## A CAUSAL-COMPARATIVE STUDY ON THE EFFECTS OF PREKINDERGARTEN ON KINDERGARTEN READINESS ASSESSMENT (KRA) SOCIAL FOUNDATION SCORES

by

Sabrina Bede Miller

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

Gina Thomason, EdD, Committee Chair

Meredith Park, EdD, Committee Member

Vonda Beavers, EdD, Committee Member

#### ABSTRACT

A student's educational development is brought on through learning experiences and lessons that enhance school readiness and set the tone for the remainder of that student's life. School readiness begins with attendance in a preschool environment. Although not mandatory, the educational journey can begin in prekindergarten where children are exposed to a variety of lessons and experiences that enhance literacy, social, math, and physical skills. This study examined the impact that prekindergarten had on the social and behavior skills, also known as social foundations using a causal-comparative design. Specifically, this study determined if there was a difference among the Kindergarten Readiness Assessment (KRA) social foundation scores of students who attend prekindergarten programs compared to students who do not attend prekindergarten programs. This study included KRA scores from kindergarteners enrolled in a school district in Maryland during the 2016-2017. For the 2016-2017 school year, the study assessed 213 students using KRA. From that population, 70 samples were analyzed using the Kruskal-Wallis H Test. Based on the test, there were significant differences among the KRA social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, private preschool, or no prekindergarten program. This study was important since it addressed students' social development at the beginning of their educational career in different learning environments. Additionally, it provided information on the development of the whole child.

*Keywords*: prekindergarten, social foundations, cognitive learning, preschool, development, Head Start, Kindergarten Readiness Assessment

#### Dedication

This manuscript is dedicated to my daughter, Tori Layla Hodge. While taking this educational journey, I had the opportunity to watch my daughter begin her growth in education. As parents, we ask ourselves many questions regarding when we should expose our child to other people and influences. Specifically, we ask, "When should I allow my child to go to school or begin Head Start?" When making those decisions, we try not to be selfish, and we want to make the best decision for our children. I asked myself those questions repeatedly and never really knew if I was making the best decisions for my child. We know that people say that the earlier children are placed in school, the better children will be since they get that extra year of practice and exposure. When making that decision, I decided to begin my daughter's educational journey at age four. I had to weigh the negative and positive influences that could affect her development. None of the decisions I made were based on research of any kind, but rather on parental intuition.

After entering this doctoral world, I yearned to understand why things are the way they are and research answers to questions that others have not answered, or answers to questions that have mixed solutions. One of those questions for me was, "Should I have allowed my daughter to leave my safety net at the age of four or should I have held her close and nurtured her myself?" In life, she will have to make decisions on information that she may not understand or that she may not be clear on at that moment, but I hope that she learns that she can always go back and fill in that knowledge. This dissertation is to demonstrate to her that all questions can be answered; all it takes is a little passion and dedication.

#### Acknowledgments

Many individuals influenced my drive to take on this research journey, including my mother Jacqueline Hall, my father Kevin Miller, my stepfather Frank Hall, and a host of other family and friends. My mother stood behind me throughout this journey and stepped in whenever I needed her. She would take care of my daughter or give me time to get my thoughts together and, for that, I am forever grateful. My father also encouraged me. Whenever we spoke about school, he made sure that I understood that anything is possible if I sit down and put my best foot forward. My stepfather helped me keep my stress levels down. The help could be some alone time or a nighttime cup of tea to make sure that I was comfortable to take on any task ahead. Without their support through this journey, none of this would have been possible.

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### **List of Abbreviations**

Analysis of Variance (ANOVA) Institute for Developmental Studies (IDS) Institutional Review Board (IRB) Kindergarten Readiness Assessment (KRA) National Center of Education Research (NCER)

#### **CHAPTER ONE: INTRODUCTION**

#### **Overview**

Although research has shown that prekindergarten programs positively affect school readiness, there is lack of research on the impact that different prekindergarten environments have on the social foundation of students. The purpose of this study was to determine whether attending prekindergarten affects students' social foundations at the elementary level. Social foundations are students' social and emotional development and approaches towards learning. Specifically, this study examined the differences between students who attended Head Start, private preschool, school-based prekindergarten, or no prekindergarten program.

#### Background

Birth to age eight represents a critically important window of opportunity to develop a child's full potential and to shape key academic social, emotional, and cognitive skills (Diffey, Parker, & Atchinson, 2017). Social skills lay a critical foundation for later academic achievement as well as work-related skills (Lynch & Simpson, 2010). In 2016, notable researchers released developments that highlighted the value of prekindergarten on a students' educational trajectory (Diffey, Parker, & Atchinson, 2017). According to research, the development that is brought on through elementary school experiences and lessons will enhance school readiness and set the tone for the remainder of that student's life. Specifically, research shows that attending prekindergarten provides advantages to the student's reading skills, math skills, and behavior. Overall, research has shown that prekindergarten programs positively influence children's school readiness (Alsobaie, 2015; Ansari & Winsler, 2014).

The importance of prekindergarten began in the 1800s when parents worked in factories and needed daycare for their young children (Cross, 2008). The need for childcare grew during World War II and was addressed by the Day Care Section of U.S. Office of Defense Health and Welfare Services (Marks, 1943). As time went on, some daycare centers naturally evolved into preschools and provided students with basic care and a chance to learn academic skills (Cross, 2008). In 1967, the U.S. Head Start program became the first federally-funded prekindergarten program (Andrew & Slate, 2001). Currently, all 50 states have federally-funded, school-based prekindergarten programs with funding increasing to \$480 million since the 2015-2016 fiscal year. Attendance at school-based prekindergarten programs is voluntary and usually based on the economic status of the students' family. The specific requirements for school-based prekindergarten attendance are determined by individual states. In addition to the federally-funded, school-based prekindergarten programs that are housed within elementary schools, students can attend federally-funded Head Start programs that are housed outside of the schools. Students who do not meet the requirements to attend federally-funded, school-based prekindergarten or Head Start programs can attend privately owned preschools.

In 1960, two studies were conducted on the effects of attending state and local prekindergarten programs and found that students who attended preschool showed higher achievements on standardized tests, better life achievements, higher educational attainment, and valuable employment (Barnett, 2008). Curby, Brock, and Hamre (2013) found that prekindergarten offers academic gains as well as offers students' skills that would prepare them for the learning environment. Many studies have been conducted on the cognitive and achievement outcomes of attending prekindergarten. However, research on the socio-emotional development of attending prekindergarten is not as clear. Few programs have demonstrated a focus on positive effects on students' socio-emotional development.

The National Head Start Impact Study found that there were no effects in the socialemotional area for four-year-old children. Although research has shown that there were no effects, the students improved in problem behaviors such as hyperactivity, which was reduced after one year of Head Start (Yoshikawa et al., 2013). Additionally, Gunter, Caldarella, Korth, and Young (2012) found that attending prekindergarten increased students' emotional regulation that resulted from their interaction in the classroom. Specifically, students developed better student-teacher relationships and worked better in group environments. Although the results indicated that attendance in prekindergarten was favorable, the researchers concluded that this was due to natural maturity (Gunter et al., 2012). Additional research is needed to determine the effects that prekindergarten has on the social foundation of students in different educational environments.

#### **Problem Statement**

Currently, there is lack of research on the effects that different prekindergarten environments have on the social foundation of students. Rather, research has focused on the positive effects that prekindergarten has on the reading, math, and cognitive abilities of students. Positive impacts from attending prekindergarten can include gains in achievement test scores, including early literacy and math skills, as well as improvements in social and emotional development. Although positive impacts were found in multiple areas, many school standards focus on the effects of language and cognitive development. Specifically, 38.5% of standards focus on cognitive skills or general knowledge with 31.7% focused on language development. The percentages in other areas were considerably lower, with 9.3% concentrating on approaches to learning and 8.4% covering physical and motor development (Jacobson, 2004). Also, over the past 15 years, public school goals for academic attainment in kindergarten have increased, and kindergartens have become increasingly academic focused. However, many educators and researchers worry that a narrow focus on early academic knowledge and skills may undermine educational attainment as well as child's long-term school adjustment by reducing the focus on a child's social-emotional development in the early school years (Pennsylvania State University, 2017).

In addition to the lack of research on the social foundations that are developed in prekindergarten, there is a lack of research on the different impacts from various prekindergarten environments. A 2015 study showed that students who attended early childhood education programs had higher levels of social skills in first grade than students who did not experience early childhood education (Broekhuizen, Mokrova, Burchinal, Garrett-Peters, & the Family Life Project Investigators, 2016). Ansari and Winsler (2014) found that all children made gains in cognitive, language, and motor skills when attending public school prekindergarten programs regardless of the curricula. The two studies focused on separate educational settings and did not look across to determine the differences between public and early childhood education.

The problem is that there is lack of emphasis on social development in prekindergarten and that there is a lack of research that examines the differences in the impact that the prekindergarten environment has on developing social foundations for learning. Providing a well-rounded picture of prekindergarten environments and the effects can provide decision makers additional information to determine the need for prekindergarten when beginning the educational journey. It would assist families in deciding the best course of action when raising their children. With the additional information, families can make more informed decisions on whether to keep the child home or to place the child in an educational environment with a teacher and peers.

#### **Purpose Statement**

The purpose of this study was to determine whether attending prekindergarten affects students' social foundations at the elementary level. Specifically, this study examined the differences between students who attend Head Start, private preschool, school-based prekindergarten, or no prekindergarten program. The population of students entered kindergarten during the 2016-2017 school year. Within the population, students started in different types of prekindergarten programs. Students who attended Head Start were a part of a federal preschool program developed to prepare students to enter elementary school. Students who attended private preschool were in early childhood care that was paid for by their parents and is outside of the state- and federally-funded prekindergarten programs. Students who attended school-based prekindergarten programs attended voluntarily and often based on the economic status of the student's family. Finally, students who attended no prekindergarten program entered kindergarten without any prior early childhood education. Because of the lack of research on the effects of various types of prekindergarten, this study determined whether the type of prekindergarten influenced the social foundation of students differently.

#### **Significance of the Study**

This study was important because it addressed students' social development in various prekindergarten environments. Most parents report concerns regarding students' social-emotional skills, including "getting used to" a new school and following directions (McIntyre, Eckert, Fiese, DiGennaro, & Wildenger, 2007). While in any prekindergarten environment, students are outside of the home learning alongside their peers. Although all environments are outside of the home, not all learning environments are within a physical school building. Instead, they can be within churches or private care facilities. According to Denham, Bassett, and Zinsser (2012), young children's social-interpersonal skills can facilitate or interfere with their adjustment to kindergarten. A child's brain grows to 90% of its adult size by age five, which indicates that the first few years of a child's life are very critical to their development (Jyoti, 2013). Additionally, studies of young children's success in the early months of kindergarten provide evidence that children who had previously attended preschool were more successful than their peers who had not (Mashburn et al., 2008; Wong, Cook, Barnett, & Jung, 2008). Further, students who attended a structured prekindergarten program were more emotionally sound in kindergarten than students who came from an unstructured preschool environment (Curby et al., 2013).

Currently, there is a lack of research on the impact that different prekindergarten environments have on the social foundations of students. Although there is some research on the impact that prekindergarten has on the development of students, it does not address the differences in impacts that the various prekindergarten environments have on the students' social foundations for education. Hawkins, Kosterman, Catalano, Kill, and Abbott (2005) found that students who previously attended prekindergarten demonstrated significantly better functioning in school and the work environment. Additionally, they were more likely to have graduated from high school. Studying the impacts in various settings will enhance understanding of the impact of prekindergarten education. This study provided decision makers and families with data that show the different impacts that prekindergarten environments had on the overall social development of students.

#### **Research Question**

**RQ1:** Is there a difference among the Kindergarten Readiness Assessment (KRA) social foundation scores of students who attended prekindergarten programs compared to students who did not attend prekindergarten programs?

#### Null Hypothesis

H<sub>0</sub>1: There is no significant difference among the Kindergarten Readiness Assessment (KRA) social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, or private preschool, compared to no prekindergarten program.

#### Definitions

- Cognitive learning Cognitive learning involves the interaction between mental components and the information processed through this complex network. As individuals learn, they actively create cognitive structures that determine their concepts of self and the environment (Grieder, 1993).
- Development Child development generally involves observing/assessing five specific areas: motor/physical, cognitive, social/emotional, communication/language, and selfhelp/adaptive (Florida Department of Health, 2012).
- 3. *Head Start* Head Start is a federal preschool program developed to prepare students to enter elementary school (Cross, 2008).
- 4. *School-based prekindergarten* Prekindergarten programs are voluntary and often based on the economic status of the student's family. The requirements for state programs are determined by the specific states and territories (U.S. Department of Education, 2015).
- Preschool Preschool is early childhood education that is not state funded (Barnett, 2008).

