergarten type were studied. Lastly, the differences in social-emotional development, as affected by learning ability, gender, EL status, and

ethnicity, and based on pre-kindergarten type were researched. The results of the hypothesis testing are discussed in the following section.

RQ1. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

H1. There is a difference in the ability to display appropriate interactions with adults between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

The results of the chi-square test for H1 indicated a statistically significant difference between the observed and expected frequencies, $\chi^2 = 6.549$, $df = 1$, $p = .010$ (see Table 7). Students who attended pre-kindergarten displayed the ability to interact appropriately with adults ($n = 2403$) more than expected by chance ($n = 2380.7$). Students who did not attend pre-kindergarten failed to display the ability to interact appropriately with adults ($n = 135$) more than expected by chance ($n = 112.7$). This finding supports H1.

Table 7

Observed and Expected Frequencies for H1

Pre-kindergarten	Social-Emotional Skill	Observed	Expected
Did not Attend			
	Displayed	541	563.3
	Not Displayed	135	112.7
Attended			
	Displayed	2,403	2,380.7
	Not Displayed	454	476.3

H2. There is a difference in the understanding of what it means to be a friend between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

The results of the chi-square test for H2 indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = .020$, $df = 1$, $p = .889$ (see Table 8). This finding does not support H2.

Table 8

Observed and Expected Frequencies for H2

Pre-kindergarten	Social-Emotional Skill	Observed	Expected
Did not Attend			
	Displayed	584	585.1
	Not Displayed	92	90.9
Attended			
	Displayed	2,474	2,472.9
	Not Displayed	383	384.1

H3. There is a difference in the ability to state personal information between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program**.**

The results of the chi-square test for H3 indicated a statistically significant difference between the observed and expected frequencies, $\chi^2 = 7.904$, $df = 1$, $p = .005$ (see Table 9). Students who attended pre-kindergarten displayed the ability to state personal information ($n = 1916$) more than expected by chance ($n = 1884.9$). Students who did not attend pre-kindergarten failed to display the ability to state personal

information (n = 261) more than expected by chance (n = 229.9). This finding supports H3.

Table 9

Observed and Expected Frequencies for H3

Pre-kindergarten	Social-Emotional Skill	Observed	Expected
Did not Attend			
	Displayed	415	446.1
	Not Displayed	261	229.9
Attended			
	Displayed	1,916	1,884.9
	Not Displayed	940	971.1

H4. There is a difference in the ability to manage transitions between students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

The results of the chi-square test for H4 indicated a marginally significant difference between the observed and expected frequencies, $\chi^2 = 2.767$, $df = 1$, $p = .096$ (see Table 10). Students who attended pre-kindergarten displayed the ability to manage transitions (n = 2260) more than expected by chance (n = 2244.0). Students who did not attend pre-kindergarten failed to display the ability to manage transitions (n = 161) more than expected by chance (n = 145.0). Although not statistically significant, this finding supports H4.

Table 10

Observed and Expected Frequencies for H4

Pre-kindergarten	Social-Emotional Skill	Observed	Expected
Did not Attend			
	Displayed	515	531.0
	Not Displayed	161	145.0
Attended			
	Displayed	2,260	2,244.0
	Not Displayed	597	613.0

RQ2. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs)?

H5. There is a difference in whether students display appropriate interactions with adults among students who were enrolled in different pre-kindergarten programs.

The results of the chi-square test for H5 indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 4.332$, $df = 2$, $p = .115$ (see Table 11). This finding does not support H5.

Table 11

Observed and Expected Frequencies for H5

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	2,276	2,280.2
	Not Displayed	435	430.8
Faith-based			
	Displayed	42	37.0
	Not Displayed	2	7.0
For-profit			
	Displayed	85	85.8
	Not Displayed	17	16.2

H6. There is a difference in the understanding of what it means to be a friend among students who were enrolled in different pre-kindergarten programs.

The results of the chi-square test for H6 indicated a statistically significant difference between the observed and expected frequencies, $\chi^2 = 11.251$, $df = 2$, $p = .005$ (see Table 12). Students who attended a district-based pre-kindergarten displayed the understanding of what it means to be a friend ($n = 2359$) more than expected by chance ($n = 2347.6$). Students who did attend a for-profit program failed to display the understanding of what it means to be a friend ($n = 25$) more than expected by chance ($n = 13.7$). This finding supports H6.

Table 12

Observed and Expected Frequencies for H6

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	2,359	2,347.6
	Not Displayed	352	363.4
Faith-based			
	Displayed	38	38.1
	Not Displayed	6	5.9
For-profit			
	Displayed	77	88.3
	Not Displayed	25	13.7

H7. There is a difference in the ability to state personal information among students who were enrolled in different pre-kindergarten programs.

The results of the chi-square test for H7 indicated a statistically significant difference between the observed and expected frequencies, $\chi^2 = 23.992$, $df = 2$, $p = .000$ (see Table 13). Students who attended a faith-based pre-kindergarten displayed the ability to state personal information ($n = 37$) more than expected by chance ($n = 29.5$). Students who attended a for-profit pre-kindergarten displayed the ability to state personal information ($n = 88$) more than expected by chance ($n = 68.4$). Students who attended a district-based pre-kindergarten failed to display the ability to state personal information ($n = 919$) more than expected by chance ($n = 891.9$). This finding supports H7.

Table 13

Observed and Expected Frequencies for H7

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,791	1,818.1
	Not Displayed	919	891.9
Faith-based			
	Displayed	37	29.5
	Not Displayed	7	14.5
For-profit			
	Displayed	88	68.4
	Not Displayed	14	33.6

H8. There is a difference in the ability to manage transitions among students who were enrolled in different pre-kindergarten programs.

The results of the chi-square test for H8 indicated a statistically significant difference between the observed and expected frequencies, $\chi^2 = 6.366$, $df = 2$, $p = .041$ (see Table 14). Students who attended a district-based pre-kindergarten displayed the ability to manage transitions ($n = 2146$) more than expected by chance ($n = 2144.5$). Students who attended a faith-based pre-kindergarten displayed the ability to manage transitions ($n = 40$) more than expected by chance ($n = 34.8$). Students who attended a for-profit pre-kindergarten failed to display the ability to manage transitions ($n = 28$) more than expected by chance ($n = 21.3$). This finding supports H8.

Table 14

Observed and Expected Frequencies for H8

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	2,146	2,144.5
	Not Displayed	565	566.5
Faith-based			
	Displayed	40	34.8
	Not Displayed	4	9.2
For-profit			
	Displayed	74	80.7
	Not Displayed	28	21.3

RQ3. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by learning ability (students with specialized needs and students without specialized needs)?

For each of the hypotheses, H9-H12, data was disaggregated by learning ability into two subsamples: students with specialized needs and students without specialized needs. Four chi-square tests were conducted using the sample of students with specialized needs. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample of students without specialized needs. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The results of

some of the analyses were interpreted tentatively due to small sample sizes in some of the subgroups ($n < 5$). The level of significance was set at .05.

H9. The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by learning ability.

The results of the chi-square test for H9 using the data from students without specialized needs indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 3.560$, $df = 2$, $p = .169$ (see Table 15). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students without specialized needs.

Table 15

Observed and Expected Frequencies for H9: Students without Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	2,008	2,009.0
	Not Displayed	313	312.0
Faith-based			
	Displayed	41	37.2
	Not Displayed	2	5.8
For-profit			
	Displayed	82	84.8
	Not Displayed	16	13.2

The results of the chi-square test for H9 using the data from students with specialized needs indicated the difference between the observed and expected

frequencies was not statistically significant, $\chi^2 = .526$, $df = 2$, $p = .769$ (see Table 16). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students with specialized needs.

Table 16

Observed and Expected Frequencies for H9: Students with Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	268	268.6
	Not Displayed	122	121.4
Faith-based			
	Displayed	1	0.7
	Not Displayed	0	0.3
For-profit			
	Displayed	3	2.8
	Not Displayed	1	1.2

The results of the hypothesis test for students with specialized needs were not different than the results of the hypothesis test for students without specialized needs. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was not affected by learning ability. This finding does not support H9.

***H10*.** The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by learning ability.

The results of the chi-square test for H10 using the data from students without specialized needs indicated the difference between the observed and expected

frequencies was statistically significant, $\chi^2 = 15.603$, $df = 2$, $p = .000$ (see Table 17). Students without specialized needs who attended a district-based pre-kindergarten displayed the understanding of what it means to be a friend ($n = 2074$) more than expected by chance ($n = 2061.7$). Students without specialized needs who attended a for-profit pre-kindergarten failed to display the understanding of what it means to be a friend ($n = 23$) more than expected by chance ($n = 10.9$). There were differences in the understanding of what it means to be a friend based on pre-kindergarten type for students without specialized needs.

Table 17

Observed and Expected Frequencies for H10: Students without Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	2,074	2,061.7
	Not Displayed	247	259.3
Faith-based			
	Displayed	38	38.2
	Not Displayed	5	4.8
For-profit			
	Displayed	75	87.1
	Not Displayed	23	10.9

The results of the chi-square test for H10 using the data from students with specialized needs indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 3.726$, $df = 2$, $p = .155$ (see Table 18).

There were no differences in the understanding of what it means to be a friend based on pre-kindergarten type for students with specialized needs.

Table 18

Observed and Expected Frequencies for H10: Students with Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	285	283.4
	Not Displayed	105	106.6
Faith-based			
	Displayed	0	0.7
	Not Displayed	1	0.3
For-profit			
	Displayed	2	2.9
	Not Displayed	2	1.1

The results of the hypothesis test for students with specialized needs differed from the results of the hypothesis test for students without specialized needs. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by learning ability. This finding supports H10.

***H11*.** The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by learning ability.

The results of the chi-square test for H11 using the data from students without specialized needs indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 18.311$, $df = 2$, $p = .000$ (see Table 19).

Students without specialized needs who attended a faith-based pre-kindergarten displayed the ability to state personal information (n = 36) more than expected by chance (n = 30.0). Students without specialized needs who attended a for-profit pre-kindergarten displayed the ability to state personal information (n = 85) more than expected by chance (n = 68.4). Students without specialized needs who attended a district-based pre-kindergarten failed to display the ability to state personal information (n = 723) more than expected by chance (n = 700.4). There were differences in the ability to state personal information based on pre-kindergarten type for students without specialized needs.

Table 19

Observed and Expected Frequencies for H11: Students without Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,597	1,619.6
	Not Displayed	723	700.4
Faith-based			
	Displayed	36	30.0
	Not Displayed	7	13.0
For-profit			
	Displayed	85	68.4
	Not Displayed	13	29.6

The results of the chi-square test for H11 using the data from students with specialized needs indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 2.008$, $df = 2$, $p = .366$ (see Table 20).

There were no differences in the ability to state personal information based on pre-kindergarten type for students with specialized needs.

Table 20

Observed and Expected Frequencies for H11: Students with Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	194	195.5
	Not Displayed	196	194.5
Faith-based			
	Displayed	1	0.5
	Not Displayed	0	0.5
For-profit			
	Displayed	3	2.0
	Not Displayed	1	2.0

The results of the hypothesis test for students with specialized needs differed from the results of the hypothesis test for students without special needs. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by learning ability. This finding supports H11.

***H12*.** The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by learning ability.

The results of the chi-square test for H12 using the data from students without specialized needs indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 7.910$, $df = 2$, $p = .019$ (see Table 21). Students without specialized needs who attended a district-based pre-kindergarten

displayed the ability to manage transitions (*n* = 1899) more than expected by chance (*n* = 1893.9). Students without specialized needs who attended a faith-based pre-kindergarten displayed the ability to manage transitions (*n* = 39) more than expected by chance (*n* = 35.1). Students without specialized needs who attended a for-profit pre-kindergarten failed to display the ability to manage transitions (*n* = 27) more than expected by chance (*n* = 18.0). There were differences in the ability to manage transitions based on pre-kindergarten type for students without specialized needs.

Table 21

Observed and Expected Frequencies for H12: Students without Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,899	1,893.9
	Not Displayed	422	427.1
Faith-based			
	Displayed	39	35.1
	Not Displayed	4	7.9
For-profit			
	Displayed	71	80.0
	Not Displayed	27	18.0

The results of the chi-square test for H12 using the data from students with specialized needs indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = .808$, $df = 2$, $p = .668$ (see Table 22). There were no differences in the ability to manage transitions based on pre-kindergarten type for students with specialized needs.

Table 22

Observed and Expected Frequencies for H12: Students with Specialized Needs

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	247	247.8
	Not Displayed	143	142.2
Faith-based			
	Displayed	1	0.6
	Not Displayed	0	0.4
For-profit			
	Displayed	3	2.5
	Not Displayed	1	1.5

The results of the hypothesis test for students with specialized needs were different from the results of the hypothesis test for students without specialized needs. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by learning ability. This finding supports H12.

RQ4. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by gender (students identified as male and students identified as female)?

For each of the hypotheses, H13-H16, data was disaggregated by gender into two subsamples: students identified as female and students identified as male. Four chi-square tests were conducted using the students identified as the female sample. The two categorical variables that were cross-tabulated for each test were pre-kindergarten

program type and social-emotional development status. Four chi-square tests were conducted using the students identified as the male sample. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The results of some of the analyses were interpreted tentatively due to small sample sizes in some of the subgroups ($n < 5$). The level of significance was set at .05.

H13. The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by gender.

The results of the chi-square test for H13 using the data for students identified as female indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 2.958$, $df = 2$, $p = .228$ (see Table 23). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students based on gender.

Table 23

Observed and Expected Frequencies for H13: Students Identified as Female

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,148	1,150.6
	Not Displayed	162	159.4
Faith-based			
	Displayed	21	18.4
	Not Displayed	0	2.6
For-profit			
	Displayed	51	50.9
	Not Displayed	7	7.1

The results of the chi-square test for H13 using the data for students identified as male indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 2.002$, $df = 2$, $p = .367$ (see Table 24). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students based on gender.

Table 24

Observed and Expected Frequencies for H13: Students Identified as Male

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,128	1,129.0
	Not Displayed	273	272.0
Faith-based			
	Displayed	21	18.5
	Not Displayed	2	4.5
For-profit			
	Displayed	34	35.5
	Not Displayed	10	8.5

The results of the hypothesis test for students identified as female were no different from the results of the hypothesis test for students identified as male. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was not affected by gender. This finding does not support H13.

H14. The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by gender.

The results of the chi-square test for H14 using the data for students identified as female indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = .708$, $df = 2$, $p = .702$ (see Table 25). There were no differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as female.

Table 25

Observed and Expected Frequencies for H14: Students Identified as Female

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,194	1,192.1
	Not Displayed	116	117.9
Faith-based			
	Displayed	19	19.1
	Not Displayed	2	1.9
For-profit			
	Displayed	51	52.8
	Not Displayed	7	5.2

The results of the chi-square test for H14 using the data for students identified as male indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 17.054$, $df = 2$, $p = .000$ (see Table 26). Students identified as male who attended a district-based pre-kindergarten displayed the understanding of what it means to be a friend ($n = 1165$) more than expected by chance ($n = 1154.8$). Students identified as male who attended a for-profit pre-kindergarten failed to display the understanding of what it means to be a friend ($n = 18$) more than expected by chance ($n = 7.7$). There were differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as male.

Table 26

Observed and Expected Frequencies for H14: Students Identified as Male

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,165	1,154.8
	Not Displayed	236	246.2
Faith-based			
	Displayed	19	19.0
	Not Displayed	4	4.0
For-profit			
	Displayed	26	36.3
	Not Displayed	18	7.7

The results of the hypothesis test for students identified as female were different from the results of the hypothesis test for students identified as male. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by gender. This finding supports H14.

***H15*.** The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by gender.

The results of the chi-square test for H15 using the data for students identified as female indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 24.391$, $df = 2$, $p = .000$ (see Table 27). Students identified as female who attended a faith-based pre-kindergarten displayed the ability to state personal information ($n = 20$) more than expected by chance ($n = 15.1$). Students identified as female who attended a for-profit pre-kindergarten displayed the ability to state personal information ($n = 56$) more than expected by chance ($n = 41.7$). Students

identified as female who attended a district-based pre-kindergarten failed to display the ability to state personal information (n = 386) more than expected by chance (n = 366.9). There were differences in the ability to state personal information based on pre-kindergarten type for students identified as female.

Table 27

Observed and Expected Frequencies for H15: Students Identified as Female

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	923	942.1
	Not Displayed	386	366.9
Faith-based			
	Displayed	20	15.1
	Not Displayed	1	5.9
For-profit			
	Displayed	56	41.7
	Not Displayed	2	16.3

The results of the chi-square test for H15 using the data for students identified as male indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 3.417$, $df = 2$, $p = .181$ (see Table 28). There were no differences in the ability to state personal information based on pre-kindergarten type for students identified as male.

Table 28

Observed and Expected Frequencies for H15: Students Identified as Male

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	868	875.1
	Not Displayed	533	525.9
Faith-based			
	Displayed	17	14.4
	Not Displayed	6	8.6
For-profit			
	Displayed	32	27.5
	Not Displayed	12	16.5

The results of the hypothesis test for students identified as female were different from the results of the hypothesis test for students identified as male. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by gender. This finding supports H15.

H16. The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by gender.

The results of the chi-square test for H16 using the data for students identified as female indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 3.296$, $df = 2$, $p = .192$ (see Table 29). There were no differences in the ability to manage transitions based on pre-kindergarten type for students identified as female.

Table 29

Observed and Expected Frequencies for H16: Students Identified as Female

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,135	1,138.4
	Not Displayed	175	171.6
Faith-based			
	Displayed	21	18.2
	Not Displayed	0	2.8
For-profit			
	Displayed	51	50.4
	Not Displayed	7	7.6

The results of the chi-square test for H16 using the data for students identified as male indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 9.686$, $df = 2$, $p = .008$ (see Table 30). Students identified as male who attended a district-based pre-kindergarten displayed the ability to manage transitions ($n = 1011$) more than expected by chance ($n = 1004.9$). Students identified as male who attended a faith-based pre-kindergarten displayed the ability to manage transitions ($n = 19$) more than expected by chance ($n = 16.5$). Students identified as male who attended a for-profit pre-kindergarten failed to display the ability to manage transitions ($n = 21$) more than expected by chance ($n = 12.4$). There were differences in the ability to manage transitions based on pre-kindergarten type for students identified as male.

Table 30

Observed and Expected Frequencies for H16: Students Identified as Male

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,011	1,004.9
	Not Displayed	390	396.1
Faith-based			
	Displayed	19	16.5
	Not Displayed	4	6.5
For-profit			
	Displayed	23	31.6
	Not Displayed	21	12.4

The results of the hypothesis test for students identified as female were different from the results of the hypothesis test for students identified as male. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by gender. This finding supports H16.

RQ5. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by EL status (students identified as EL and students identified as non-EL)?

***H17*.** The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by EL status.

For each of the hypotheses, H17-H20, data was disaggregated by EL status into two subsamples: students identified as EL and students identified as non-EL. Four chi-

square tests were conducted using the students identified as EL. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the students identified as non-EL. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The level of significance was set at .05.

The results of the chi-square test for H17 using the data for students identified as EL indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 1.968$, $df = 2$, $p = .374$ (see Table 31). There were no differences in the ability to display appropriate interactions with adults for students identified as EL.

Table 31

Observed and Expected Frequencies for H17: Students Identified as EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,218	1,219.9
	Not Displayed	261	259.1
Faith-based			
	Displayed	9	7.4
	Not Displayed	0	1.6
For-profit			
	Displayed	16	15.7
	Not Displayed	3	3.3

The results of the chi-square test for H17 using the data for students identified as non-EL indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 2.561$, $df = 2$, $p = .278$ (see Table 32). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students identified as non-EL.

Table 32

Observed and Expected Frequencies for H17: Students Identified as Non-EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,058	1,058.6
	Not Displayed	174	173.4
Faith-based			
	Displayed	33	30.1
	Not Displayed	2	4.9
For-profit			
	Displayed	69	71.3
	Not Displayed	14	11.7

The results of the hypothesis test for students identified as EL were not different from the results of the hypothesis test for students identified as non-EL. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was not affected by EL status. This finding does not support H17.

H18. The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by EL status.

The results of the chi-square test for H18 using the data for students identified as EL indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 3.530$, $df = 2$, $p = .171$ (see Table 33). There were no differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as EL.