- 6. *Social foundations* Social foundations are students' social and emotional development and approaches towards learning (Ohio Department of Education, 2016).
- 7. *Universal prekindergarten* Universal prekindergarten is prekindergarten programs that are offered to all children regardless of socioeconomic status (Mead, 2015).

#### Summary

The purpose of this study was to determine whether attending prekindergarten affects students' social foundations at the elementary level. The study included students who attended kindergarten in a Maryland county elementary school during the 2016-2017 school year. The students started in different types of prekindergarten programs: Head Start, private prekindergarten, school-based prekindergarten, or no prekindergarten program. This study will add to the research on the effects of prekindergarten with a focus on the social foundation of students. Specifically, this study determined whether there is a difference among the KRA social foundation scores of students who attend prekindergarten programs compared to students who do not attend prekindergarten programs. Although there are various types of prekindergarten program.

The next chapter will examine the effects of prekindergarten from research and will review the social learning theory and the social development theory as they relate to the social development in prekindergarten. Specifically, the chapter will address the history of prekindergarten and highlight the types of prekindergarten programs that will be discussed throughout this study. It also will address the teacher's role in the development of social foundation and provide the evidence on the lack of research on the various types of prekindergarten and social development.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### **Overview**

Research and literature have examined the impact prekindergarten education has on the academic achievement and social development of students. Some research has found that prekindergarten positively influences the growth of students academically and socially, while other research found that prekindergarten only prepares students academically and students naturally progress socially through maturity. However, these studies focused on one type of program within the prekindergarten environment. The purpose of this study was to determine whether various types of prekindergarten environments have different effects on the social foundations of elementary school students. Specifically, this study examined the differences among students who attended Head Start, private preschool, school-based prekindergarten, or no prekindergarten program.

This chapter reviewed the social learning theory and the social development theory to identify how they relate to students' social development in prekindergarten education. It also addressed the history of prekindergarten, the impact on school readiness, and the types of prekindergarten. Further, it would demonstrate the lack of research on the effects of the various types of prekindergarten programs in the social foundations that are developed during prekindergarten.

#### **Theoretical Framework**

Bandura (1977) worked to advance research on why people behaved the way they did and defined the social learning theory. According to the social learning theory, behavior is learned, at least in rough form, before it is performed. By observing a model of the desired behavior, an individual can form an idea of how response components must be combined and temporarily

sequenced to produce new behavioral configurations (Bandura, 1977). For children, the observation of behaviors begins in the home. Children observe their parents' behavior and the interactions they may have with their siblings. They also learn from the responses they receive from their parents while they are in the home. Normally, this assists with setting the child's standards for what is right and wrong. Once children learn new behaviors, the lessons are strengthened by the immediate rewards or consequences that are given during and following interactions. For example, when a child does not share with their sibling, the child is reprimanded and taught that not sharing is bad. On the positive side of rewards, a child who responds with "thank you" when handed something is rewarded with a smile, showing his/her actions were positive. Children also learn from observing the interaction of others. Observations can occur through direct sight and multimedia. Multimedia creates high quality learning environments with the capability of creating a more pragmatic learning context through its different medias, texts, graphics, sounds animation. Examples include computers, mobile devises, and gaming systems (Islam, Islam, Ahmed, & Shamsuddin, 2013). Learning through observation is a primary method of social learning; however, a person cannot learn much by observation if he/she does not attend to or recognize the essential features of the model's behavior (Bandura, 1977). Children must be introduced to the observed behavior for them to process and understand the lesson in the observed behavior. While learning, people not only perform responses, but they also observe the different consequences accompanying various actions. From the responses, individuals establish a foundation and understanding of how to interact and respond to certain actions as well as the right behaviors in different environments, such as the home, classroom, play area, and community (Bandura, 1977).

In addition to Bandura's (1977) social learning theory, Vygotsky's (1978) social development theory stresses the fundamental role of social interaction in the development of cognition. Under the social development theory, children's learning begins long before they attend school. According to Vygotsky (1978), cognitive development stemmed from social interactions and guided learning within the zone of proximal development as children and their classmates co-construct knowledge. The zone of proximal development is the distance between the actual development level, as determined by independent problem solving, and the level of potential development, as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978). Although students learn before attending school, further development is brought on when they are guided to their potential development. In the classroom, interactions with the teacher and classmates guide students to their potential development.

Most behaviors that people display are learned behaviors, either deliberately or inadvertently, through the influence of an example (Bandura, 1977). Examples that influence behaviors can come from many different avenues, and there can be more than one example that will affect behaviors. People witness responses to one behavior that may be different depending on the person, setting, and the time that the action occurs. Bandura (1977) provided an example of children learning speech. Bandura explained that it is impossible to teach linguistic skills to a student who has never heard speech before since the student will not understand how to interact or understand the new skill. As it relates to this study, students learn the behavior of the classroom from being exposed to the classroom environment. Once students are placed in the environment, they learn the right things to do and how to interact with the other students in the classroom. Additionally, once in the learning environment, they are introduced to "good learning" where they are advanced beyond their current level of development (Vygotsky, 1978). Several studies of social-cognitive problem-solving skills training for preschool children suggest that classroom-based intervention can significantly improve young children's abilities to generate alternative solutions for interpersonal conflict situations and increase their positive social behaviors and cooperative behavior (Han, Catron, Weiss, & Marciel, 2006).

For the students to function effectively in the classroom, they must be able to anticipate the probable consequences of different events and courses of action and regulate behavior accordingly (Bandura, 1977). When regulating behavior, students are able to handle emotions and interact with peers without conflict. In addition, students are able to respond positively to the teacher's directions in the classroom environment. Actions in the classroom can include respecting the teachers, group work, and sharing. Additionally, it can include learning to respond to the behaviors of others that are outside of the home.

The social learning theory assumes that modeling influences produce learning principally through their informative functions and that observers acquire a symbolic representation of modeled activities rather than specific stimulus-response association. The informative function can include just being in the classroom and learning the rules that must be followed when in the structured learning environment. Further, behaviors are learned before they are performed (Bandura, 1977; Vygotsky, 1978). When behaviors are observed, an individual can form an idea of how response components must be combined and temporarily sequenced to produce new behavioral configurations (Bandura, 1977). Additionally, children can imitate a variety of actions that go well beyond the limits of their capabilities (Vygotsky, 1978). Simply by watching and observing behavior, children learn how to respond and interact socially with others in various settings.

Most social learning occurs based on casual or studied observation of models. Models come in various forms to include multimedia, parents, and teachers. No matter the style of modeling, the same impact is made on social learning. The desired behavior can be conveyed through words, pictures, and live actions. Although there are many forms of behaviors that can influence behavior, Bandura (1977) noted that observed behavior is more impacting than listening. When children can observe behaviors in the classroom, they are learning first-hand what is acceptable behavior and what is not. In contrast, explaining to a child what is expected of them in the school environment is not the best form of teaching social behaviors in the learning environment. From teachers' perspectives on children's social behaviors, it is important to understand children's ideas about appropriate social behaviors. Children's ability to resolve social problem situations increases with age as approximately 50% of four-year-olds resolve conflicts in preschool using adult authority, negotiation, and explanations as solutions (Robinson & Diamond, 2014). The social development theory supports the understanding that teachers should not explain their behavior. Social learning is achieved when the teachers collaborate with the students in the classroom.

Emotional responses to actions are learned based on direct experiences. The experiences are observed through interactions with people. Interactions between two people can include teacher-to-student or student-to-student (Bandura, 1977). Further, Vygotsky (1978) stated that learning awakens a variety of internal developmental processes that only can operate when children are interacting with people in their environments and cooperation with their peers. The experiences can come from oral interactions, facial expressions, and body posture that are observed. The behavior that is observed from an interaction can mark different consequences

depending upon the time, the place, and the person toward whom they are expressed (Bandura, 1977).

Several factors influence the reinforcement of behavior. Three factors related to this study include the anticipation of reinforcement, observed reinforcement, and vicarious reinforcement. When students learn that a certain behavior provides rewards and positivity, they will work towards having that behavior. In the classroom, students learn that when they speak out in class, the teacher may ask them to raise their hand, or their consequence is to be placed in time out. However, when they raise their hand and wait, they are called on and allowed to share whatever information they have for the class

Anticipated reinforcement can strengthen retention of what has been learned through observation by the high value that is achieved when performing that behavior. The process of retention cannot greatly influence children if they have no memory of the model's behavior (Bandura, 1977). In the classroom environment, students are introduced to the teacher model and the learning environment. During that time, students observed the teacher as a model and work with students that are their peers. Students are rewarded for good behavior through a rating scale or simple praise of "great job." When in the class the students will receive rewards as well as observe other students receive rewards for good behavior.

Observed reinforcement is not only informative but can also have incentivized motivational effects. Seeing others reinforced can function as a motivator by arousing in observers the expectation that they will be similarly rewarded for analogous performances. The classroom environment can demonstrate and provide an example. Students can see how a student is treated when they are constantly rewarded for their polite attitude and their preparedness daily for school. Students observe that the teacher has a positive attitude toward that student, which thereby reinforces that they should act similarly to receive positive treatment. Teachers can reward the polite and prepared students with additional classroom duties and stickers. The variation of generosity with which children are reinforced determines the speed, vigor, and the persistence with which others behave (Bandura, 1977). This form of reinforcement can be enhanced when the observer is also rewarded for the same behavior.

Vicarious reinforcement is defined as a change in behavior resulting from seeing the response consequences of others (Bandura, 1977). In everyday situations, reinforcement typically occurs within a social context. That is, people repeatedly observe the actions of others and the occasions in which they are rewarded, ignored, or punished. Within the classroom environment, the students' behaviors are reinforced by the teachers' responses in the classroom. For example, when students act out and cry in the classroom, the teachers' response will show the students whether that is bad or acceptable behavior. Han et al. (2006) found that teachers' response to children's behaviors in prekindergarten impacted their social and emotional skills more than the response from parents in the home.

In this study, the varying environments and models included different prekindergarten environments. School-based prekindergarten programs were held within elementary schools, and private and Head Start programs were held outside of the elementary school environment. This study also investigated the impact that the prekindergarten experience had on the students' social response to working in the classroom environment. According to Bandura (1977), students learn from the environment, and observed behavior has the greatest impact. Vygotsky (1978) supported Bandura's theory and stated that learning awakens when the child interacts with people and cooperates with their peers. Therefore, students will develop a social foundation for the classroom by interacting with students and teachers in the classroom. Since the direct interaction affects the students, differences in the models and interactions can affect how students socially develop in the school environment.

#### **Empirical Evidence**

Various researchers have examined the impact that prekindergarten has on the readiness of children for school. Readiness to start school is a multifaceted construct that encompasses not only cognitive aspects of children's development but also social-emotional aspects (Miller & Goldsmith, 2017). Social and emotional development was defined as the emerging ability of young children ages zero to five to form close and secure adult and peer relationships. Development also was defined as the ability to experience, regulate, and express emotions in socially and culturally appropriate ways. (Yates, Ostrosky, Cheatham, Fettig, & Santos, 2008). Miller and Goldsmith (2017) found evidence to support the impact that prekindergarten has on the social development and foundation of students. Curby et al. (2013) found that prekindergarten offers academic gains and skills that would prepare students for the learning environment. The skills that they found were in academic areas as well as in the social development area. Additionally, Miller and Goldsmith (2017) noted that components of socialemotional development deserve increased attention in consideration of a child's readiness for early education.

During the 2017 study, Miller and Goldsmith (2017) obtained information from 29 kindergarten teachers who had completed at least one year of teaching. The teachers completed the Children's Behavior Questionnaire to assess the temperament of four-year-old kindergartners. The study revealed that increased attention that favors school readiness is supported by the temperament theory, which provides a useful framework for conceptualizing this aspect of development. Specifically, differences in temperament affect how children learn, develop, and interact with the world around them. Knowledge of childhood temperament can help identify why some children are more prepared for formal schooling than others are. Temperament differences can help explain why some students can develop and maintain positive relationships with their peers and teachers while others cannot. Temperament is developed along with social skills. The development of social skills, such as social information processing and social competence before kindergarten entry, is essential for early school readiness (Robinson & Diamond, 2014; Ziv, 2013).