Table 33

Observed and Expected Frequencies for H18: Students Identified as EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,300	1,297.4
	Not Displayed	179	181.6
Faith-based			
	Displayed	8	7.9
	Not Displayed	1	1.1
For-profit			
	Displayed	14	16.7
	Not Displayed	5	2.3

The results of the chi-square test for H18 using the data for students identified as non-EL indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 6.285$, $df = 2$, $p = .043$ (see Table 34). Students identified as non-EL who attended a district-based pre-kindergarten displayed the understanding of what it means to be a friend ($n = 1059$) more than expected by chance ($n = 1051.3$). Students identified as non-EL who attended a for-profit pre-kindergarten failed to display the understanding of what it means to be a friend ($n = 20$) more than expected by

chance (n = 12.2). There were differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as non-EL.

Table 34

Observed and Expected Frequencies for H18: Students Identified as Non-EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,059	1,051.3
	Not Displayed	173	180.7
Faith-based			
	Displayed	30	29.9
	Not Displayed	5	5.1
For-profit			
	Displayed	63	70.8
	Not Displayed	20	12.2

The results of the hypothesis test for students identified as EL were different from the results of the hypothesis test for students identified as non-EL. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by EL status. This finding supports H18.

***H19*.** The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by EL Status.

The results of the chi-square test for H19 using the data for students identified as EL indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 1.857$, $df = 2$, $p = .395$ (see Table 35). There were no

differences in the ability to state personal information based on pre-kindergarten type for students identified as EL.

Table 35

Observed and Expected Frequencies for H19: Students Identified as EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	874	877.4
	Not Displayed	605	601.6
Faith-based			
	Displayed	6	5.3
	Not Displayed	3	3.7
For-profit			
	Displayed	14	11.3
	Not Displayed	5	7.7

The results of the chi-square test for H19 using the data for students identified as non-EL indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 12.317$, $df = 2$, $p = .002$ (see Table 36). Students identified as non-EL who attended a faith-based pre-kindergarten displayed the ability to state personal information ($n = 31$) more than expected by chance ($n = 26.5$). Students identified as non-EL who attended a for-profit pre-kindergarten displayed the ability to state personal information ($n = 74$) more than expected by chance ($n = 62.9$). Students identified as non-EL who attended a district-based pre-kindergarten failed to display the ability to state personal information ($n = 314$) more than expected by chance ($n =$

298.4). There were differences in the ability to state personal information based on pre-kindergarten type for students identified as non-EL.

Table 36

Observed and Expected Frequencies for H19: Students Identified as Non-EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	917	932.6
	Not Displayed	314	298.4
Faith-based			
	Displayed	31	26.5
	Not Displayed	4	8.5
For-profit			
	Displayed	74	62.9
	Not Displayed	9	20.1

The results of the hypothesis test for students identified as EL were different from the results of the hypothesis test for students identified as non-EL. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by EL status. This finding supports H19.

***H20*.** The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by EL status.

The results of the chi-square test for H20 using the data for students identified as EL indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 4.166$, $df = 2$, $p = .125$ (see Table 37). There were no

differences in the ability to manage transitions based on pre-kindergarten type for students identified as EL.

Table 37

Observed and Expected Frequencies for H20: Students Identified as EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,196	1,193.4
	Not Displayed	283	285.6
Faith-based			
	Displayed	8	7.3
	Not Displayed	1	1.7
For-profit			
	Displayed	12	15.3
	Not Displayed	7	3.7

The results of the chi-square test for H20 using the data for students identified as non-EL indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 4.331$, $df = 2$, $p = .115$ (see Table 38). There were no differences in the ability to manage transitions based on pre-kindergarten type for students identified as non-EL.

Table 38

Observed and Expected Frequencies for H20: Students Identified as Non-EL

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	950	952.7
	Not Displayed	282	279.3
Faith-based			
	Displayed	32	27.1
	Not Displayed	3	7.9
For-profit			
	Displayed	62	64.2
	Not Displayed	21	18.8

The results of the hypothesis test for students identified as EL were not different from the results of the hypothesis test for students identified as non-EL. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was not affected by EL status. This finding does not support H20.

RQ6. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) affected by ethnicity (students identified as Black, Hispanic, White, or Other)?

For each of the hypotheses, H21-H24, data was disaggregated by ethnicity into four subsamples: students identified as Black, students identified as Hispanic, students identified as White, and students identified as Other. The category labeled Other included students identified as either Asian, Hawaiian/Pacific Islander, Indian/Alaska

Native, Multi-Racial, Unknown or Declined to Identify. Four chi-square tests were conducted using the sample identified as Black. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample identified as Hispanic. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample identified as White. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. Four chi-square tests were conducted using the sample identified as Other. The two categorical variables that were cross-tabulated for each test were pre-kindergarten program type and social-emotional development status. The results of some of the analyses were interpreted tentatively due to small sample sizes in some of the subgroups ($n < 5$). The level of significance was set at .05.

H21. The difference in whether students display appropriate interactions with adults among students enrolled in different prekindergarten programs is affected by ethnicity.

The results of the chi-square test for H21 using the data for students identified as Black indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = .085$, $df = 2$, $p = .958$ (see Table 39). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students identified as Black.

Table 39

Observed and Expected Frequencies for H21: Students Identified as Black

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	541	541.0
	Not Displayed	99	99.0
Faith-based			
	Displayed	4	4.2
	Not Displayed	1	0.8
For-profit			
	Displayed	34	33.8
	Not Displayed	6	6.2

The results of the chi-square test for H21 using the data for students identified as Hispanic indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 2.419$, $df = 2$, $p = .298$ (see Table 40). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students identified as Hispanic.

Table 40

Observed and Expected Frequencies for H21: Students Identified as Hispanic

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,161	1,163.6
	Not Displayed	217	214.4
Faith-based			
	Displayed	12	10.1
	Not Displayed	0	1.9
For-profit			
	Displayed	21	20.3
	Not Displayed	3	3.7

The results of the chi-square test for H21 using the data for students identified as White indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 1.231$, $df = 2$, $p = .540$ (see Table 41). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students identified as White.

Table 41

Observed and Expected Frequencies for H21: Students Identified as White

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	201	202.3
	Not Displayed	30	28.7
Faith-based			
	Displayed	20	18.4
	Not Displayed	1	2.6
For-profit			
	Displayed	19	19.3
	Not Displayed	3	2.7

The results of the chi-square test for H21 using the data for students identified as Other indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 1.819$, $df = 2$, $p = .403$ (see Table 42). There were no differences in the ability to display appropriate interactions with adults based on pre-kindergarten type for students identified as Other.

Table 42

Observed and Expected Frequencies for H21: Students of Other

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	334	333.1
	Not Displayed	79	79.9
Faith-based			
	Displayed	3	2.4
	Not Displayed	0	0.6
For-profit			
	Displayed	9	10.5
	Not Displayed	4	2.5

When the hypothesis test results were compared among the following ethnicities there were no observable differences: Black, Hispanic, White, and Other. None of the results indicated a significant difference in social-emotional development based on pre-kindergarten type. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was not affected by ethnicity. This finding does not support H21.

H22. The difference in the understanding of what it means to be a friend among students enrolled in different prekindergarten programs is affected by ethnicity.

The results of the chi-square test for H22 using the data for students identified as Black indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = .6.466$, $df = 2$, $p = .039$ (see Table 43). Students identified as Black who attended a district-based pre-kindergarten displayed the understanding of

what it means to be a friend (*n* = 534) more than expected by chance (*n* = 527.9). Students identified as Black who attended a for-profit pre-kindergarten failed to display the understanding of what it means to be a friend (n = 12) more than expected by chance (n = 7.0). There were differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as Black.

Table 43

Observed and Expected Frequencies for H22: Students Identified as Black

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	534	527.9
	Not Displayed	106	112.1
Faith-based			
	Displayed	3	4.1
	Not Displayed	2	0.9
For-profit			
	Displayed	28	33.0
	Not Displayed	12	7.0

The results of the chi-square test for H22 using the data for students identified as Hispanic indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 3.056$, $df = 2$, $p = .217$ (see Table 44). There were no differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as Hispanic.

Table 44

Observed and Expected Frequencies for H22: Students Identified as Hispanic

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,233	1,229.9
	Not Displayed	145	148.1
Faith-based			
	Displayed	10	10.7
	Not Displayed	2	1.3
For-profit			
	Displayed	19	21.4
	Not Displayed	5	2.6

The results of the chi-square test for H22 using the data for students identified as White indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 2.978$, $df = 2$, $p = .226$ (see Table 45). There were no differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as White.

Table 45

Observed and Expected Frequencies for H22: Students Identified as White

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	200	199.8
	Not Displayed	31	31.2
Faith-based			
	Displayed	20	18.2
	Not Displayed	1	2.8
For-profit			
	Displayed	17	19.0
	Not Displayed	5	3.0

The results of the chi-square test for H22 using the data for students identified as Other indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 1.533$, $df = 2$, $p = .465$ (see Table 46). There were no differences in the understanding of what it means to be a friend based on pre-kindergarten type for students identified as Other.

Table 46

Observed and Expected Frequencies for H22: Students of Other

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	353	351.4
	Not Displayed	60	61.6
Faith-based			
	Displayed	2	2.6
	Not Displayed	1	0.4
For-profit			
	Displayed	10	11.1
	Not Displayed	3	1.9

When the hypothesis test results were compared among the following ethnicities there were no observable differences: Hispanic, White, and Other. None of the results indicated a significant difference in social-emotional development based on pre-kindergarten type. However, when the hypothesis test results were compared with students identified as Black, there were observable differences. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by ethnicity. This finding supports H22.

H23. The difference in the ability to state personal information among students enrolled in different prekindergarten programs is affected by ethnicity.

The results of the chi-square test for H23 using the data for students identified as Black indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 1.878$, $df = 2$, $p = 0.391$ (see Table 47). There were no

differences in the ability to state personal information based on pre-kindergarten type for students identified as Black.

Table 47

Observed and Expected Frequencies for H23: Students Identified as Black

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	483	486.7
	Not Displayed	156	152.3
Faith-based			
	Displayed	4	3.8
	Not Displayed	1	1.2
For-profit			
	Displayed	34	30.5
	Not Displayed	6	9.5

The results of the chi-square test for H23 using the data for students identified as Hispanic indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 3.276$, $df = 2$, $p = .194$ (see Table 48). There were no differences in the ability to state personal information based on pre-kindergarten type for students identified as Hispanic.

Table 48

Observed and Expected Frequencies for H23: Students Identified as Hispanic

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	871	876.1
	Not Displayed	507	501.9
Faith-based			
	Displayed	9	7.6
	Not Displayed	3	4.4
For-profit			
	Displayed	19	15.3
	Not Displayed	5	8.7

The results of the chi-square test for H23 using the data for students identified as White indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 7.848$, $df = 2$, $p = .020$ (see Table 49). Students identified as White who attended a faith-based pre-kindergarten displayed the ability to state personal information ($n = 19$) more than expected by chance ($n = 15.4$). Students identified as White who attended a for-profit pre-kindergarten displayed the ability to state personal information ($n = 20$) more than expected by chance ($n = 16.1$). Students identified as White who attended a district-based pre-kindergarten failed to display the ability to state personal information ($n = 69$) more than expected by chance ($n = 61.5$). There were differences in the ability to state personal information based on pre-kindergarten type for students identified as White.

Table 49

Observed and Expected Frequencies for H23: Students Identified as White

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	162	169.5
	Not Displayed	69	61.5
Faith-based			
	Displayed	19	15.4
	Not Displayed	2	5.6
For-profit			
	Displayed	20	16.1
	Not Displayed	2	5.9

The results of the chi-square test for H23 using the data for students identified as Other indicated the difference between the observed and expected frequencies was statistically significant, $\chi^2 = 9.053$, $df = 2$, $p = .011$ (see Table 50). Students identified as Other who attended a for-profit pre-kindergarten displayed the ability to state personal information ($n = 13$) more than expected by chance ($n = 7.8$). Students identified as Other who attended a district-based pre-kindergarten failed to display the ability to state personal information ($n = 171$) more than expected by chance ($n = 165.6$). There were differences in the ability to state personal information for students identified as Other.

Table 50

Observed and Expected Frequencies for H23: Students of Other

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	242	247.4
	Not Displayed	171	165.6
Faith-based			
	Displayed	2	1.8
	Not Displayed	1	1.2
For-profit			
	Displayed	13	7.8
	Not Displayed	0	5.2

When the hypothesis test results were compared among the following ethnicities there were no observable differences: Black and Hispanic. None of the results indicated a significant difference in social-emotional development based on pre-kindergarten type. However, when the hypothesis test results were compared with students identified as either White or Other, there were observable differences. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by ethnicity. This finding supports H23.

***H24*.** The difference in the ability to manage transitions among students enrolled in different prekindergarten programs is affected by ethnicity.

The results of the chi-square test for H24 using the data for students identified as Black indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = .439$, $df = 2$, $p = .803$ (see Table 51). There were no

differences in the ability to manage transitions based on pre-kindergarten type for students identified as Black.

Table 51

Observed and Expected Frequencies for H24: Students Identified as Black

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	468	467.2
	Not Displayed	172	172.8
Faith-based			
	Displayed	3	3.6
	Not Displayed	2	1.4
For-profit			
	Displayed	29	29.2
	Not Displayed	11	10.8

The results of the chi-square test for H24 using the data for students identified as Hispanic indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 4.654$, $df = 2$, $p = .098$ (see Table 52). There were no differences in the ability to manage transitions based on pre-kindergarten type for students identified as Hispanic.

Table 52

Observed and Expected Frequencies for H24: Students Identified as Hispanic

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	1,130	1,129.5
	Not Displayed	248	248.5
Faith-based			
	Displayed	12	9.8
	Not Displayed	0	2.2
For-profit			
	Displayed	17	19.7
	Not Displayed	7	4.3

The results of the chi-square test for H24 using the data for students identified as White indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 2.955$, $df = 2$, $p = .228$ (see Table 53). There were no differences in the ability to manage transitions based on pre-kindergarten type for students identified as White.

Table 53

Observed and Expected Frequencies for H24: Students Identified as White

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	187	188.8
	Not Displayed	44	42.2
Faith-based			
	Displayed	20	17.2
	Not Displayed	1	3.8
For-profit			
	Displayed	17	18.0
	Not Displayed	5	4.0

The results of the chi-square test for H24 using the data for students identified as Other indicated the difference between the observed and expected frequencies was not statistically significant, $\chi^2 = 1.067$, $df = 2$, $p = .586$ (see Table 54). There were no differences in the ability to manage transitions based on pre-kindergarten type for students identified as Other.

Table 54

Observed and Expected Frequencies for H24: Students of Other

Pre-kindergarten Type	Social-Emotional Skill	Observed	Expected
District-based			
	Displayed	328	326.4
	Not Displayed	85	86.6
Faith-based			
	Displayed	2	2.4
	Not Displayed	1	0.6
For-profit			
	Displayed	9	10.3
	Not Displayed	4	2.7

When the hypothesis test results were compared among the following ethnicities there were no observable differences: Black, Hispanic, White, and Other. None of the results indicated a significant difference in social-emotional development based on pre-kindergarten type. The difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was not affected by ethnicity. This finding does not support H24.

Summary

Chapter 4 included a summary of the results of the statistical testing and analysis. Twenty-four chi-square tests of independence were conducted to address each of the research hypotheses. The social-emotional skills studied were young children's abilities to display appropriate interactions with adults, their understanding of what it means to be a friend, their ability to state personal information, and manage transitions. Chapter 5 includes the study summary, findings related to the literature, and the conclusions.

Chapter 5

Interpretation and Recommendations

Each year young children miss the opportunity to become equipped for overcoming life's challenges and be situated for future success by failing to attend a formal pre-kindergarten experience. Pre-kindergarten programs, specifically those for three to five-year-olds, were created to offer young children opportunities for early learning in many areas which could have implications for further successes. The current offerings for pre-kindergarten programs for young children include, but are not limited to, in-home, faith-based, for-profit, and district-based settings (Karoly, 2016). These programs continue to grow in their availability but unfortunately continue to underserve the youngest of learners in the development of social-emotional skills (Jones et al., 2015). Social-emotional development includes the formation of relationships and the appropriate regulation and expression of various emotions (Yates et al., 2008). A strong foundation of social-emotional development can lead to the strengthening of other areas of learning (Sadler, 2007). Each type of pre-kindergarten program varies in its attention to the importance of social-emotional development. This difference can lead to inequities that can have implications for kindergarten readiness (Barnett et al., 2014). Young children will have a multitude of experiences into adulthood, including exchanges with other members of society. Through these occurrences, they will encounter struggles, but with a solid social-emotional foundation these instances will be better served (Darling-Churchill & Lippman, 2016).

This chapter consists of a summary of the current research, including an overview of the problem, statement of purpose for the study, research questions, and a review of

the research methodology. Additionally, this chapter presents the major findings of the study and how the findings are related to the literature reviewed. Lastly, this chapter includes conclusions.

Study Summary

Through this study, the researcher examined the differences in social-emotional development associated with different types of pre-kindergarten programs. The programs included district-based, faith-based, and for-profit pre-kindergarten programs. The researcher also used data in the current study to determine whether these differences in social-emotional development were affected by learning ability, gender, EL status, and ethnicity.

Overview of the problem. Nationally, schools strive to become better equipped to support students' growth including social-emotional development, but young children continue to be underserved socially and emotionally (Jones et al., 2015). The NAEYC (2016) identified school readiness to be more than just literacy, math, and motor skills, it also includes social and emotional learning. Jones et al. (2015) wrote that social-emotional competence of young children is a low priority when compared with other public concerns. Increased exposure to trauma and the prevalence of stressors on young children's mental health caused from a multitude of occurrences in the early years of a child's life conveys the need for further study on the impact that a pre-kindergarten program could have on social-emotional development. Expanded access to early educational programs have the potential to support the social-emotional development of all children.

Varying levels of importance continue to be placed on the need for early educational opportunities. Barnett et al. (2017) indicated that early education programs were not widely available across the nation and kindergarten education was required in only 15 states. This number from 2017 is indicative of the current level of importance that is being placed on pre-kindergarten programs. Further, Barnett et al. (2017) stated that the enrollment levels of three and four-year-olds in early education has risen since 2002, the need for additional research regarding school readiness still remains. Across the nation, young children are not provided the opportunity that a pre-kindergarten program could provide in situating them for future success and equipping them with the social-emotional skills necessary to overcome any challenges that they might encounter in life.

Purpose statement and research questions. The purpose of this study was to contribute to the current field of research regarding the impact of enrollment in a pre-kindergarten program on social-emotional development of children. The results of the study helped to determine the effects on social-emotional development of kindergarten students. Specifically, this study was developed to determine the difference in social-emotional development among students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program. The research also examined the impact that various types of pre-kindergarten programs had on social-emotional development, as measured by the KRA. Finally, the study was designed to determine whether differences in the social-emotional development of young children based on type of pre-kindergarten program attended were affected by learning ability, gender, EL status, and ethnicity. To address six research questions, twenty-four chi-

square tests of independence were conducted for each of the research hypotheses.

Review of the methodology. A quantitative research design was utilized for this study which involved an urban school district in the Midwest. A causal-comparative research method using archival data was implemented to measure the relationship between variables. Archival data from the 2015-2016, 2016-2017, and 2017-2018 school years were utilized to determine the differences in the social-emotional development of incoming kindergarten students based on early educational experience. For this study, enrollment in a pre-kindergarten program included district-based, faith-based, and for-profit programs. The independent variables examined within this research study were enrollment in a pre-kindergarten program, type of pre-kindergarten, learning ability, gender, EL status, and ethnicity. The dependent variables were the scores on the four components of social-emotional development as measured by the KRA.

Major findings. The first set of hypotheses focused on the social-emotional skills of children who attended a pre-kindergarten program and those who did not. Three out of four hypotheses were supported by the findings. Enrollment in a pre-kindergarten program did affect the social-emotional development of the sample. Students who had been enrolled in a pre-kindergarten program displayed three of four social-emotional skills. The skills that were displayed were the ability to interact appropriately with adults, to state personal information, and to manage transitions. Attendance in a pre-kindergarten program failed to affect the social-emotional skill of the understanding of what it means to be a friend.

The next set of hypotheses were focused on the impact the type of pre-kindergarten program had on the development of each of the four social-emotional skills.

Three out of four hypotheses were supported by the findings. The type of pre-kindergarten program did affect the social-emotional development of the sample. Students who had attended a district-based pre-kindergarten program displayed the understanding of what it means to be a friend. Students who had attended a district-based or faith-based pre-kindergarten program displayed the ability to manage transitions. Students who had attended either a faith-based or for-profit pre-kindergarten program displayed the ability to state personal information. Type of pre-kindergarten program failed to affect the social-emotional skill of the ability to display appropriate interactions with adults.