When teachers prepare children for the learning environment, students become aware of what is expected of them and can self-regulate themselves in the school environment. Specifically, students can conduct themselves in the school environment without constant reminders from the teacher. Students who are self-regulated know when to be quiet in the classroom and how to be an active participant in the classroom without interrupting others. Further, Gormley, Phillips, Newmark, Welti, and Adelstein (2011) found that high quality, school-based preschool programs can enhance social-emotional development. The social readiness developed by the students was contributed to the learning environment that the students are placed in during their first year outside of the home. The students were placed in environments with peers and an adult model who was not in a parental role. In those environments, the students were away from their families and followed the rules of the schools while interacting with their peers. Researchers reported that the students who did not attend the preschool environment had behavior issues when they were placed in a formal school environment. Behavior problems included acting out in the classroom and not following the direction of the teacher model (Gormley et al., 2011).

Barnett (2008) conducted a study on the effects of universal prekindergarten using the regression-discontinuity design. The students attended school and listened to teachers and others who were outside of their home. The design was used to estimate the effects of attending prekindergarten in Arkansas, California, Michigan, New Jersey, New Mexico, Oklahoma, South Carolina, and West Virginia. The results of the analysis supported previous studies, finding that prekindergarten positively affects students' language and cognitive abilities.

Bierman, Nix, Domitrovich, Welsh, and Gest (2015) reviewed the impact that Head Start has on the social-emotional development of students and found that early learning assisted the students with their responses in the learning environment. The children involved in the study were from low-income families and attended the Head Start program to break away from the social strain of their community. The students who were exposed to school environments responded better in the learning environment and could interact with the classroom environment with less frustration. The students involved in the project had increased emotional awareness that fostered social development and aggression control in the classroom. The students had the awareness, observed the proper behavior, and understood how they should act in the classroom. The students who were not exposed to school environments were frustrated when placed in the learning environment without the previous experience.

Additionally, a 2015 study found that Head Start assisted with student self-regulation. During this study, 276 children were examined to determine if Head Start was a form of intervention for children who were experiencing demographic risk. The study found that students who attended the Head Start program had greater self-regulation than children who were not exposed to the Head Start program. The Head Start students could pay attention and understand that school is a learning environment. In addition to improved self-regulation, the students also improved in their math and English skills in the classroom (Schmitt, McClelland, Tominey, & Acock, 2015). Students who focused and did not interrupt the class learned more in the classroom environment.

The National Center for Education Research (NCER) supported the need for social development in the school in their 2011 report. During the 2011 study, NCER determined whether seven coherent, universal, school-based programs improved students' social and emotional competency, improved behavior, reduced negative behavior, improved student achievement, and improved student and teacher perceptions of school climate. To begin the study, the researchers took an assessment of the students' initial characteristics. During that assessment, they found that some third-grade teachers had already implemented lessons that focused on developing the students' social and emotional skills while others did not. Therefore, the treatment groups were also noted as a standard group for the study. During the study, the researchers looked at social and emotional competence, behavior, academics, and perceptions of school climate. The classes that were in the treatment group started out with standard lessons that only focused on academic goals. During the study, the researchers revealed that social and emotional skills were only focused on and developed when they were included in the class as a goal and as a part of the curriculum. When social and emotional development was added in the class, the researchers found that there was a statistical difference in the students' ability to self-regulate and prevent social issues in the classroom.

Resmovits (2013) issued an article addressing whether four-year-old children needed to be educated. The article stemmed from the 2013 Presidential address proposing high-quality preschool education to every four-year-old American. In addition to preschool benefiting the students academically by decreasing grade repetition and increasing high school graduation rates, Resmovits noted that participation also influenced the social and emotional development of the students, which allows the students to interact appropriately and effectively with others inside and outside of school.

Hawkins et al. (2005) conducted a study that considered the positive functioning through social development intervention in childhood. The study examined the impact that social readiness had on the overall development of the students who attended prekindergarten. During the study, the researchers reviewed 18 public elementary schools serving diverse neighborhoods, including high-crime neighborhoods. From the 18 public schools, the researchers examined 605 participants who were selected based on their participation in prekindergarten. At the time of the study, the participants were 21 years of age. The study examined the lasting effects that attending prekindergarten had on the social development of children. The researchers found that the public school students that attended prekindergarten demonstrated significantly better functioning in school and the work environment than students that did not. They also were more likely to have graduated from high school. For example, 91% of students who had attended prekindergarten graduated from high school versus 81% of the students who had not attended prekindergarten. Later in their adult life, these children who attended prekindergarten held jobs and were more responsible in their job duties. Outside of school and work, the participants who had attended prekindergarten showed a significantly better regulation of emotions compared with controls as well as significantly fewer thoughts about suicide.

Thus, various studies have shown that attending prekindergarten improved the social development of students. The earlier the exposure, the more the students could understand the learning process and purpose of attending school. This study contributed to the previous studies while focusing specifically on social development skills that occur during the prekindergarten

years. In addition to considering the impact on social development, this study tried to determine whether there are any differences in social development depending on the type of prekindergarten environment. This study determined whether different forms of prekindergarten effect students' social and emotional development differently.

#### **Related Literature**

#### **History of Prekindergarten**

The idea of educating elementary age children was derived from infant schools, which began to fade out in the 1850s (Webb, Metha, & Jordan, 2000). Infant schools catered to children between the ages of four and seven. In 1929, the nursery school movement initiated the provision of care and social learning for children before formal school entry (Zigler & Styfco, 2010). As time went on and women began to enter the workforce, the need for childcare and preschool education increased. The idea of prekindergarten evolved over the years as the demand for childcare changed.

To address this constant change with working families and the need for education, Head Start was developed in 1965 to assist working mothers with caring for their children (Rose, 2010). The focus of attending Head Start programs was to provide an advantage to children who came from poor neighborhoods. In 1967, the first federally-funded U.S. Head Start program was started (Andrew & Slate, 2001). At the time, there was no educational focus, and the opportunity to attend Head Start was restricted to parents in low-economic groups. Instead of providing an educational foundation for students, the Head Start programs directly provided a supervised environment for children while their parents worked. Therefore, Head Start was put in place as an intervention to improve the lives of poor children. Children could come to school and play with other children outside of the stresses of their homes. They were also provided food and

medical attention when needed. Specifically, when Head Start was created, it did not only promise to improve poor children's school performance but also provide healthcare, nutrition, parental education, and cultural enrichment (Rose, 2010). Head Start programs were a break from their lives at home and assisted the families as well as the children. In addition to providing an advantage to the children, the families also benefited from the services and programs offered by the Head Start programs (Early Childhood Learning & Knowledge Center [ECLKC], 2016). Parents could receive medical care as well as training and education.

Decades after World War II, families' perception of daycare centers began to change, and more families from various social classes believed that their children could benefit from attending a daycare program (Marks, 1943). The families sought advanced development for their children that resulted from attending early childhood education. To cater to families that were not economically challenged, centers, identified as "preschools" and "nursery schools," were developed to serve three- and four-year-old children. The preschools and nursery schools were more appealing to families who sought an educational component to the "during the day" care of their children. Preschools were developed by private companies and allowed families to pay to enroll children in a learning environment like Head Start programs. Since the programs were paid for, they did not offer the medical assistance that came with the Head Start programs and did not focus on nurturing the entire family. Policy makers became interested in research on the promises of educationally preparing students for school, which lead to efforts to reform kindergarten-12 (K-12) schools.

When policy makers reformed K-12 schools, the concept of prekindergarten within the school environment was developed. Prekindergarten programs were initiated at the state levels to improve disadvantaged children's school readiness. Unlike the Head Start programs,

prekindergarten was implemented and funded by the states individually. By 1989, 31 states funded their prekindergarten programs or contributed to expanding Head Start programs. Over the years, prekindergarten programs grew, and standards were set at state levels. The prekindergarten classes were reserved for the low-income families as well. During the 1990s, a few states moved to make prekindergarten programs available to a much wider population. The state of Georgia was the first state to make preschool universally available, moving from the historical standard of reserving the opportunity to disadvantaged children and families (Rose, 2010).

Although the need for prekindergarten programs continues to increase and academic advantages have been highlighted through research, the effects that the different prekindergarten programs have had on the social foundations of students is still lacking in the literature. As shown above, literature has highlighted the benefits of one type of prekindergarten program but not the differences that can come from different types of these programs. The different types of prekindergarten programs—Head Start, private preschool, or school-based prekindergarten place the students in different learning environments.

#### **Types of Prekindergarten Programs**

Currently, all types of prekindergarten programs that were developed over the years still exist and serve different people depending on their economic need and abilities. These prekindergarten programs are also regulated and funded differently. The types of prekindergarten include Head Start, private preschool, and school-based prekindergarten. No matter the type of prekindergarten, they all educate four-year-old children before they enter kindergarten and all aim to prepare students for their educational career by exposing them to the educational environment earlier than the required school age. Head Start. Head Start programs are federally-funded programs that serve low-income families. Head Start programs are authorized by the Improving Head Start for School Readiness Act of 2007 and are in place to serve children aged three to five. Families must meet certain income requirements to enroll. Head Start is in place to support children's growth and development in a positive learning environment (ECLKC, 2016). Head Start services address early learning, health, and family well-being for students. The Improving Head Start for School Readiness Act of 2007 stated that programs assist in developing children's language knowledge and skills, mathematics knowledge, scientific knowledge, cognitive abilities, approaches to learning related to child development and early learning, abilities in creative arts, physical development and social-emotional development related to early learning, school success, and social problem solving.

**Preschool.** Preschool programs generally have no income requirements. Preschool is a general term used to describe schools that service all economic statuses. Children who attend preschool are not held to any economic status since parents are often required to pay tuition for the child to attend the school. According to Rose (2010), preschools are usually located in churches or governed by private organizations. Just like Head Start, preschool programs are often outside of the regular environment. The classes include children who are similar in age and have a teacher or school provider running the class. Families pay for children to attend preschool programs that are outside of the school's prekindergarten and Head Start programs. The specific school determines and outlines the additional requirements to attend the school. The educational components of preschools are noted to be like the Head Start and prekindergarten environment but are not assessed to any state or federal standards.

School-based prekindergarten. School-based prekindergarten programs are statefunded programs that are positioned with the normal matriculation of schools. Unlike other prekindergarten programs, school-based prekindergarten programs differ from state to state, since the requirements and funding of the programs are regulated at the state level. Therefore, the school-based prekindergarten requirements that are set up in Maryland may not be the same as the requirements in Georgia. No matter the set-up, prekindergarten programs typically operate within the public school system and are designed to boost the cognitive, academic, and language skills of four-year-old children during the year before they enter kindergarten (Howes et al., 2008; Pianta et al., 2005). Prekindergarten classes are normally housed in the school environment along with the other elementary grades, allowing the students to transition through school. Although prekindergarten is included in the schools, attendance in prekindergarten programs is voluntary since it is not a required grade to complete in the United States (U.S. Department of Education, 2015).

In addition to state funds, some states receive federal funding from Title 1, Part A (Title I) of the Elementary and Secondary Education Act as amended. Title I funds are provided to schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging, state academic standards (U.S. Department of Education, 2015). The funds that are allocated to the states are based on census poverty estimates and the cost of education in the state. For states that use Title I funds to fund prekindergarten programs, students must meet a specific income requirement for enrollment. Generally, the requirements to enter prekindergarten are the same as the requirements for Head Start (Canter & Schrouf, 2012). For 2017, the annual poverty guideline for a family of four was \$24,600 (U.S. Department of Health and Human Services, 2017). Since prekindergarten

programs are housed in schools, the research found that students respond better to the school environment when transitioning since they were actively participating in the schools during their prekindergarten years.

# Social Foundation and Competence in Education

Social and emotional competencies are increasingly recognized as critical for children's success in school as well as in other settings and in later phases of life in adulthood (Darling-Churchill, 2016). NCER reported that social competencies underlie many primary developmental tasks during middle childhood and predicted that deficits would likely lead to the emergence of problem behavior (National Center for Education Research, 2011). The research conducted by NCER demonstrated that social competence and foundation is the core of all learning. Even before children can learn to read and write, they should learn the meaning of education and their role in the school environment. Moraleda, Gonzalez, and Garcia-Gallo (1998) defined the theoretical framework of social competence as the expression of certain necessary attitudes and specific cognitive processes that will lead to success and failure in social relationships between preschool learning behaviors such as competence motivation and persistence and social skills such as self-control lead to success in the learning environment (Fantuzzo, Bulotsky, McDermott, Mosca, & Lutz, 2003; McDermott, Leigh, & Perry, 2002).