Additional hypotheses tests determined the extent the difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by learning ability. Three out of four hypotheses were supported by the findings. Learning ability did affect differences in the social-emotional development of the sample based on the type of pre-kindergarten program attended. Students without specialized needs who attended a district-based pre-kindergarten program displayed the understanding of what it means to be a friend. Students without specialized needs who attended a faith-based or for-profit pre-kindergarten program displayed the ability to state personal information. Students without specialized needs who attended a district-based or faith-based pre-kindergarten program displayed the ability to manage transitions. Students with specialized needs showed no differences in their ability to display social-emotional skills based on the type of pre-kindergarten program attended.

The next group of four hypothesis tests determined the extent the difference in social-emotional development among students enrolled in different pre-kindergarten programs was affected by gender. Three out of four hypotheses were supported by the findings. Gender did affect differences in the social-emotional development of the sample based on type of pre-kindergarten program attended. Students identified as female who attended a faith-based or for-profit pre-kindergarten program displayed the ability to state personal information. Students identified as male who attended a district-based or faith-based pre-kindergarten program displayed the understanding of what it means to be a friend and the ability to manage transitions. Also, students identified as male showed no differences in their ability to state personal information regardless of the type of pre-kindergarten program they had attended.

The next set of hypothesis tests determined the extent the difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by EL status. Two out of four hypotheses were supported by the findings. EL status did affect differences in the social-emotional development of the sample based on the type of pre-kindergarten program attended. Students identified as non-EL who attended a district-based pre-kindergarten program displayed the understanding of what it means to be a friend. Students identified as non-EL who attended a faith-based or for-profit pre-kindergarten program displayed the ability to state personal information. Students identified as non-EL or EL showed no differences in their ability to display appropriate interactions with adults or manage transitions based on type pre-kindergarten attended.

The testing of the final set of hypotheses determined the extent the difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by ethnicity. Two out of four hypotheses were supported by the findings. Ethnicity did affect differences in the social-emotional development of the sample based on type of pre-kindergarten program attended. Students identified as Black who attended a district-based pre-kindergarten program displayed the understanding of what it means to be a friend. Students identified as White who attended a faith-based or for-profit pre-kindergarten program displayed the ability to state personal information. Students identified as Other who attended a for-profit pre-kindergarten program displayed the ability to manage transitions. Students identified as Black, Hispanic, White, or Other showed no differences in their ability to display appropriate interactions with adults or manage transitions based on type of pre-kindergarten attended.

Findings Related to the Literature

A review of the literature for this study was conducted and provided the reader with a better understanding of early childhood experiences in the United States and an account of the evolution of intended outcomes for pre-kindergarten programs. Social-emotional developmental differences among children of varying circumstances were studied. Various forms of pre-kindergarten programs have existed to support the youngest of children in developing the skills needed for school readiness. Each type of program was shown to have a different focus, area of concentration, length of schedule, curriculum resource, and philosophy. The results from the current research both supported and contrasted with research findings.

The results of the Allen (2009) study aligned with the results of the current study which indicated that students who had an early education experience were positively impacted over those students having no early education experience. Similar to the current study, the analysis of the impact of pre-kindergarten enrollment on social-emotional development revealed that all but one skill was impacted with statistical significance. The findings suggest that only the understanding of what it means to be a friend showed no difference regardless of enrollment in a pre-kindergarten program.

Much like the current study, Goldstein, Warde, and Peluso (2013), examined the social-emotional effects of various types of pre-kindergarten programs. The researchers studied the extent to which social-emotional skill development was impacted in young children who were enrolled in various early education programs. The sample was assessed with two measurements: the Developmental Assessment of Young Children (DAYC) and Peabody Picture Vocabulary Test (PPVT-4). These assessments indicated that, much like the current study, some of the participants were found to have increased social-emotional development scores. This 2013 study compared the differences in social-emotional development of students having attended various types of pre-kindergarten programs including Florida's state-funded pre-kindergarten program as well as other publicly funded and community-based programs. The results of the current study revealed that the only social-emotional skill that failed to be significantly impacted by any type of pre-kindergarten program was the ability to display appropriate interactions with adults. The results from the current study signify that district-based and for-profit pre-kindergarten programs had only a minor statistically significant impact on a student's ability to display appropriate interactions with adults.

The current study was similar to Bloom and Weiland (2014) who conducted a study in which children were placed into various educational settings. The results of the 2014 study showed differences in the effects of various early education settings including Head Start and parental care situations when considering social-emotional development. Bloom and Weiland (2014) concluded that the differences in social-emotional development outcomes were due to the variance in program sites. Similar to Goldstein et al. (2013) and Bloom and Weiland (2014), who studied skills such as taking turns, problem-solving, self-regulation, and following directions, the results from the current study indicated that three of the four social-emotional skills were significantly impacted by attendance in various types of pre-kindergarten programs. The social-emotional skill that did not appear to be impacted by enrollment in any type of pre-kindergarten program was the ability to display appropriate interactions with adults.

The current study also researched the extent the difference in social-emotional development among students who were enrolled in different pre-kindergarten programs was affected by learning ability. Hibbert and Sprinthall (1995) conducted a study which utilized both students with and without specialized needs. This study was meant to determine the impact that two different classroom structures had on the social-emotional development of students with and without specialized needs. The results of the analysis showed that both students with and without specialized needs made positive gains in social-emotional learning as measured by two assessment instruments. The results of the current study were unlike Hibbert and Sprinthall (1995) who indicated that only students without specialized needs were significantly impacted by the type of pre-kindergarten program.

Cascio and Whitmore-Schanzenbach (2013) conducted a study that examined the impact that a pre-kindergarten program had on various outcomes in a child's life including social-emotional skills. The findings from this research indicated that male and female students involved in the study were affected differently (Cascio & Whitmore-Schanzenbach, 2013). Related directly to Taylor et al. (2000), the researcher of the current study found that students identified as female were significantly impacted. Students identified as female who attended either a faith-based or for-profit pre-kindergarten program displayed the ability to state personal information more than students identified as female who attended a district-based pre-kindergarten program.

Taylor et al. (2000) studied 171 kindergarten students. Taylor et al. (2000) assessed growth using the GKAP just as the current research used the KRA to determine the impact of pre-kindergarten enrollment on social-emotional development. The sample was split into two subgroups: students who had been enrolled in a pre-kindergarten program and students who had not been enrolled in a pre-kindergarten program. After assessing these groups with the GKAP in the area of social learning it was found that the students identified as female having attended a pre-kindergarten program were significantly impacted in the area of social-emotional development where they exhibited the skills of participating in group activities and carrying out assigned tasks more than students identified as male. The findings from the current study align to the results of earlier studies. The current study was conducted to determine the differences in social-emotional development between students who were enrolled in a pre-kindergarten program and students who were not. The current study also researched the extent the difference in social-emotional development among students who were enrolled in

different pre-kindergarten programs was affected by EL status. The researcher determined that research to support the findings was not found.

One last aspect of the research centered around how ethnicity affected school readiness in the area of social-emotional development of young children. Across the nation, the disproportionality and variance in pre-kindergarten programs promote different sets of expectations between experiences in early education settings. Graves and Howes (2011) made connections to the high expulsion rates of students identified as Black and the impacts that this occurrence has on social-emotional development which related directly to the current study that showed that students identified as Black displayed the understanding of what it means to be a friend more than expected having only attended a district-based pre-kindergarten program.

Modeling after previous research studies (Allen, 2009; Bloom & Weiland, 2014; Cascio et al., 2013; Chazan-Cohen & Kisker, 2013; Goldstein et al., 2013; Lee et al., 1990; Stanley et al., 2016; Whitmore-Schanzenbach & Bauer, 2016) the current study provided additional findings to the extensive body of research concentrated on the effects that early education has on social-emotional development in the youngest of students. Specifically, the results of this study showed that students who had been enrolled in a pre-kindergarten program exhibited a higher rate of three of the four social-emotional skills than students who had not been enrolled in a pre-kindergarten program.

Additionally, the findings indicated that for each type of pre-kindergarten program studied: district-based, faith-based, and for-profit, there were statistically significant impacts on at least one of the four social-emotional skills. The results of the analysis suggest that when considering the types of pre-kindergarten program and their

effects on students with and without specialized needs, students without specialized needs demonstrated at a higher rate three out of four social-emotional skills having attended either a district-based, faith-based, or for-profit pre-kindergarten program than students with specialized needs. The findings suggest that when considering the types of pre-kindergarten program and their effects on students based on EL Status, students identified as non-EL demonstrated at a higher rate two out of four social-emotional skills having attended either a district-based, faith-based, or for-profit pre-kindergarten program than students identified as EL. Lastly, the findings from the current study indicated that based on ethnicity, students identified as Hispanic, White, or Other showed to be not significantly impacted in one of the four social-emotional skills regardless of the type of pre-kindergarten program. For students identified as Black the findings indicated that there were no differences in each of the four social-emotional skills regardless of the type of pre-kindergarten program. The ability to display appropriate interactions with adults, the understanding of what it means to be a friend, the ability to state personal information, and the ability to manage transitions were not impacted based on pre-kindergarten type for students identified as Black. The findings from both previous and current research show the variance in impact on social-emotional development based on the type of pre-kindergarten program, learning ability, gender, EL status, and ethnicity.

Conclusions

The conclusions section consists of three parts. First, the implications for action are discussed including how local, district, and state-level educational leaders might use the information from this study to advocate for, develop, establish, maintain, and strengthen pre-kindergarten programs. Findings from the current study impact the next

part of this chapter which is a discussion of the recommendations for future research. This chapter closes with concluding remarks from the researcher.

Implications for action. The results from the current study were mixed regarding the impact that enrollment in a pre-kindergarten program had on the social-emotional development of young children. There were instances that indicated exposure to early education did have a statistically significant impact on the social-emotional development of young children. From the findings of the current research study, it was determined that only one of the four social-emotional development skills was not impacted by any type of pre-kindergarten program.

The implications of the findings call for action at all levels to ensure that the youngest of children be provided with an opportunity for social-emotional development at the early childhood level. Supports should be put in place to ensure that quality and consistency exist regardless of the type of pre-kindergarten program. A quality indicator instrument would need to be considered for implementation statewide to support narrowing the margin of difference relating to educational quality at the pre-kindergarten level. Currently, in the state where the study was conducted, a pre-kindergarten quality indicator instrument is used, but only to ensure consistency for Head Start and other grant-funded pre-kindergarten programs. This instrument should also be considered for use in evaluating the quality of all types of pre-kindergarten programs. Additionally, a consistent curriculum resource must be adopted at the state level to ensure that regardless of the type of pre-kindergarten program all students would receive continuity in social-emotional learning.

The implications of the findings show a need for continued advocacy and support at the district and state level. Establishing a reciprocal relationship with the community is vital for an educational leader at the building and district level. This partnership would encourage communication and collaboration regarding the social-emotional preparation in faith-based, for-profit, and other community pre-kindergarten programs. This work would support establishing indicators for social-emotional consistency and preparation among all pre-kindergarten programs within the community.

The implications of the findings require the additional need for action at the local and district level similar to that at the state level. District leaders must provide support to community partners that operate faith-based, for-profit, and other community pre-kindergarten programs to establish quality indicators for programs. Consistency in quality between the different types of programs will only be developed through partnerships between district and community leaders. A task force should be established and maintained to determine steps needed to strengthen consistency in social-emotional instruction between both community and district-based pre-kindergarten programs. This advocacy group would include members of the community as well as the school district. A school district does not operate in isolation, but rather in harmony with the community in which it is located. Young children who are not able to be enrolled in a district-based pre-kindergarten program might find themselves in a faith-based or for-profit program which may or may not exhibit the same quality of social-emotional preparation as other pre-kindergarten programs. Due to this lack of consistency in quality and social-emotional preparation, it is vital that district leaders work in partnership to strengthen early education not only within their organization but outside of the school as well.

Recommendations for future research. The current study allowed the researcher to determine if current offerings of pre-kindergarten programs were supporting the social-emotional development of the youngest learners. The following recommendations were developed to support other professionals who may conduct additional research related to the impacts of enrollment in a pre-kindergarten program on a young child's social-emotional development.

- It is recommended that future researchers replicate the current study in other districts with similar characteristics including population, differences in learning ability, gender, EL status, ethnicities, and varying pre-kindergarten experiences. Doing so may help ensure the sample size is adequate to provide more conclusive results as to the impact that a pre-kindergarten program has on social-emotional development in young children.
- It is recommended that future researchers replicate the current study including students in additional grade levels. Engaging in this research will provide the researcher with a longitudinal perspective and could support the body of research indicating long-term benefits of social-emotional development in a pre-kindergarten program.
- It is recommended that future researchers replicate this current study considering only the differences between faith-based and for-profit programs. Future research could provide more clarity on the differences that these programs have regarding educational methods.
- It is recommended that future researchers conduct program reviews measuring the effectiveness of other prescribed social-emotional programs and

curriculum resources. Additional research would provide further evidence of the effectiveness of differing types of social-emotional curriculum resources and programs.

Concluding remarks. Each school year, young children across the country are underserved by not being provided with exposure to a quality pre-kindergarten program. School districts must continue to establish, implement, and maintain an effective pre-kindergarten program. Taking this action would be seen as an investment in quality pre-kindergarten through twelfth-grade education. Establishing pre-kindergarten programs requires educational leaders at the state, community, and district levels to communicate and collaborate to ensure that young children are provided the opportunity for quality early educational experiences regardless of type. This point further emphasizes the need for a measurement tool to ensure consistency between early education programs to provide young children with a strong foundation of social-emotional development at the early childhood level. Providing the resources needed to establish, implement, and maintain consistency in quality across all pre-kindergarten programs will continue to support the youngest of learners socially and emotionally throughout their educational journey.

References

Albritton, K., Anhalt, K., & Terry, N. P. (2016). Promoting equity for our nation's youngest students: School psychologists as agents of social justice in early childhood settings. *School Psychology Forum*, *10*(3), 237-250. Retreived from ResearchGate website: https://www.researchgate.net/publication/310481036_Promoting_equity_for_our_nation%27s_youngest_students_School_psychologists_as_agents_of_racial_and_social_justice_in_early_childhood_settings

Allen, C. R. (2009). *Effect of early childhood education programs on school readiness* (Doctoral dissertation). Retrieved from the ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection. (ProQuest No. 3390644)

American Montessori Society. (2018a). *Early history of Montessori.* Retrieved from American Montessori Society Headquarters website: https://amshq.org/Montessori-Education/History-of-Montessori-Education/Early-History-of-Montessori

American Montessori Society. (2018b). Introduction to Montessori method. *Montessori Education.* Retrieved from https://amshq.org/Montessori-Education/Introduction-to-Montessori

Ashdown, D., & Bernard, M. (2012). Can explicit instruction in social and emotional learning skills benefit the social-emotional development, well-being, and academic achievement of young children? *Early Childhood Education Journal, 39*(6), 397-405. doi:10.1007/s10643-011-0481-x

Barnett, W. S., Carolan, M. E., Squires, J. H., & Brown, K. C. (2014). *The state of preschool 2013*. Retrieved from The National Center for Education Statistics website: https://nces.ed.gov/pubs2014/2014078.pdf

Barnett, W. S., Friedman-Krauss, A. H., Weisenfeld, G. G., Horowitz, M., Kasmin, R., & Squires, J. H. (2017). *The state of preschool 2016*. Retrieved from The National Institute for Early Education Research website: http://nieer.org/wp-content/uploads/2017/05/YB2016_StateofPreschool2.pdf

Barnett, W. S., & Yarosz, D. (2007). Who goes to preschool and why does it matter? *Preschool Policy Matters Journal*, (15), 1-15. Retrieved from the National Institute for Early Education Research website: http://nieer.org/wp-content/uploads/2016/08/15.pdf

Bierman, K. L., Heinrichs, B. S., Welsh, J. A., Nix, R. L., & Gest, S. D. (2017). Enriching preschool classrooms and home visits with evidence-based programming: Sustained benefits for low-income children. *Journal of Child Psychology & Psychiatry*, *58*(2), 129-137. doi:10.1111/jcpp.12618

Bloom, H. S., & Weiland, C. (2014). *To what extent do Head Start's effects on children's language, literacy, mathematics, and socio-emotional skills vary across individuals, subgroups, and centers?* (Doctoral dissertation). Retrieved from the ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection. (ProQuest No. ED562943)

Bloom, H.S., Weiland, C. & MDRC. (2015). Quantifying variation in Head Start effects on young children's cognitive and socio-emotional skills using data from the national Head Start impact study. *MDRC.* Retrieved from: https://bakeru.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED558509&site=ehost-live

Bodrova, E., & Leong, D. (2007). *Tools of the mind*. Upper Saddle River, N.J.: Pearson/Merrill Prentice Hall.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist,* (32), 513-531. Retrieved from https://pdfs.semanticscholar.org/a857/783a2bfc8aef8c93c200b3c635549237b434.Pdf

Burger, K. (2015). Effective early childhood care and education: Successful approaches and didactic strategies for fostering child development. *European Early Childhood Education Research Journal*, *23*(5), 743-760. doi:10.1080/1350293X.2014.882076

Cascio, E. U. (2010). What happened when kindergarten went universal? *Education Next, 10*(2), 62-69. Retrieved from http://educationnext.org/what-happened-when-kindergarten-went-universal/

Cascio, E. U., & Whitmore-Schanzenbach, D. (2013). The impacts of expanding access to high-quality preschool education. *Brookings Paper on Economic Activity,* (2), 1–54. Retrieved from http://doi.org/10.1353/eca.2013.0012

Case, T., Early, F., In, I., & Kids, O. (2007). Life chances. The case for early investment in our kids. *The American Prospect Magazine,* (18), A2-A22. Retrieved from https://gsppi.berkeley.edu/~ruckerj/American_Prospect_1207_EarlyEdSpecialReport.pdf

Chazan-Cohen, R., & Kisker, E. E. (2013). Links between early care and education experiences birth to age 5 and prekindergarten outcomes. *Monographs of The Society for Research in Child Development, 78*(1), 110-129. doi:10.1111/j.1540-5834.2012.00705.x

Clifford, R., Barbarin, O., Chang, F., Early, D., Bryant, D., Howes, C., & Pianta, R. (2005). What is pre-kindergarten? Characteristics of public pre-kindergarten programs. *Applied Developmental Science, 9*(3), 126-143. doi:10.1207/s1532480xads0903_1

Cohen, J., Onunaku N., Clothier, S. & Poppe, J. (2005). *Helping you children succeed: Strategies to promote early childhood social and emotional development* (National Conference of State Legislatures Research and Policy Report). Retrieved from http://www.buildinitiative.org/WhatsNew/ViewArticle/tabid/96/ArticleId/396/Helping-Young-Children-Succeed-Strategies-to-Promote-Early-Childhood-Social-and-Emotional-Developmen.aspx

Capossela, A. (2000). *Are children really more creative than adults? An examination of Lev Vygotsky's theory*. Claremont Reading Conference. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=10&ved=0ahUKEwjwvo2FgtvbAhUK4oMKHeSxBYoQFghWMAk&url=http%3A%2F%2Fwww.ccsenet.org%2Fjournal%2Findex.php%2Fjedp%2Farticle%2Fdownload%2F47928%2F27844&usg=AOvVaw04_3AWK_1KvxojfNPwpV4d

Currie, J. (2001). Early childhood education programs. *The Journal of Economic Perspectives*, *15*(2), 213-238. Retrieved from https://bakeru.idm.oclc.org/login?url=http://search.proquest.com.bakeru.idm.oclc.org/docview/212088691?accountid=26368

Darling-Churchill, K., & Lippman, L. (2016). Early childhood social and emotional development: advancing the field of measurement. *Journal of Applied Developmental Psychology*, (45), 1–7. Retrieved from: https://www.researchgate.net/publication/297684297_Early_childhood_social_and_emotional_development_Advancing_the_field_of_measurement/fulltext/57dc886508ae72d72ea69823/297684297_Early_childhood_social_and_emotional_development_Advancing_the_field_of_measurement.pdf?origin=publication_detail

District X. (2012). *Kindergarten Readiness Assessment* [Measurement Instrument].