Social and emotional competencies as they relate to school readiness have gained enormous attention. Research indicates that social skills and accompanying process skills (e.g., attention and approaches to learning) evident at school entry are the best predictors for later social and emotional competencies such as managing behavior, making social connections, and tolerating frustration with peers (Darling-Churchill, 2016). Understanding how to function in environments gives the child the room to begin to learn outside of behavior and communication. Children learn to function in the school environment. Moraleda et al. (1998) further explained that social competence is a crucial element needed by students to adapt to the school environment. When students develop social competence, they can control themselves in various environments to include the classroom. Additionally, social and emotional competencies are often unique predictors of academic achievement, even when other factors such as earlier academic success are considered (Darling-Churchill, 2016). In contrast, when students lack a foundation or development of social competency, they exhibit negative behaviors in the classroom to include stubbornness, dominance, and anxiety (Martinez, Justicia, & Fernandez, 2016). The negative behaviors become a hindrance in children's ability to learn skills such as reading and writing. When students develop social competence and foundations, they can adapt and thrive in their environments. Further, they are given the foundation of how to interact inside and outside of the classroom, making it easier to learn academic skills. The social competence and foundations include communication and self-regulation in the learning environment.

Monkeviciene (2014) supported the understanding that academic achievement is improved when students develop social and emotional competencies. Monkeviciene's research found that developing coping skills in early childhood education allows children to adapt easier in school. A long-term effect of developing areas to support the students' social competencies is that it provides children the abilities to communicate, collaborate, self-regulate, and selfdiscipline. Developing social skills has long-term effects on the development of children's social competence. Spivak and Farran (2016) conducted a study of 862 ethnically- and racially-diverse children who attended public preschool to investigate the contributions of preschools on students' interpersonal environment to social competencies in first grade. During the 2016 study, the researchers measured the students' social competence, social behavior, problem behavior, teachers' behavior in the classroom, and interaction among peers. The study results suggested that preschool settings with teachers who displayed more approving behavior, less disapproving behavior, and a more positive emotional tone influenced the first-grade students' social competence. Specifically, the students from classrooms with those characteristics showed gains in positive social behavior and lower rates of problem behavior. The students with positive behavior could examine gains in social adeptness from preschool to the end of first grade. The study also found that the peer interaction in the classroom impacts the student's social competence. These findings support the social learning theory by demonstrating the need for interaction and modeled behavior to learn and grow developmentally. Specifically, the findings of the study suggested that having socially-adjusted peers who engage in positive exchanges in preschools helps children model, learn, and progressively internalize socially-competent behavior. Teachers create cooperative interaction in the classroom, which allows the students to interact positively with peers and work in groups (Spivak & Farran, 2016).

Stefan and Miclea (2013) also conducted a study that demonstrated the importance of social competencies in school readiness. During the study, social competencies were measured using the Social Competence and Behaviors Evaluation-Preschool Edition. The instrument was administered to 121 participants. The study included a control group that was not exposed to the social-emotional prevention program in preschool, which was designed for behavior intervention. Providing education interventions at a young age affects the students' social and emotional competencies. The students who participated in the intervention programs could interact in class and understand how to behave in the classroom environment, which

demonstrated the importance of social competence in the classroom. Students' understanding of how to interact and behave in the class influenced their readiness for school.

Although research has shown that social competence is important to school readiness, schools have created a more complex environment that focuses on academics and decreases students' extracurricular activities. Since students' extracurricular activities are decreased, students are emotionally imbalanced and can develop behavioral issues prematurely (Doina & Georgiana, 2014). Doina and Georgiana (2014) conducted a study on preschool students who were a part of an educational program for social and emotional development. The study revealed that preschool students are motivated to participate actively in learning activities and progress in socio-emotional development. The students had fewer behavior issues in class, allowing for more time to focus on learning and instruction.

# **Importance of Social Readiness in Prekindergarten**

School readiness refers to the state of the child's competence at the time of school entry (i.e., kindergarten) that is important for later success (Snow, 2006). In 1960, two studies were conducted on the effects of attending state and local school-based prekindergarten and preschools programs and found that students who attended school prior to kindergarten showed higher achievements on standardized tests, better life achievements, educational attainment, and employment (Barnett, 2008). One study was conducted at Perry Hall Preschool. The study followed 123 children from preschool into adulthood. Initially, the study found cognitive advantages from the preschool program, but the study found a decline over time because the public school experience appeared to help the control group catch up once they entered kindergarten.

The study also found that students had improved in language and general cognitive abilities but noted that there were no lasting academic effects of attending prekindergarten. In addition to their academic abilities, students who attended the preschool program had better classroom and personal behavior and less involvement in delinquency, crime, and special education placement. Although there were no effects throughout their lives, the students who attended the preschool showed higher achievements on standardized tests than their peers that did not attend preschool. In addition, as they entered adulthood, the students who attended the preschool program had decreased welfare dependency and reduced arrests (Barnett, 2008).

The study conducted at Perry Hall Preschool demonstrated the benefits of a preschool program, noting that preschool programs assist with students' behaviors. Further, the study showed that preschool could have lasting effects on students' education and economic future. Specific to this study, students developed social abilities by having better personal and classroom behavior. The benefits of preschool were also supported in a 2013 study of prekindergarten programs for four-year-olds. Goldstein, Warde, and Peluso (2013) tested 86 four-year-old children to determine if there were any gains in school readiness skills by children participating in publicly supported, community-based programs during their prekindergarten year. The assessment reviewed the students' cognitive, communication, social-emotional, and receptive vocabulary. The results indicated that participation in the publicly-funded, community-based prekindergarten program increased the learning of knowledge and skills of four-year-olds at a faster than expected rate in the areas of cognitive development, social/emotional development, and receptive vocabulary. The researchers noted that the findings were consistent with previous research on other publicly-funded programs to include Head Start, Title I, and prekindergarten programs in community and public schools (Winsler et al., 2008). Specific to social-emotional

outcomes, the researchers found that the prekindergarten participants made statistically significant gains in the social-emotional subtest.

The Institute for Developmental Studies (IDS) conducted a study that sampled 402 children randomly assigned to the preschool program. The students in the study attended the preschool program at the age of four and stayed in the program for one year. After the one year, the students entered an IDS kindergarten program. The students who attended preschool showed positive, lasting effects into adulthood, which included having better life achievement, educational attainment, and successful employment (Barnett, 2008).

Denham, Bassett, Zinsser, and Wyatt (2014) highlighted specifics regarding social development in the preschool but demonstrated that social skills influence preschool students' development. The 2014 study supported the positive impact that social development has on children by highlighting its impact on the academic readiness of students. The researchers observed and assessed 101 preschoolers, examining their social problem solving, socialemotional behavior, and self-regulation. Based on the study, the researchers found that the social learning in preschool contributed to their early school success. The impact that social development has on the readiness of children was also supported in a 2013 study conducted to examine associations between the childcare center quality experienced by preschool and the school readiness skills of these children at kindergarten entry (Keys et al., 2013). The researchers highlighted that school readiness encompasses physical, cognitive, language, and behavioral aspects of development. Under the behavioral aspects, the researchers examined the social skills that are developed during preschool years and found that preschool provided gains in social skills. The 2013 study further identified that the quality of childcare and education of the parent affects the number of gains in social development (Keys et al., 2013).

Ansari and Winsler (2014) also found that all students could benefit from attending pre-academic education no matter the curriculum. The researchers highlighted that when students are exposed to education early on, they develop skills that will prepare them for their academic journey. During the study, the researchers tested 7,045 Hispanic/Latino children and 6,700 African-American children who were enrolled in prekindergarten programs in Miami. All the students were enrolled in Title I programs and were from low-income communities. The study found that the students who attended prekindergarten were better able to develop relationships with their peers when they entered the classroom and had fewer behavior issues than the students who came into the schools without exposure to pre-academic education (Ansari & Winsler, 2014). The study demonstrated the development of behaviors when children are placed in the environment in which they will function. Rather than learning to develop peer relationships in the home, the students in the study were in a learning environment that taught them what was socially acceptable while in school. In contrast, Pennsylvania State University (2017) found curricula that focused on social-emotional learning, and promoted self-regulation and social skills children need to gain the most benefit from schooling. Longitudinal research links early social-emotional skills with a wide array of positive adult outcomes including positive mental health, interpersonal relationships, educational attainment, civic engagement, productive employment, and physical health later in life (Jones, Greenberg, & Crowley, 2015; Bavarian et al., 2016).

While in the prekindergarten environment, students learn how to interact with others and how to follow the rules that are outlined in the school (Ansari & Winsler, 2014). When the students worked together and with the teacher, more time was left for instruction in the classroom. Teachers could address the lesson without having to address behavior issues such as temper tantrums and problems between the children. The study showed how children were exposed to the teacher model, their responses in the classroom, and how they adapted socially to kindergarten.

When students enter the learning environment, they learn academic skills and social skills. According to Jones, Brown, and Aber (2011), the outcome of school-based intervention has been studied over the years to determine whether intervention affects the social and academic skills separately. The researchers found that when the social-emotional development of the child was increased during learning, academic skills also increased over time. Although academic and social skills are researched separately, they directly affect one another, with the social-emotional skills driving the students' ability to learn their academic topics. Specifically, poor academic achievement co-occurs with disruptive and aggressive behavior and is a predictor of future maladaptive behavior (Jones et al., 2011). Integrating social development with academic development allows students to grow overall. However, taking away the social development in the classroom can hinder the academic development of the children inside and outside of the prekindergarten environment.

Robinson and Diamond (2014) conducted a study to determine the association between preschool children's social-interpersonal skills and their transition to the school in the beginning months of kindergarten. The participants of the study were 133 preschool children and their families from low-income backgrounds. To test the social skills of the students, the researchers used the Social Skills Rating System-Preschool. They also used the Kindergarten Parent Transition Questionnaire and the Kindergarten Teacher Transition Practice Survey to determine how the preschool students transitioned. One tool measured the transition from the parent perspective and the other from the teacher perspective. Robinson and Diamond (2014) revealed that there were no significant associations between the parents' and the teachers' assessment of the students' transition to kindergarten. The parents' reports of the children's transition were not related to the social problem skills in preschool or the teachers' social skills rating in preschool. In contrast, kindergarten teachers' reports of children's transition to kindergarten were significantly associated with their preschool teachers' rating of their social skills. The association was not related to the students' ability to solve social problems. This demonstrated the benefit that students gain from having social skills as they transition into kindergarten and the benefit of introducing social learning early. Robinson and Diamond (2014) also examined the interpersonal skills of the children who were rated by their kindergarten teacher as having more difficulties transitioning to kindergarten. Children who were rated by their kindergarten teacher as having six or more difficulties had significantly lower vocabulary levels, fewer positive solutions to social problems, and lower social skills. The study revealed that the interpersonal skills that students learn during preschool help them adjust successfully to the new social and academic environment of kindergarten.

Robinson and Diamond's (2014) study further demonstrated the social readiness that is developed during prekindergarten. They found that the students could transition to kindergarten better after attending a prekindergarten program, and they found how social foundations are developed during the prekindergarten program. The students in the study understood the classroom environment and how to interact with their peers.

# Prekindergarten's Impact on Poverty and Community

Children from economically poor and undereducated families are at an elevated risk for lack of school readiness due to less knowledge and skill (Ramey & Ramey, 2004). Human development is determined by genetic and environmental factors, especially during early childhood. Children who live in low-income areas were found to be delayed in general development (De los Reyes-Aragon et al., 2016). De los Reyes-Aragon et al. (2016) conducted a study of 629 children ages zero to five years who were members of families experiencing economic difficulties. The study found that students from low-income backgrounds had lower cognitive, communication, and social development scores. As the children progressed in their environment, the development delays increased. The delays in the low-income communities were attributed to the family structures and poor parenting practices. Since the main contributors to the delays in the development were in the home, the study emphasized the need for early childhood institutions. The study explained that early childhood institutions serve as interventions and assist with the development of the children outside of the home (De los Reyes-Aragon et al., 2016).

Additionally, Winsler et al. (2008) found that students who are ethnically diverse and in poverty start their prekindergarten year at a significant risk compared to national norms. During this study, the researchers examined if attending center-based care differed from attending a public school prekindergarten program. During the study, researchers studied 3,838 four-year-old preschoolers attending either center-based childcare in the community, public school prekindergarten programs or fee-supported, public school prekindergarten programs during the 2003-2004 school year. The researchers were unable to control the effects of the family versus the effect of the community. Winsler et al. (2008) found that ethnically-diverse, low-income children attending center-based care of mediocre quality make notable school readiness gains during their prekindergarten years and that children in public school prekindergarten programs show slightly larger gains in language and cognition. Their study supported the need for high quality, prekindergarten programs in areas of poverty. The center-

based preschool programs serve as a buffer in the lives of children living in urban poverty that help compensate for the other risk factors associated with poverty.

When students enter the school environment from low-income communities, they are stepping out of their normal society and gaining experiences and lessons in a structured school environment. Parents and communities have different views on education and on how to teach children the various impacts that education can have on them. Although prekindergarten offers students the learning environment, learning and building a child's education begins in the home and in the community (Akman, Kukurtcu, Tarman, & Sanli, 2017). While in the home, children begin to develop an attitude towards learning and education. The family is the student's first model to educate them and teach them the value of education. One of the most influential factors that affects a student's attitude towards education is the family's attitude towards learning. Unfortunately, all families do not share the same view that education is important and necessary to progress and survive in society. Generally, family attitudes are the first to influence the student's attitude towards learning. For example, if the family believes that education should be a life priority and should be taken seriously, the student will enter the classroom with the understanding that the learning environment is not a place of play. In contrast, families and communities that do not emphasize the importance of education leave the decision on the importance of education to the students.

Brooks-Gunn and Duncan (1997) conducted a study to measure the effects of the timing, depth, and duration of poverty on children and how many fail to adjust from other family characteristics that may account for much of the observed correlation between poverty and child outcomes. The article found that family income has selective but, in some instances, substantial effects on child and adolescent well-being (Brooks-Gunn & Duncan, 1997). Children who are

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subject to poverty in their preschool and early school years have lower rates of completing school than children who experience poverty later in their educational career. The impacts that poverty has on children are related to the timing of the exposure to poverty and the timing of the intervention. When an intervention is offered to children in their preschool years, it increases their ability to overcome the effects that poverty will have on their education. Brooks-Gunn and Duncan's study supported the social learning theory and demonstrated the impact that experiences have on the social development of children. Children who are exposed to the learning environment early on can observe and gain social skills that will better prepare them for kindergarten and their educational journey.

Luby et al. (2013) conducted a study to determine how poverty negatively affects childhood brain development. To conduct the study, the authors recruited 145 right-handed students from the universe of 305 students from a preschool daycare center. After obtaining the data from the universe, it was analyzed using regression analysis. The findings were that poverty materially affects brain development at school age. Ultimately, caregiving and stress relief could mediate the effects of poverty on brain development. The 2013 study is important to this research because it provides insight on the development of children living in poverty. Specifically, it shows that poverty affects brain development. Although poverty negatively affected brain development, there are ways to mediate the negative impact. Specific to the social learning theory, this demonstrated the importance of observational experiences during the development time. Placing the children in the structured learning environment allows them to learn and grow first hand. They can interact with a different adult model in the classroom while also interacting with the other students/peers in the classroom. Attendance in prekindergarten is a form of intervention for children living in poverty.

According to Engle and Black (2008), poverty affects a child's development and educational outcomes beginning in the earliest years of life, both directly and indirectly through mediated, moderated, and transactional processes. To conduct their research, the authors reviewed intervention reports issued by schools throughout the United States. They included reports from schools in developing countries to determine if there were any differences found. Their research found that the demographic area that the students are from does affect development. However, the effects can be minimized if the student is offered intervention early in their educational career. The study explained that school is usually an outlet for students when they are faced with hard issues at home. Education is the one thing that can elevate the students away from continuing to live in poverty as there is a direct link between poverty and low academic achievement. Specifically, low-income children are at an increased risk of leaving school without graduating. Exposing students to education increases their social foundations and their attitude towards learning earlier. Engle and Black (2008) demonstrated that when students are placed in the learning environment at a young age, they can overcome obstacles and have an improved attitude towards learning. This further demonstrates the social learning theory and the impact that the learning environment has on the child. They are more likely to stay in school and graduate when they are placed in the learning environment early in their educational career.

When students enter prekindergarten and come from low-income families, they can gain experiences and stimulations that they would not get from home (Wong, 2014). Blau (1999) conducted a study to determine the effect of parental income on children's cognitive, social, and emotional development. To conduct the study, the author collected data on the child's family income, behavior, and family background. The researcher found that income slightly influenced the child's development but that the background of the family and school policies affected the child's characteristics more. Blau (1999) brought to light the importance of exposing students to prekindergarten so that they are removed from negatively influential backgrounds and placed in an environment of learning. Children who are affected by their background can enter the prekindergarten classroom and gain exposure to new adult models outside of their homes. They can see teachers and staff as well as receive responses to their behavior to learn what is right and what is wrong.

For children in that environment, prekindergarten is a form of intervention that teaches them how to act and learn. It provides them with a structured environment outside of the home. It also assists with establishing their attitude towards learning. They can work in groups with peers that are like them while observing the teacher in the classroom. Upon entering the classroom, they can leave the stresses that come from the home behind and engage in a nurturing learning environment. During that time, the students' minds are developing, and they are increasing their social skills. Following the social learning theory, the students can observe additional models in the classroom. The models are found in the teachers and in the students with which they interact. The responses to their behavior teach them how to interact and how to engage in the learning environment.

Durlak et al. (2007) also conducted a study to review the changes that can be made to children when their social system is adjusted. The review was done to determine what impact social interventions have on students. These social interventions included schools and community-based organizations. During the study, the researchers did not determine the changes in the students but instead that changes could occur. Based on the review of 526 outcome studies, the researchers found that 24% of the data indicated that intervention could be successful in children. Intervention removes children from their normal environment and places them in

new environments that expose them to new models and new experiences that are outside of the norms. During that time, children can develop socially through their responses. Children who are placed in schools for intervention can work along their peers in a structured environment. While in the school setting, students encounter different rules and are taught to follow the lead of the teacher as the class model.

# **Teachers' Impact on Social Foundation**

In the classroom, teachers are the primary role models that influence the students' social development. Part of the role of an early childhood educator is to help young children develop the skills needed to become socially competent. Throughout the day, children participate in routines that require the use of social skills. With daily activities, there are expectations for what they should say, do, and remember (Quesenberry, Mustian, & Clark-Bischke, 2016). Teachers are responsible for creating the learning environment and modeling the behavior that the classroom requires. Teachers influence peer interaction in the classroom to the extent that they create opportunities for children to become acquainted with peer groups, practice social skills, and model how to interact positively with others (Spivak & Farran, 2016). The environment that the teachers create can impact the students' ability to develop social foundations in prekindergarten. According to Burchinal, Vandergrift, Pianta, & Mashburn (2010), teachers' ability to create a good learning environment in the classroom with a positive emotional tone in teachers' interactions impacts the students' social skills development. Further, the social developments of the students are directly linked to the teacher-student relationship in the classroom (Martinez et al., 2016). Teachers are responsible for planning and organizing the classroom activities that will allow students to participate in the different educational experiences.

Although learning can take place in the home, preschools foster children's learning experiences through a variety of means, the nature of activities and material present, interactions with peers, and the behaviors of teachers (Goble et al., 2016). For young children, the extent to which the teacher manages a child's engagement in an activity or the child self-manages the activity is an important distinction (Connor, Morrison, & Slominski, 2006). Teachers are vital in the development of students' social development for the school. Specifically, teachers are considered one of the outstanding models in the development of social competence in children (Corredor, Justicia-Arráez, Martinez, & Justicia, 2013). In the 2010 study, teachers are important because of their role in the classroom and the impact that they have on students' development. Teachers reviewed in the study demonstrated the role model as outlined in the social learning theory. The teachers provided students with modeled behavior that they followed and used throughout their educational career. During the study of 1,129 students from 671 prekindergarten classrooms, they examined the students learning the behavior from observing the teacher's response to their behavior. The researchers observed teachers monitoring children's behavior and looked for cues of distress or confusion and quickly they responded in ways that would enable the child to return to learning. The teachers' behavior was predictable and would provide children cues for how to behave, and children would persistently offer and engage in activities that were interesting to them (Burchinal et al., 2010). The observations that took place during this study supported the social learning theory in many ways. The study demonstrated the importance of the modeled behavior in the classroom and the need for reinforcement in the classroom. The predictable actions from the teachers demonstrated the anticipated reinforcement. The students were learning the correct behavior, which strengthened their retention of what they had learned through observing the teacher.

The teachers also used each moment as an opportunity to stretch children's learning and thinking; extending conceptual understanding and thinking and teachers' feedback to children would not just focus on "correctness" but instead would elicit more complex performance of skill through feedback and response (Burchinal et al., 2010). In the classroom, interactions with the teacher and classmates guide students to their potential development (Vygotsky, 1978). This study showed how students were guided to learn new behaviors through observation and interactions.

Goble et al. (2016) conducted a study where they examined the teacher interaction with students. During that study, the researchers highlighted the importance of teacher instruction when developing the students' skills for school readiness. During the study, the researchers determined if there were any differences in child and teacher managed learning. Goble et al. (2016) examined children enrolled in 18 Head Start classrooms in an urban, southwestern city and their teachers. The study observed interactions between the students and peers and the interactions between the students and the teachers and compared them to the students' school readiness outcomes at the end of the study. The study found that the students spent more time with peer interaction than with teacher interaction. The results of the study revealed that the teacher and child managed interaction differed on the impact to school readiness. Specifically, when students interacted with their peers, learning was effective when teachers engaged with the children during the learning activity. The study further demonstrated that when students had positive social skills, they had more positive teacher interaction. The positive interaction allowed time for the teacher to provide instruction versus discipline. Additionally, the positive social skills of students allowed for more teacher interaction in the classroom. In contrast, negative social skills affected the peer interaction as well as the teacher interaction. Students

with negative social skills were found to have conflicting interaction with peers (Goble et al., 2016).

While in the classroom, teachers set the tone that will influence the social foundation of the students. Teachers who are assertive in the classroom generate good cohesion among members of the class (Martinez et al., 2016). Students are more likely to work together in the classroom environment. Specifically, the teacher's assertiveness in the classroom assists with developing the students' ability to communicate, work in groups, and hold discussions that are not aggressive. Additionally, the teacher's attitude in the classroom sets the tone for the norms of the classrooms and shows the students the rules that govern their interaction with others in the classroom. Martinez et al. (2016) explained that when the teacher was pleasant and social with students in the classroom, the students were in turn pleasant and social with others because they learned that behavior from observing the teacher. The students also learned what not to do by the teacher's reaction to negative actions in the classroom. Burchinal et al. (2010) also found that the teacher's tone and quality influences the students' development of social foundation. During the study, students who came from a classroom with a high quality, teacher-child interaction had better attitudes toward learning and had fewer behavior problems in school. In contrast, students who were in the classroom with lesser quality teacher-child interaction exhibited more behavior problems in the classroom. This demonstrated the impact of modeled behavior influencing the child's social development.

According to Early et al. (2010), teachers design the curriculum for the students who give them different educational experiences. They explained that most of the experiences in the classroom are not specific to education but provide the students with lessons. Early et al. (2010) highlighted the vital role that teachers play in developing the social foundation of the students. Teachers must provide opportunities in the learning environment for students to understand how to learn and what attitude to have towards learning. Early et al. (2010) explained that during the study, teachers spent much time with group activities that taught the students how to work with others and communicate in a group environment. The teachers were observed having morning meeting time where students sat on the carpet and answered a series of questions and worked together to answer some of the questions. The students who participated in the classes that allowed specific time for social development had increased social skills and developed a foundation for learning.

Burchinal et al. (2008) also conducted a study to evaluate the teacher's impact in the prekindergarten environment. During the study, the researchers examined 929 prekindergarten students and followed them into kindergarten. The study revealed that when students attended prekindergarten and were educated by a qualified teacher, they had better social skills and fewer behavior problems when they moved on to kindergarten. The teachers in the study received training on how to plan and execute lessons that included social development. When a plan in the learning day did not include social development, children did not receive enough social development to affect their skills or attitudes toward learning. Burchinal et al. (2008) further demonstrated the teacher classroom model. The students observed and internalized the responses from the teachers and learned how to behave in the classroom and the school environment. The students also relied on the teacher to provide information in the learning environment that they can take away and use in their educational journey.

Brown (2013) conducted a study on prekindergarten reform and highlighted the importance of teachers. The researcher explained that for prekindergarten to be effective and to prepare students for education, teachers must create teachable moments that will assist with

developing that foundation for learning. The study did not highlight the teachers' credentials but simply stated that the teachers' ability to plan and develop moments that allow students to develop in the classroom increases the development of specific skills. When teachers create social lessons and ensure that the focus of the lessons is on the development of social skills, students can focus on the development of the skills. In contrast, when social development is not included in the plan or as a part of the lesson, it is often lost in the day. The study further highlighted the importance of the models in the social learning theory and the need to create experiences from which the child can observe and learn. For students to develop socially, the teacher must act as that model and provide the responses that will alter the student's understanding of learning. The teacher also must allow the students to observe the right way to act and the attitude they should have towards learning.