District X. (2016). *Annual Report*. Retrieved from https://districtx.org/images/goals/annualreport2016.pdf

Đurišic, M. M., & Gajic, J. (2016). Social functioning of students with internalizing behavioral problems. *Research In Pedagogy*, *6*(2), 32-42. Retrieved from http://research.rs/wp-content/uploads/2016/12/2217-7337_v06_n02_p032.pdf

Englander, E. (2018). *10 ways schools, parents and communities can prevent school shootings now*. Retrieved from: http://www.wbur.org/radioboston/2018/02/19/prevent-school-shootings

Erikson, E. H. (1964). A memorandum on identity and Negro youth. *Journal of Social Issues*, *20*(4), 35-48. Retrieved from http://dx.doi.org/10.1111/j.1540-4560.1964.tb00471.x

Fleming, J. S. (2004). *Erikson's psychosocial developmental stages*. Retrieved from http://swppr.org/textbook/ch%209%20erikson.pdf

Friedman-Krauss, A., Barnett, W. S., & Nores, M. (2016). *How much can high-quality universal pre-k reduce achievement gaps?* Retrieved from: http://nieer.org/wp-content/uploads/2017/01/NIEER-AchievementGaps-report.pdf

Goldstein, P., Warde, B., & Peluso, P. (2013). Children's readiness gains in publicly funded, community-based pre-kindergarten programs for 4-year olds and preschool for 3-year olds. *Child & Youth Care Forum*, *42*(6), 507-523. doi:10.1007/s10566-013-9215-0

Graves, S. J., & Howes, C. (2011). Ethnic differences in social-emotional development in preschool: The impact of teacher child relationships and classroom quality. *School Psychology Quarterly, 26*(3), 202-214. Retrieved from https://www.researchgate.net/profile/Carollee_Howes/publication/232553428_Ethnic_Differences_in_Social-Emotional_Development_in_Preschool_The_Impact_of_Teacher_Child_Relationships_and_Classroom_Quality/links/0c960517eb015e23f6000000/Ethnic-Differences-in-Social-Emotional-Development-in-Preschool-The-Impact-of-Teacher-Child-Relationships-and-Classroom-Quality.pdf

Hemmeter, M. L., Snyder, P. A., Fox, L., and Algina, J. (2016). *Evaluating the implementation of the pyramid model for promoting social-emotional competence in early childhood classrooms.* Retrieved from Hammill Institute on Disabilities website: http://mediad.publicbroadcasting.net/p/wpln/files/201609/topics_in_early_childhood_special_education-2016-hemmeter-0271121416653386.pdf

Hewes, D. W. (1989). *Entrance age to public education in the United States, 1642 to 1842*. Retrieved from https://eric.ed.gov/?id=ED315166

Hibbert, M. T., & Sprinthall, N. (1995). Promoting social and emotional development of preschoolers: Inclusion and mainstreaming for children with special needs. *Elementary School Guidance & Counseling*, *30(1)*,131-142. Retrieved from https://bakeru.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=508578168&site=ehost-live

Holahan, A., & Costenbader, V. (2000). A comparison of developmental gains for preschool children with disabilities in inclusive and self-contained classrooms. *Topics in Early Childhood Special Education, 20*(4), 224-235. doi:10.1177/027112140002000403

Hughes, M. L. (2015). *Differences in literacy scores among students who attended school-based prekindergarten, head start, and no prekindergarten* (Doctoral dissertation). Retrieved from the ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection. (UMI No. 3745339)

International Association for Steiner/Waldorf Early Childhood Education. (2018). *What is Waldorf early childhood education?* Retrieved from http://www.iaswece.org/waldorf-education/what-is-waldorf-education/

Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health,* (11), 2283-90. Retrieved from https://www.academia.edu/29795202/Early_Social-Emotional_Functioning_and_Public_Health_The_Relationship_Between_Kindergarten_Social_Competence_and_Future_Wellness

Kansas Department of Education. (2017). *Kansas Early Learning Standards (KELS).* Retrieved from: http://www.ksde.org/Portals/0/Early%20Childhood/KsEarlyLearningStandards.pdf

Kansas Department of Education. (2018). *Civil Rights and English Learners.* Retrieved from https://www.ksde.org/Portals/0/Title/ESOL/CivilrightsandEnglishlearners.pdf

Karoly, L. A. (2016). The economic returns to early childhood education. *Future of Children, 26*(2), 37-55. Retrieved from https://futureofchildren.princeton.edu/about/Outreach_OnePage.pdf

Kokoszka, C., & Smith, J. (2016). Fostering character education in an urban early childhood setting. *Journal of Character Education*, *12*(1), 69-74. Retrieved from https://bakeru.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=124616620&site=ehost-live

Lee, R., Zhai, F., Brooks-Gunn, & Han, W. (2014). Head start participation and school readiness: Evidence from the early childhood longitudinal study – birth cohort. *Developmental Psychology, 50*(1), 202-215. Retrieved from https://doi-org.bakeru.idm.oclc.org/10.1037/a0032280

Lee, V. E., Brooks-Gunn, J., Schnur, E., & Liaw, F. (1990). Are Head Start effects sustained? A longitudinal follow-up comparison of disadvantaged children attending Head Start, no preschool, and other preschool programs. *Child Development, 61*(2), 495. doi:10.1111/1467-8624.ep5878998

Levy, F. J. (1976). Some origins of Piagetian theory. *Child welfare*, *55,* 252-256. Retrieved from https://bakeru.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=519685363&site=ehost-live

Lunenburg, F. & Irby, B. (2008). *Writing a successful thesis or dissertation: Tips and strategies for students in the social and behavioral sciences.* Thousand Oaks, CA: Corwin Press.

Manigo, C., & Allison, R. (2017). Does pre-school education matter? Understanding the lived experiences of parents and their perceptions of preschool education. *Teacher Educators' Journal*, (10), 105-42. Retrieved from http://files.eric.ed.gov/fulltext/EJ1138778.pdf

Maxwell, K. L., & Clifford, R. M. (2004). School Readiness Assessment. *YC: Young Children*, *59*(1), 42-46.

Michel, S. (2017). *The history of child care in the U.S. social welfare history project.* Retrieved from Virginia Commonwealth University Libraries website*:* https://socialwelfare.library.vcu.edu/programs/child-care-the-american-history/

National Association for the Education of Young Children. (2016). *Early childhood curriculum, assessment and program evaluation: Building an effective, accountable system in programs for children birth through age 8.* Retrieved from: https://www.naeyc.org/files/naeyc/file/positions/CAPEexpand.pdf

National Association for the Education of Young Children. (2018). *A position statement of the National Association for the Education of Young Children.* Retrieved from https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSREADY98.PDF

National Center for Education Statistics. (2017). *The condition of education: Preprimary education enrollment,* (NCES 2017-144). Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=516

Neugebauer, R. (2006). *Nonprofit child care outlook: After 160 years, it's time to change*. Retrieved from https://www.childcareexchange.com/library/5016958.pdf

North American Reggio Emilia Alliance. (2018). *About NAREA*. Retrieved from https://www.reggioalliance.org/narea/

Peters, G., & Woolley, J. T. (2018). *Lyndon B. Johnson: Remarks on Project Head Start.*, Retrieved from The American Presidency Project website: http://www.presidency.ucsb.edu/ws/?pid=26973.

Sadler, J. (2007). Early childhood education: The promise, the challenges. *Forum on Public Policy Online*, *2007*(2), 1-13. Retrieved from https://eric.ed.gov/?id=EJ1099084

Simatwa, E. M. W. (2010). Piaget's theory of intellectual development and its implication for instruction management at pre-secondary school level. *Educational Research and Reviews*, *5*(7), 366-371. Retrieved from http://www.academicjournals.org/article/article1379610138_Simatwa.pdf

Stanley et al. (2016). Increasing physical activity among young children from disadvantaged communities: Study protocol of a group randomized controlled effectiveness trial. *BMC Public Health*, *16*(1), 1-13. doi:10.1186/s12889-016-3743-0

Stewart, D. J. (2016). Preparing early learners for kindergarten success (Doctoral dissertation). Available from ProQuest Dissertations & Theses Full Text: The Humanities and Social Sciences Collection. (UMI No. 1779522971)

Stork, S., & Sanders, S. W. (2008). Physical education in early childhood. *Elementary School Journal*, *108*(3), 197-206. doi:10.1086/529102

Suizzo, M. (2000). The social-emotional and cultural contexts of cognitive development: Neo-Piagetian perspectives. *Child Development, 71*(4), 846-49. doi: 10.1111/1467-8624.00191

Taylor, K. K., Gibbs, A. S., & Slate, J. R. (2000). Preschool attendance and kindergarten readiness. *Early Childhood Education Journal, 27*(3), 191-195. https://doi-org.bakeru.idm.oclc.org/10.1007/BF02694234

Tours, S., & Dennis, L.R. (2015). Easing first day jitters: Strategies for successful home-to-school transitions. YC: *Young Children, 70*(4), 84-89. Retrieved from: https://bakeru.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=112343058&site=ehost-live

United States Conference of Catholic Bishops. (2018). *History of the Catholic Church in the United States.* Retrieved from: http://www.usccb.org/about/public-affairs/backgrounders/history-catholic-church-united-states.cfm

U.S. Department of Education. (2015). *A Matter of equity: Preschool in America*. Retrieved from https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf

U.S. Department of Health and Human Services. (2018). *History of Head Start.* Retrieved from https://www.acf.hhs.gov/ohs/about/history-of-head-start

Virginia Commonwealth University Libraries Social Welfare History Project. (2013). *Historical sketch of the day nursery movement.* Retrieved from: https://socialwelfare.library.vcu.edu/ programs/child-welfarechild-labor/nursery-schools-history/

Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. *Child Development*, *84*(6), 2112-2130. doi:10.1111/cdev.12099

Wertsch, J. V. (1988). L. S. Vygotsky's "new" theory of mind. *American Scholar*, 57(1), 81-89. Retrieved from https://www.simplypsychology.org/vygotsky.html

Yasnitsky, A., & Ferrari, M. (2008). From Vygotsky to Vygotskian psychology: Introduction to the history of the Kharkov School. *Journal of the History of the Behavioral Sciences*, *44*(2), 119-145. doi:10.1002/jhbs.20303

Yates, T., Ostrosky, M., Cheatham, G., Fettig, A., Shaffer, L., & Santos, R. (2008). *Research synthesis on screening & assessing social-emotional competence.* Retrieved from The Center on the Social and Emotional Foundations For Early Learning website: http://csefel.vanderbilt.edu/documents/rs_screening_assessment.pdf

Appendices

Appendix A: Request for Research Proposal to District X

THE IMPACT OF ENROLLMENT IN A PRE-KINDERGARTEN PROGRAM ON SOCIAL-EMOTIONAL DEVELOPMENT OF YOUNG CHILDREN

by

THOMAS M. SOWERS

A Proposal Submitted to [redacted] Director [redacted]

District X

Ed.D. PK-12 Educational Leadership

Baker University

Introduction

Attainment of strong social-emotional competence has direct implications on a student's success within education and ability to persevere emotionally through life struggles. The purpose of the study was to determine to what extent is social-emotional development of incoming kindergarten students impacted by enrollment in a pre-kindergarten program. A quantitative research design was utilized for the purposes of this study to determine the relationship between these variables. The sample included all kindergarten students from 2015-2016, 2016-2017 and 2017-2018 school years. The sample utilized within the study was made up of approximately 5,200 kindergarten students that were either enrolled in a pre-kindergarten program or did not have prior education other than kindergarten as indicated through their records. The study utilized archival data for the purposes of educational research.