Research has found that schools determine the social development of students when placed in the elementary classroom. Although the classroom provides students with additional experiences to foster development, teachers should have the skills and focus on bringing the social experiences in the classroom. Williams, Landry, Anthony, Swank, & Crawford (2012) found that topical classroom focuses, such as literacy, language, and social skills, promote school readiness. Specifically, classrooms should provide purposeful, cognitive activities, such as early literacy that is carried out in intentional ways, and promote social competence in the classroom. The researchers further explained that teachers should be trained and competent in creating activities that will foster the development of students' social skills in prekindergarten. They provided an example of including teachers that are trained to provide social lessons to provide predictable routines and engaging learning activities that will develop the social skills of students. Trained teachers can provide scientifically-based practices in the classroom to assist with the development of the students' social skills. Good teacher models ensure that social skills of students are adequately developed (Williams et al., 2012).

In 2014, the National Council for Curriculum and Assessment conducted a study to determine the priorities of primary education. The study revealed that the priorities of primary education focused on life-skills, communication skills, and well-being; literacy and numeracy skills; motivation and engagement; and students' sense of identity and belonging (FitzPatrick, Twohig, & Morgan, 2014). To determine the priorities, the researchers conducted a qualitative study on primary teachers, parents, principals, and early childhood practitioners. The participants were emailed and asked to respond to a 100-word essay explaining the purpose of primary education. The most frequent response indicated that the main purpose of primary education is to help children develop disposition and skills for life. One response stated,

the ability to make good informed decisions is a skill they will need all their lives...children often lack the ability to make independent decisions...we need to give them the courage to question and the confidence to decide for themselves and not succumb to peer pressure. (FitzPatrick et al., 2014, pg. 275)

Additionally, FitzPatrick et al. (2014) explained that primary education should help children learn to express themselves by building their voice and self-expression. During attendance in primary education, students can also develop a love of learning. The participants in the study noted, happy and engaged children learn more and do better in the long run. The teachers in the study also called for primary education to teach children life skills, like happiness and engagement. The study examined the curriculum designs of the teacher to determine whether the teachers highlighted these areas in the curricula. The researchers found that when the curriculum was content-based and did not address the social development of the students, social development was easily missed in the lessons. The researchers suggested realigning the traditional and content-based curriculum subjects with the needs of today's primary school children.

Although teachers and educators highlighted life-skills and social skills as necessary to the development of children in primary education, they did not highlight these skills in the curricula. Instead, the curricula focused on content areas, aiming to educate children without addressing the life or social skills. FitzPatrick et al. (2014) found that it is important for teachers to afford students the opportunities to develop skills that they will use throughout their lives. To ensure that students have these opportunities, teachers need to redefine the curricula and move away from the traditional classroom that focuses on content areas only. In turn, they should incorporate social and emotional development and vital life skills.

This chapter has illustrated the importance of the teacher model in the classroom. The research supports the social learning theory while showing that students learn from observing teachers and the behavior should be shown and enforced for the student to learn and retain. When the teacher creates the social activities that display how the student should interact and respond to the learning environment, the students develop social foundations that prepare them for their journey of learning.

# **Impact of Social Learning on School Readiness**

Researchers have suggested prekindergarten should provide the social and emotional foundation of kindergarten success (Emanoil, 2000; Schell, Albers, von Kries, Hillenbrand, & Hinnermann, 2015). Social learning has been shown to be a factor towards school readiness along with the reading and math skills of students. A survey completed by the National Center for Early Development and Learning highlighted teachers' concerns about how social deficits

impact learning in kindergarten classrooms (Rimm-Kaufman, Pianta, & Cox, 2000). Nationally, 46% of kindergarten teachers indicated that over half of their class arrived without all the necessary abilities to function successfully in the classroom. The students could not follow directions and work in groups. Additionally, Rimm-Kaufman et al. (2000) found that one-third of all children had difficulty adapting to school. Schell et al. (2015) also found that 13-18% of preschoolers had serious behavior problems. Students who participated in educational programs that improve social and emotional learning are significantly better prepared academically for school (Durlak et al., 2011). Also, students can solve problems and brainstorm to address difficult learning areas in school (White, Moore, Fleer, & Anderson, 2017). The problem solving can be in the social arena or in the development of academic skills. During a 2011 study, the researchers examined 270,034 students who were in kindergarten through high school. The students in the study were a part of social and emotional learning programs and outside of those programs. The students who participated in the social learning program had improved attitudes and academic performance with an 11% gain in achievement. The study reviewed specific students who moved from middle-level performers in class to the top 40% in the class. These students also improved in nonacademic measures to include greater social skills, fewer conduct problems such as bullying and suspensions, and more positive behaviors (Durlak et al., 2011). Improving the students' social and emotional education provided a foundation for academic instruction by teaching students skills in self-awareness and self-management, getting along with others, and decision-making (Sparks, 2011). When the focus of readiness for education is on the development and prevention of activities, such as bullying, it creates a better learning environment and allows all students to learn.

Joy (2016) supported the understanding that social readiness improved students for academic readiness. The researcher examined 153 parent and student sets and assessed the skills of social competence, social school readiness: peer and classroom attitudes, school readiness: fit in the school, and self-concept. The ultimate operationalized definition for school readiness became the idea of "fit" in the school. During the study, the child's fit was measured by how well the child demonstrated behavior conducive to classroom learning. The study found that the student's fit in the school was the best indicator of social school readiness. Therefore, readiness may be determined more appropriately by evaluating the fit between the classroom expectations and the child's abilities and needs rather than a set of acquired skills and experiential knowledge.

When preparing students for school, the focus should be on preparing the whole child. Pianta and Walsh (1998) suggested that preparing for school readiness should begin before kindergarten. Thus, improving understanding of social school readiness in preschool populations would lend to their success. According to Murray, Hurley, and Ahmed (2015), alignment, integration, and collaboration between health and education across the school setting and improving students' cognitive, physical, and emotional development prepares students. Just as reading and math create barriers for children when learning, the health, social, and emotional development of children also create barriers to learning. These barriers affect the student's motivation to learn and achieve academically (Murray et al., 2015). Specifically, social and behavioral problems can interfere with a child's acquisition of age-appropriate skills, which may lead to antisocial behavior in adolescence and adulthood (Bub, 2009). To develop all areas, the researcher highlighted the need for policies and procedures that foster the whole child and do not specifically focus on the academic side (Murray et al., 2015). Fostering the whole child prepares students for all classes instead of a specific course. Thus, students learn the value of education along with how to carry themselves in the classroom. Bub (2009) supported the need for socially-focused classrooms. The researcher found that classrooms that were more emotionally supportive than academically focused resulted in better social skills and fewer problem behaviors in preschool. Even after correcting for observed family, child, and neighborhood selection factors, this effect did not exist for classrooms that were more academically focused.

Children's executive functions encompassing inhibitory control, working memory, and attention are vital for their self-regulation (Van Lier & Deater-Deckard, 2015). When students are taught self-regulation upon entering the learning environment, they can function in the classroom without the constant reminder or attention of the teacher. Instead, they can function as individuals in the classroom and grow from the attention that they may seek at home from their parents. Van Lier and Deater-Deckard (2015) conducted their study to determine the potential impact of elementary school social experiences with peers and teachers on the development of children's executive functions. The researchers found that the school environment can prepare students with social skills if the environment is conducive to social learning. In contrast, a negative school's environment can have a negative effect on the student's social skills and will not give them any skills to increase their readiness for the learning journey. The 2015 study also examined the social learning theory and demonstrated how the observer would learn the model displays and whatever was enforced in the learning environment. When negative behaviors were displayed and no punishments given in response to the negative behavior, the observer took in the learned behavior.

When preparing students for school readiness, there should be a focus on the whole child, so that students can take the skills learned outside of the classroom. Additionally, a focus on the whole child would prepare them to build on the skills in the years to come when they start with the development of the love of learning. Throughout this research on the social foundations of learning, researchers noted that students get that jump-start by understanding the purpose of learning and instilling the natural love of learning. Social learning theorists explained that a model in the environment that the skills are used was best way to learn the behavior. For learning, that primary area is the classroom, and the models are the teachers as well as school peers.

Research on prekindergarten education demonstrated that attendance benefits the students' academic performance as well as their social development. Most of the research conducted on prekindergarten attendance did not focus on developing social foundations, and it did not look across the various types of prekindergarten to compare the impact that different prekindergarten environments had on the development of students. For decision makers to determine the need for prekindergarten when beginning the educational journey, they need information that shows a well-rounded picture of prekindergarten environments.

#### Summary

This chapter defined the types of prekindergarten programs that the study examined. It also highlighted the studies that have been conducted on the effects that attending prekindergarten has on the social development of students. Based on the information presented, attending prekindergarten affected students' academic and social development positively. The learning environment as well as the teachers' role in the classroom influenced the social development of the students. When students developed social skills while in prekindergarten, they were better prepared for kindergarten. Students could follow directions and worked well with their peers. The research findings supported the Bandura's (1977) social learning theory and Vygotsky's (1878) social development theory by demonstrating that students learn from being in the classroom and participating in the classroom environment with peers. However, there has been little research that examines the types of prekindergarten programs to determine if they affect students differently.

This study determined whether the type of prekindergarten program impacts students' social foundations differently. The next chapter used a causal-comparative design to identify cause and effect relationships by forming groups where the independent variable is present or absent. The next chapter will examine students who entered kindergarten during the 2016-2017 school year in a rural Maryland school district and identify whether there any differences among the Kindergarten Readiness Assessment (KRA) social foundation scores of students who attended prekindergarten programs compared to students who did not attend prekindergarten programs.

## **CHAPTER THREE: METHODS**

#### **Overview**

Researchers examined prekindergarten effects on academic achievement and cognitive development and concluded that attending prekindergarten was beneficial to students' social development. Specifically, researchers found that prekindergarten positively affected students' development in reading and math (Barnett, 2008). In addition, researchers found that students who attend school-based prekindergarten programs could have enhanced social-emotional development (Gormley et al., 2011). Although the study identified social-emotional development as a benefit to attending prekindergarten, researchers have attributed the impact on social development to natural maturity (Gunter et al., 2012).

This chapter will analyze the KRA social foundation scores from the students that entered kindergarten during the 2016-2017 school year. Based on the data analysis, this chapter will provide information on whether to accept or reject the null hypothesis.

### Design

A causal-comparative design was used to research this topic. According to Gall, Gall, and Borg (2007), causal-comparative designs identify cause and effect relationships by forming groups where the independent variable is present or absent. This was the most appropriate design to test the hypotheses because this study reviewed the effects of prekindergarten on the students' social foundations. The scores used in this study was previously recorded by the school; therefore, the researcher did not need to collect the scores for the study.

In this non-experimental design, the type of prekindergarten education received by the students could not be manipulated. Instead, the data were captured at the kindergarten level when completing the Kindergarten Readiness Assessment (KRA). In this study, the independent

variable was the type of prekindergarten. The types of prekindergarten environments examined were Head Start, school-based prekindergarten, private preschools, and no prekindergarten. The KRA social foundation scores were the dependent variable for this study.

# **Research Question**

**RQ1:** Is there a difference among the Kindergarten Readiness Assessment (KRA) social foundation scores of students who attended prekindergarten programs compared to students who did not attend prekindergarten programs?

### **Null Hypothesis**

 $H_01$ : There is no significant difference among the Kindergarten Readiness Assessment (KRA) social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, or private preschool, compared to no prekindergarten program.

### **Population and Sample**

### **Population**

This study was conducted in a rural Maryland school district using data collected during the 2016-2017 school year. The population of this district was 29,233. The median household income was \$45,432 with 12.8% of the population below the poverty line (U.S. Census Bureau, 2016). During the 2016-2017 school year, eight elementary schools in the school district offered kindergarten programs for students. The school enrollment was 96.2% Caucasian, 2.1% Two or more races, 1.2% Hispanic/Latino, and 0.4% African American.

The first prekindergarten setting examined in this comparative study was school-based prekindergarten programs that educate four-year-old children. Participants in this setting attended school-based prekindergarten programs and were from various schools in the inner-city Maryland school district. The students in the school-based prekindergarten programs received free breakfast and lunch since the programs receive Title I funds that educate and assist lowincome families. The second prekindergarten setting examined was Head Start centers that educate students outside of the school environment. The Head Start programs provide educational instruction to students as young as three years old. Like the school-based prekindergarten programs, Head Start is federally funded but located outside of the regular school environment. The third prekindergarten setting in this study was private preschools that educate children as young as three years old. Participants in this setting pay to attend prekindergarten and are not a part of the regular school setting. Finally, this study also examined environments outside of the other three settings. Participants in this setting did not attend prekindergarten in any form. Instead, they remained in the home until they attended kindergarten.

# Sample

The available population for this study was all students who entered kindergarten during the 2016-2017 school year in a school district located in Maryland. For the 2016-2017 school year, the study assessed 213 students using KRA (Maryland Department of Education, 2017). According to Gall et al. (2007), at least 72 samples must be tested for a medium effect size. During this study, two samples were used (N = 70). A systematic random sampling from each of the four groups was used to ensure adequate representation. The sample size for this study was n= 19 for Head Start, n = 19 for private preschool, n = 15 for school-based prekindergarten, and n= 19 for no prekindergarten.

The records in the sample came from students who entered kindergarten in the school district during the 2016-2017 school year. During the testing, data were captured to determine the students' educational experience before entering the inner-city school's kindergarten

program. The data included experiences from students who attended prekindergarten, private preschool, Head Start, and non-preschool settings. Students who were repeaters did not receive the KRA and, therefore, were excluded from this study.

# Instrumentation

The Kindergarten Readiness Assessment (KRA) is an assessment used by various school districts, including Maryland and Ohio, to assess students' readiness for kindergarten. The KRA is not a test since it does not disqualify students from entering kindergarten but an assessment to determine students' readiness at the beginning of the school year. The KRA assesses students' readiness in language and literacy, mathematics, social foundations, physical well-being, and motor development. The kindergarten teacher administers it at the beginning of the school year. The teachers' administration of the test did not create limitations for the study since teachers received training on the assessment and followed guidelines for administering the test. The four domains were assessed using both indirect and direct items to link each area to the standard or group of standards. The KRA is a 21-point assessment that has a Cronbach's alpha of .94. This study used KRA social foundation scores. The study results were used in the schools to determine the readiness of students as they entered kindergarten.

The social foundation domain is made up of 12 of the 21 points in the KRA. The social foundation scores are collected using an indirect assessment. Specifically, teachers use an observational rubric to collect the social foundation scores. The teachers observe the students performing in the classroom environment during lessons that included sharing, group work, and recreation (see Appendix C). The social foundation domain of the KRA has a Cronbach's alpha of .91. The testing phase for the KRA assessment was conducted in 2014 and assessed the

validity and reliability of the KRA. During that assessment, the KRA scores were shown to measure the respective domains accurately. (Ohio Department of Education, 2014).

The administration of the KRA was a part of regular school procedures and did not require additional time from the teacher or the students. The assessment was conducted during the 2016-2017 school year, which was prior to the collection of data for this study. The schools reported the scores to the Maryland Department of Education for record keeping. The scores informed teachers, parents, early childhood programs, school administrators, and policymakers about the status of school readiness in the State, by county, school, and classroom. This information was essential in addressing emerging achievement gaps or programmatic needs in early education programs. It was also a vital tool to gauge progress of child outcomes over time. (Maryland Department of Education, 2017).

## Procedures

Before applying for Institutional Review Board (IRB) approval, the researcher obtained written permission to gather, use, and report the KRA data from the Maryland school district. To obtain permission from the school district, the researcher submitted an online request to the school district's Research, Evaluation, and Information division (see Appendix A). Once the school district granted permission, the IRB received the information and granted approval (see Appendix B). Upon IRB approval, the researcher collected the KRA social foundation scores from the 2016-2017 school year. The data were sorted based on the prior prekindergarten attendance and were assigned numbers for analysis. The researcher established groups based on prekindergarten attendance and then analyzed the data using SPSS software.

#### **Data Analysis**

The data in this study were analyzed using the Kruskal-Wallis H test. This nonparametric ANOVA was appropriate for this study because the data were unable to meet the assumption of equal variance or normality due to the small sample size. The Kruskal-Wallis H test is nonparametric test of statistical significance that does not make assumptions about the distribution and form of scores on the measured variable. If more than two groups of subjects are to be compared, a nonparametric one-way analysis of variance can be used (Gall et al., 2007). The Kruskal-Wallis H test was used to test the null hypothesis to determine if there were statistical differences between the KRA social foundation scores and the type of prekindergarten experience students attended. The data were screened for outliers using box and whisker plots. A significance level of p < .05 was required to reject the null hypothesis. Effect size was measured by partial eta-squared and interpreted using Cohen's d. The ANOVA assumed that data would be normally distributed; therefore, the Kolmogorov-Smirnov test was used to test the normality of the data since the sample size was greater than 50. The results from the Kolmogorov-Smirnov test showed that the data did not pass the test of normality; therefore, the researcher did not assume that the sample testing was from a normal population. Additionally, the Levene's Test of Equality of Variance and the Brown-Forsythe test were conducted to test the assumption of equal variance. Equal variance was assumed when p < .05. The results from the Levene's Test showed p = .034; therefore, equal variance was not assumed. The Brown-Forsythe test found that p = .018. After assumptions of normality and equal variance were not met, the null hypothesis was analyzed using Kruskal-Wallis H test. To reject the null hypothesis, p < .05 was required. The results of the Kruskal-Wallis H test showed that p = .030; therefore, the researcher rejected the null hypothesis and identified that there were significant differences

among the KRA social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, private preschool, or no prekindergarten program. Since the null hypothesis was rejected, post-hoc testing was conducted using pairwise comparison to determine which sample groups differed.

#### Summary

After assumptions of normality and equal variance were not met, this researcher analyzed the null hypothesis using Kruskal-Wallis H test. The KRA social foundation scores was the dependent variable. The independent variable was the prior prekindergarten program, which contained four groups: Head Start, Prekindergarten, Private preschool, and No prekindergarten. To reject the null hypothesis, p < .05 was required. The results of the Kruskal-Wallis H test showed that p = .030; therefore, rejecting the null hypothesis and identifying that there were significant differences among the KRA social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, private preschool, or no prekindergarten program. The next chapter will illustrate the analyzed data and provide detailed testing of the null hypothesis to determine whether there are differences among KRA social foundation scores of students who attend prekindergarten programs compared to students who do not attend prekindergarten programs.

## **CHAPTER FOUR: FINDINGS**

#### **Overview**

This study analyzed the differences among the Kindergarten Readiness Assessment (KRA) social foundation scores of students who attended prekindergarten programs compared to students who did not attend prekindergarten programs. The Kruskal-Wallis H test was used to test the null hypothesis to determine if there were statistical differences between the KRA social foundation scores and the type of prekindergarten experience students attended. Based on testing, the null hypothesis was rejected, identifying that there were significant differences among the KRA social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, private preschool, or no prekindergarten program. Post-hoc analysis was conducted using pairwise comparisons to identify which groups had differences. Then results of the pairwise comparison showed that there were no differences between school-based prekindergarten and private preschool programs.

### **Research Question**

The research question for this study was:

**RQ1:** Is there a difference among the Kindergarten Readiness Assessment (KRA) social foundation scores of students who attended prekindergarten programs as compared to students who did not attend prekindergarten programs?

### **Null Hypothesis**

The following was the null hypothesis:

 $H_01$ : There is no significant difference among the Kindergarten Readiness Assessment (KRA) social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, or private preschool, compared to no prekindergarten program.

### **Descriptive Statistics**

The KRA scores were the dependent variable for this study, and the type of prekindergarten program or experience attended were the independent variables. The independent variable contained four groups: Head Start, school-based prekindergarten, private preschool, and no prekindergarten program. The descriptive statistics of the variables are presented in Table 1.

### Table 1

Type of					
prekindergarten	Ν	М	SD	Std. error	Max
Head Start	19	275.37	18.001	4.130	298
Prekindergarten	19	281.68	16.038	3.679	298
Private preschool	14	290.07	8.775	2.345	298
No prekindergarten	18	274.67	15.431	3.637	298
Total	70	279.84	16.108	1.925	298

#### Descriptive Statistics for KRA Social Foundation Scores

## Results

## **Data Screening**

The data were screened for errors or inconsistencies. None were found. The data also were checked for outliers. Box plots were examined to determine if any scores should be considered outliers. The examination of the box plots identified two outliers that were removed before analysis of the data continued, changing the total scores from 72 to 70 (see Figures 1 and 2).

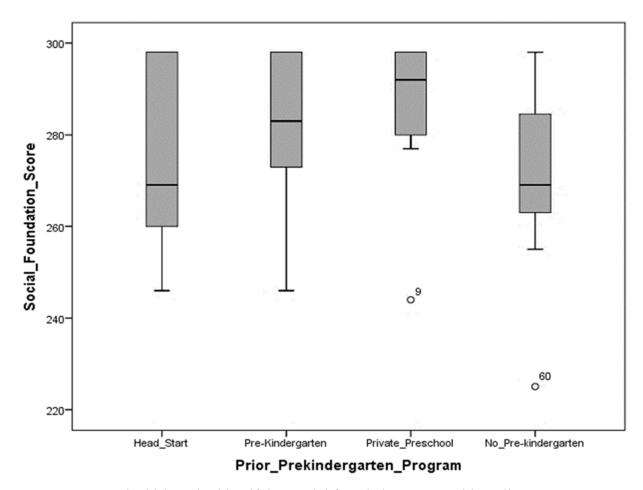
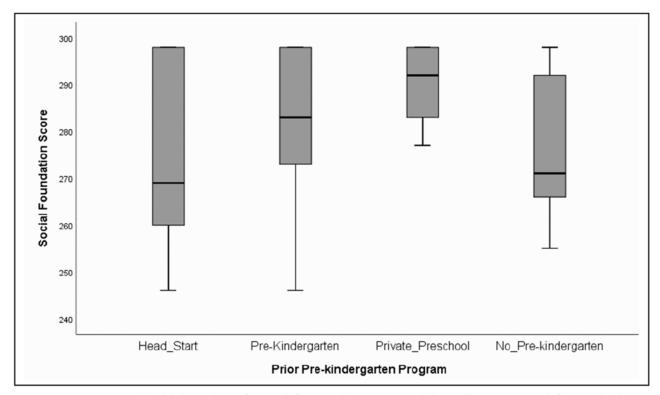
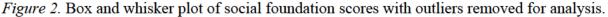


Figure 1. Box and whisker plot identifying social foundation scores with outliers.





## **Assumption Testing**

The null hypothesis was analyzed using an ANOVA. Assumption testing was necessary to ensure that the data did not violate the assumption of normality or equal variance. To test the assumption of normality, a Kolmogorov-Smirnov test was used. The Kolmogorov-Smirnov results were checked for p < .05 to be considered significant, which would mean the data were not normally distributed. Results are presented in Table 2. Based on the results, the data were assumed not to be normally distributed.

## Kolmogorov-Smirnov Test of Normality

Type of prekindergarten	Static	df	Sig.
Head Start	.211	19	.025
Prekindergarten	.214	19	.023
Private preschool	.245	14	.022
No prekindergarten	.210	18	.035

Another assumption of the ANOVA was equal variance of the data. The data were checked for equal variance using Levene's Test for Equality of Variance. For equal variance to be assumed, the results should be nonsignificant (p > .05). The result of Levene's Test was .034, which was significant (see Table 3). Therefore, equal variance cannot be assumed. Since equal variance could not be assumed under the Levene Test, the Brown-Forsythe was also conducted.

#### Table 3

Levene Test of Equal Variance

Levene Statistic	df1	df2	Sig.
3.056	3	66	.034

The results of the Brown-Forsythe test are presented in Table 4. The Brown-Forsythe further confirmed that equal variance could not be assigned with p < .05. The results of the Brown-Forsythe were .018, which was also significant.

	Statistic <sup>a</sup>	df1	df2	Sig.
Brown-Forsythe	3.613	3	61.032	.018

Note. a. Asymptotically F distributed.

After the data did not meet the assumption of normality and equal variance, the null hypothesis was analyzed using the Kruskal-Wallis H test. The nonparametric one-way ANOVA does not make assumptions about the distribution and form of scores on the measured variable (Gall et al., 2007). The dependent variable was the KRA social foundation scores. The independent variable was the prior prekindergarten program, which had four groups: Head Start (M = 275.37, SD = 18.001), Prekindergarten (M = 281.68, SD = 16.038), Private preschool (M = 290.07, SD = 8.775), and No prekindergarten (M = 274.67, SD = 15.41). To reject the null hypothesis, p < .05 was required. The results of the Kruskal-Wallis H test showed that p = .030; thereby, the researcher rejected the null hypothesis. The test confirmed that there were significant differences among the KRA social foundation scores of kindergarten students who attended Head Start, school-based prekindergarten, private preschool, or no prekindergarten program (see Table 5 for results of Kruskal-Wallis H Test).

## Kruskal-Wallis Score Test Statistics

Kruskal-Wallis H	df	Asymp sig.
8.845	3	.030

Notes. Grouping Variable: Prior-Prekindergarten Program.

Since the null hypothesis was rejected, post-hoc testing was conducted to determine which groups identified differences. Post-hoc analysis was conducted using pairwise comparisons. The pairwise comparison showed that no prekindergarten program and private preschool program differed, yielding p = .039. The remaining groups were not significantly different with p > .05 (see Table 6 for pairwise comparison of prior prekindergarten programs).