The Purpose of the Study

The purpose of this study was to analyze the effects of pre-kindergarten enrollment on kindergarten readiness in the area of social-emotional development as measured by a district-developed Kindergarten Readiness Assessment (KRA). These social-emotional development skills are assessed through teacher observation and the collection of anecdotal records which are outlined in the methods section. More specifically, the focus of the study centered around determining the effects of pre-kindergarten enrollment on the mastery of the four components of social-emotional development within the KRA. The skills within social-emotional development are character development traits centered upon developing core ethical and performance principles, creating a caring community, self-awareness, and organizing personal time by

managing own responsibilities effectively. Kokoszka and Smith (2016) wrote about how these skills support early childhood social-emotional development and indicated that a character education program has the potential to support young children to develop a strong sense of respect for their community, teachers, and peers. Additionally, it was stated that focus on character education can provide students with inspiration for best effort in school and beyond (Kokoszka & Smith, 2016). The skill of social-emotional self-awareness relates directly to a young child's ability to manage responsibilities. By supporting students through identifying various emotions that they might have at specific times of each day, children can begin to have a strong sense of self-awareness and are more apt to manage transitions and their own responsibilities effectively (Tours & Dennis, 2015). The skills within the social-emotional development section of the KRA are skills that continue to be considered as crucial in the development of young children's social-emotional school readiness (NAEYC, 2016).

Significance of the Study

This study determined the effects on social-emotional competency among students enrolled in a variety of pre-kindergarten programs. Results from this study could add to the research determining if young children are social-emotionally impacted by enrolling in a pre-kindergarten program. Further, this research study could provide additional literature on the value that pre-kindergarten has within the PK-12 society as it relates to social-emotional development.

Methodology

The purpose of this study was to analyze the effects of pre-kindergarten enrollment on kindergarten readiness in the area of social-emotional development as

measured by the Kindergarten Readiness Assessment (KRA). Each social-emotional skill was assessed through teacher observation and the collection of anecdotal records. These teacher observations took place during various times within the course of daily instruction. Each of these skills were assessed while students were naturally engaged in learning opportunities. These times of student's being engaged in learning were used to collect anecdotal evidence of communication of wants and needs, having reciprocal conversations, stating personally identifiable information about self, and successful management of transitions.

Target Population

The target population for this causal comparative study were kindergarten students from one urban school district in the Midwest in their first three weeks of kindergarten. Purposive sampling was employed for this study to include all incoming kindergarten students from the district used in this study. For the purpose of the research students having attended different pre-kindergarten programs including district-based, faith-based, and for-profit programs were considered. Learning ability (typical and non-typical) was another variable that determined the sample. Gender and ethnicity were additional variables that were considered when analyzing the data for the study. The entirety of the sample within this study was made up of every kindergarten student from across 30 district elementary schools from the 2015-2016, 2016-2017 and 2017-2018 academic years. The sample consisted of approximately 5,200 kindergarten students.

Research Design and Procedures

A quantitative research design was used for this study. A causal comparative research method using archival data was implemented to measure the relationship

between variables (Lunenburg & Irby, 2008). This technique was utilized to determine the differences in the social-emotional competencies of incoming kindergarten students based upon their early educational experiences. For the purposes of this study early educational experiences included a multitude of experiences which included district-based, faith-based, and for-profit programs. The independent variables examined within this research study were enrollment in a prekindergarten program, gender, ethnicity, and learning ability. The study's dependent variables were the scores on four different components of social-emotional development within the KRA. These skills within the social-emotional development were: character development traits centered upon developing core ethical and performance principles, creating a caring community, self-awareness, and organizing personal time by managing own responsibilities effectively.

Research Questions

To determine to what extent enrollment in a pre-kindergarten program effects social-emotional competence in incoming kindergarten students, the following research questions were developed:

RQ1. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in a pre-kindergarten program and those who were not enrolled in a pre-kindergarten program.

RQ2. To what extent is there a difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs)?

RQ3. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten

programs (faith-based, for-profit, and district-based programs) affected by learning ability (students with specialized needs and students without specialized needs)?

RQ4. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) as affected by gender (male and female)?

RQ5. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) as affected by English Learner (EL) status (EL and Non-EL)?

RQ6. To what extent is the difference in social-emotional development, as measured by the KRA, among students who were enrolled in different pre-kindergarten programs (faith-based, for-profit, and district-based programs) as affected by ethnicity (Black, Hispanic, White, or Other)?

Appendix B: Data Utilization Agreement and Approval from District X

Data Utilization Agreement

The [redacted] Schools (hereinafter referred to as the District) and Tom Sowers have entered into an agreement under which Mr. Sowers shall be given permission use data provided by the District.

Mr. Sowers will adhere to all provisions for confidentiality and protection of student and teacher information as described in the U.S. Department of Education's Protection of Pupil Rights Amendment (PPRA) (20 U.S.C. § 1232h; 34 CFR Part 98) and The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99).

No identifiable information regarding any District student, teacher, or school shall be released by Mr. Sowers in any report.

Tom Sowers	[redacted] Board of Education
Thomas M. Sowers	[redacted]
Printed Name	Printed Name
5/24/18	5/24/18
Date	Date

Appendix C: Proposal for Research to Baker University

BAKER UNIVERSITY

IRB Request

Date 5/31/18

IRB Protocol Number _____ (IRB use only)

I. Research Investigator(s) (students must list faculty sponsor)

Department(s) Education

	Name	Signature	
1.	Tom Sowers		Principal Investigator
2.	Verneda Edwards, Ed.		☑ Check if faculty sponsor
3.	Peg Waterman, Ed.D.	Margaret Waterman	☐ Check if faculty sponsor
4.	Susan Rogers, Ph.D.		☐ Check if faculty sponsor

Principal investigator contact information — Phone 816.289.3923

Note: When submitting your finalized, signed form to the IRB, please ensure that you cc all investigators and faculty sponsors using their official Baker University (or respective organization's) email addresses.

Email

Address

[redacted]

Faculty sponsor contact information — Phone

Email

Expected Category of Review: ☐ Exempt ☐ Expedited ☐ Full ☐ Renewal

II. Protocol Title

The Impact of Enrollment in a Pre-Kindergarten Program on Social-Emotional Develop

III. Summary:

The following questions must be answered. Be specific about exactly what participants will experience and about the protections that have been included to safeguard participants from harm.

A. In a sentence or two, please describe the background and purpose of the research.

The purpose of this research study is to determine the impact of enrollment in a pre-kindergarten program on the social-emotional development of children 3 to 5 years of age. The study could determine to what extent enrollment in a pre-kindergarten program affects social-emotional competence of incoming kindergarten students in four social-emotional sub-skills as measured by a district developed kindergarten readiness assessment.

B. Briefly describe each condition, manipulation, or archival data set to be included within the study.

The archival data used for this study will be from the 2016-2017 and 2017-2018 school years and will include:
-Prior educational experiences of each kindergarten student included in the study.
-Individual scores on each of the four social-emotional skills included in the kindergarten readiness assessment
-Ethnicities of the students included in the study

IV. Protocol Details

A. What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy.

The variables used in the study are measured using archived data collected within the first three weeks of a student attending kindergarten for the years of 2016-2017 and 2017-2018. The data will not identify any names or identifiable information about students. This data is housed in an online database.

B. Will the subjects encounter the risk of psychological, social, physical, or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.

No subjects will encounter the risk of psychological, social, physical or legal risk.

C. Will any stress to subjects be involved? If so, please describe.

No subjects will encounter any stress within this research study.

D. Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.

No subjects will be deceived or misled in any way during this study.

E. Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description.

No subjects in this study will be requested to provide information that they might consider personal or sensitive.

F. Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.

No subjects in this study will be presented with materials that might be considered to be offensive, threatening, or degrading.

G. Approximately how much time will be demanded of each subject?

No subjects in this study will have any time demanded of them.

H. Who will be the subjects in this study? How will they be solicited or contacted? Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.

The subjects in this study will be all incoming kindergarten students from the 2016-2017 and 2017-2018 school years. No subjects in this study will be solicited or contacted. The data to be used is archival data which will not require contact or solicitation of subjects. Data will be obtained from the Director of Assessment in the district.

I. What steps will be taken to insure that each subject's participation is voluntary? What if any inducements will be offered to the subjects for their participation?

No subjects in this study will be offered any inducements as the data utilized is archived.

J. How will you insure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.

No subjects participating in this study will be required to sign a written consent form as the data utilized is archived. Permission was received from the district.

K. Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.

No aspects of the data will be made a part of any subjects' permanent record.

L. Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher, or employer? If so, explain.

The fact that a subject did or did not participate in a specific experiment or study will not be made part of any permanent record available to a supervisor, teacher, or employer.

M. What steps will be taken to insure the confidentiality of the data? Where will it be stored? How long will it be stored? What will be done with the data after the study is completed?

The archival data collected for this study will not include any identifiable information of the subjects. The archival data collected will be stored in a Google Drive folder for no longer than three years after the study has been completed. After this three-year deadline the data will be permanently erased from the researcher's Google Drive folder. This data file will not be shared and will only be accessible to the researcher.

N. If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?

There are no risks or offsetting benefits involved or that might result from this study.

O. Will any data from files or archival data be used? If so, please describe.

Archival data will be used for this study. The archival data files will be provided by the district utilized for the study. The data used will be:
-Prior educational experiences of each kindergarten student included in the study.
-Individual scores on each of the four social-emotional skills included in the kindergarten readiness assessment
-Ethnicities of the students included in the study

Appendix D: Institutional Review Board Letter of Approval

BAKER UNIVERSITY
Own Confidence

Baker University Institutional Review Board

June 7th, 2018

Dear Tom Sowers and Verneda Edwards,

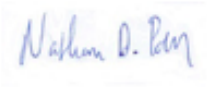
The Baker University IRB has reviewed your project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at npoell@bakeru.edu or 785.594.4582.

Sincerely,



Nathan Poell, MA
Chair, Baker University IRB

Baker University IRB Committee
Scott Crenshaw
Erin Morris, PhD
Jamin Perry, PhD
Susan Rogers, PhD