## Pairwise Comparison

Sample 1 - Sample 2	Test statistic	Std. error	Std. test statistic	Sig.	Adj. sig.
No prekindergarten - Head Start	2.075	6.575	.316	.752	1.000
No prekindergarten - Prekindergarten	9.127	6.575	1.388	.165	.991
No prekindergarten - Private school	19.381	7.123	2.721	.007	.039
Head Start - Prekindergarten	-7.053	6.486	-1.087	.277	1.000
Head Start - Private preschool	-17.306	7.041	-2.458	.014	.084
Prekindergarten - Private preschool	-10.254	7.041	-1.456	.145	.872

## **Summary**

Chapter Three analyzed the differences among KRA social foundation scores of students who attended prekindergarten programs compared to students who did not attend prekindergarten programs. The population included kindergarten students who took the KRA during the 2016-2017 in a rural Maryland school district. The variable for the type of prekindergarten had four groups: Head Start, school-based prekindergarten, private preschool, and no prekindergarten program. The results showed that there was a difference among the KRA social foundation scores of students who attended prekindergarten programs compared to students who did not attend prekindergarten program. Specifically, students who did not attend a prekindergarten program differed from students who attended a private preschool program.

The next chapter will discuss the findings from Chapter Four and highlight the implications based on the differences found in the social foundation scores of the students in the different types of prekindergarten programs compared to the students who did not attend a prekindergarten program. The chapter also will provide recommendations for future research, highlight the limitations found during this study, and address the impact of this study on research and the readiness of children as they enter kindergarten.

#### **CHAPTER FIVE: CONCLUSIONS**

#### **Overview**

This study examined the differences in the Kindergarten Readiness Assessment (KRA) social foundation scores based on the prior prekindergarten program attendance. Based on testing, there was a significant difference in students who attended Head Start, private preschool, or school-based prekindergarten as compared to no prekindergarten program. The results supported the theories that prekindergarten attendance increases school readiness specific to the social development of students. Specifically, the students who attended prekindergarten programs have been socially prepared to enter school. Since they are socially prepared, they can interact with others, conduct themselves in the classroom, and follow the instructions of the teachers.

#### Discussion

According to Bandura (1977), learning through observation is a primary method of social learning; however, a person cannot learn much by observation if he/she does not attend to or recognize the essential features of the model's behavior. This study examined students in different types of prekindergarten programs to determine if there was a difference in the social foundations developed. The students in the study observed the modeled behavior of a classroom in various settings to determine if there were differences among students who attended Head Start, private preschool, and school-based prekindergarten compared to no prekindergarten program.

This study examined the null hypothesis and differences in the KRA social foundation scores based on the prior prekindergarten program attendance. The results of the Kruskal-Wallis H test yielded significant results, which led to the rejection of the null hypothesis. There was a significant difference in students who attended Head Start, private preschool, and school-based prekindergarten compared to no prekindergarten program. To further examine the difference, post-hoc analysis was conducted using pairwise comparisons. The results of the pairwise comparison found a significant difference between no prekindergarten program and students who attended private preschools (p = .039). There was no significant difference found between no prekindergarten program and Head Start (p = 1), no prekindergarten program and prekindergarten (p = .991), Head Start and prekindergarten (p = 1), Head Start and private preschool (p = .084), and prekindergarten and private preschool (p = .872).

This study supported the theories on social development by identifying the differences in the students who attended private preschool and students who did not attend a prekindergarten program. According to Bandura (1977), students learn from the environment, and observed behavior has the greatest impact. During this study, the social foundation scores of the students who attended school in a learning environment differed from the students who did not. Further, Vygotsky (1978) stated that learning awakens a variety of internal developmental processes that can operate only when the child is interacting with people in his environment and in cooperation with his peers. Additionally, this study supported Ansari & Winsler (2014) and Alsobaie's (2015) research, which found that development that was brought on through elementary school experiences and lessons enhances school readiness and sets the tone for the remainder of that student's life. Finally, this study supported Bierman et al. (2015), which found that students who were exposed to school environments responded better to the learning environment and could interact in the classroom environment with less frustration. The difference in the scores during this study showed that the students who attended a prekindergarten environment had better social

skills and better attitudes toward learning than the students who did not attend a prior prekindergarten environment.

#### Implications

Social foundations are the cornerstone of kindergarten readiness. When developing social foundations, students learn how to function and socialize in the learning environment. They also establish their attitudes towards learning. This study highlighted the importance of social development in the education environment. Developing social skills is essential and necessary for overall development, adjustment, and interaction with others (Quesenberry et al., 2016). Over the past 15 years, the United States has increasingly emphasized achievement testing, and in turn, has shifted kindergarten to an academic focus. Typically, the decision to attend prekindergarten is based on the need for academics. However, the academic need is not the only area that needs focus. In addition to being academically prepared for school, students also need social preparation to establish the love and understanding of learning. Students need social skills as well as behaviors that promote positive interaction with others and the environment. Some of these skills include showing empathy, participating in group activities, communicating with others, and problem solving (Lynch & Simpson, 2010). According to Resmovits (2013), preschool highlights the need for social development in school readiness. This study added to the current research in this area by highlighting the importance of social development in school readiness. According to Bandura (1977), learning is best achieved in person. Students who did not attend a prekindergarten environment showed a significant difference in the social foundation scores than students who attended a private preschool environment. Not attending a prekindergarten environment can impact the students' readiness for kindergarten.

This study also highlighted the importance of teacher and peer interaction in the development of social foundations. In the classroom, students are guided to their potential development during interactions with the teacher and their classmates (Vygotsky, 1978). When parents consider placing their child in a prekindergarten environment, they should also consider the teacher's influence. Teachers are one of the most crucial models in the development of social competence in children (Corredor et al., 2013). According to Spivak and Farran (2016), teachers influence peer interaction in the classroom to the extent that they create opportunities for children to become acquainted with peer groups, practice social skills, and model how to interact positively with others. When students are placed in the learning environment, they can interact with peers and the teacher. Through those experiences, students develop social skills that impact their readiness for kindergarten. This study supported Spivak and Farran's research by exploring the difference in the social foundation of students who attend prekindergarten compared to students who do not.

This study also examined various types of prekindergarten to determine if there was a difference in the effect that prekindergarten had on students. This study concluded that there were differences in the social foundations of the students from the different prekindergarten environments. Specific differences were identified in students who attend private preschool and students who do not attend a prekindergarten program. According to Vygotsky (1978), students are guided to their potential development during interactions with the teacher and their classmates. This was demonstrated in the findings of this study, which provided families with information that can assist them in making decisions to advance the development of children. Families can use this information when deciding whether to keep students out of prekindergarten programs. The students who did not attend a prekindergarten program had lower social

foundation scores, demonstrating that their social skills were not as developed as students who attended a private preschool environment.

This study also provided information to policy makers when deciding to change prekindergarten programs to focus on academics primarily. This study demonstrated that developing the social skills in the class is just as important as academic development. Sociallydeveloped students learn to behave in the classroom environment allowing them to learn more information in the classroom. They also develop a love for learning that will carry them through adulthood. Developing social skills provides students with the basis of learning that can be used to develop their academic skills further.

### Limitations

One limitation of this study was the lack of randomization. Since the study was ex post facto, the researcher collected the data after the fact; therefore, randomization of the sample was not possible. However, systematic random sampling was used to lessen any effects from the lack of randomization. The study also was limited by the ability to identify cause and affect relationships in the differences of the social foundation scores of the students from the different settings. The researcher was unable to identify why the scores differed or why the scores did not have significant differences. This study examined if there was a difference in the KRA social foundation scores of children who had attended Head Start, private preschool, school-based prekindergarten, or no prekindergarten program previously. This study did not identify causes of differences that may exist. In addition, this study focused on a specific geographic location and included one school district. The results may not be valid for other geographic areas.

## **Recommendations for Future Research**

This study showed a difference in the KRA social foundation scores of four prekindergarten environments. The study did not explore explanations for the differences nor did it include differences in the prior attendance curriculum. It would be beneficial for further research in this area to focus on the different factors in each of the prekindergarten environments. Future studies could also explore teacher quality that may differ in prekindergarten environments, as well as explore the quality of the prekindergarten environment to determine if there is a difference in the development of social foundations.

This study also focused on one school district in Maryland. Future research could expand into other areas to include different geographic areas that participate in the KRA, allowing for more conclusive evidence in the comparison of the four groups examined during this study. This study also excluded students who repeated kindergarten. In the future, this group could be included to add additional types of prior prekindergarten attendance areas for comparison to determine the differences in KRA social foundation scores. This information would further add to research and give additional information to families on the effects of different types of prekindergarten.

#### **Summary**

This study examined the differences in the KRA social foundation scores based on the prior prekindergarten program attendance. It only identified differences between students who attended private preschool and students who attended no prekindergarten program, highlighting the importance of students attending a type of prekindergarten program to develop social foundations. The social foundation scores demonstrated students' social and emotional development and approach towards learning. Social-emotional learning contributes to the

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development of interpersonal ability and has been associated with gains in social and emotional competencies as well as gains in academics, health, and citizenship domains (White et al., 2017). However, academic learning has crowded out preschool priorities, despite the consensus that children's social-emotional needs and skills are an essential component of school readiness and healthy child development. Social skills developed in preschool include getting along with others, managing feelings, focusing, and persisting through challenging tasks (Pennsylvania State University, 2017). Although various studies have highlighted the benefits of prekindergarten, this study has added to research by examining differences among the types of prekindergarten programs. This study also highlighted the importance of developing the social foundations of learning. These foundations will provide students with skills that they can apply to all areas of life, especially their academic abilities. Specifically, the social foundations provide students with the abilities to interact with other students and model the positive behavior of teachers. With developed social foundations, students can enter kindergarten with the skills needed to learn and face all situations that may arise during their educational journey.

#### REFERENCES

- Akman, B., Kukurtcu, S., Tarman, I., & Sanli, Z. (2017). Examining preschool and first grade teachers' opinions on the effects of school readiness to classroom management. *International Journal of Progressive Education*, 13(1), 22-41.
- Alsobaie, M. (2015). Long-term impacts of prek education on childhood educational, social, and behavioral development. *Journal of Education and Practice*, *6*(16).
- Andrew, S., & Slate, J. (2001). Prekindergarten programs: A review of literature. *Current Issues in Education*, 4(5), 1-42.
- Ansari, A., & Winsler, A. (2014). Montessori public school prek programs and the school readiness of low-income black and Latino children. *Journal of Educational Psychology*, *106*(4), 1066-1079.

Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.

- Barnett, S. (2008). Preschool education and its lasting effects: Research and policy implications.
   Boulder and Tempe: Education and the Public Interest Center & Education Policy
   Research Unit. Retrieved from www.epicpolicy.ord/publication.preschool-education
- Bavarian, N., Lewis, K. M., Acock, A., DuBois, D. L., Yan, Z., Vuchinich, S.,...Flay, B. R.
  (2016). Effects of a school-based social-emotional and character development program on health behaviors: A matched-pair cluster randomized control trial. *Journal of Primary Prevention, 37*, 87-105.
- Bierman, K. L., Nix, R. L., Domitrovich, C. E., Welsh, J. A., & Gest, S. D. (2015). The Head
  Start REDI project and school readiness. In A. J. Reynolds, A. J. Rolnic, & J. A. Temple
  (Eds.)., *Health and education in early childhood: Predictors, interventions, and policies*(pp. 208-223). Cambridge: Cambridge University Press.

- Blau, D. (1999). The effect of income on child development. *The Review of Economic and Statistics*, *81*(2), 261-276.
- Broekhuizen, M. L, Mokrova, I. L., Burchinal, M. R., Garrett-Peters, P. T., & the Family Life Project Investigators. (2016). Classroom quality at prekindergarten and kindergarten and children's social skills and behavior problems. *Early Childhood Research Quarterly, 36*, 212-222.
- Brooks-Gunn, J., & Duncan, G. (1997). The effects of poverty on children. *The Future Children*, 9(2), 55-71.
- Brown, C. (2013). Reforming preschool to ready children for academic achievement: A case study of the impact of prek reform on the issue of school readiness. *Early Education and Development*, 24(4), 554-573.
- Bub, K. (2009). Testing the effects of classroom supports on children's social behavioral skills at key transition points using latent growth model. *Applied Developmental Science*, 13(3), 130-148.
- Burchinal, M., Howes, C., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008).
  Predicting child outcomes at the end of kindergarten from the quality of prekindergarten teacher-child interactions and instruction. *Applied Developmental Science*, *12*(3), 140-153.
- Burchinal, M., Vandergift, N., Pianta, R., & Mashburn, A. (2010). Threshold analysis of association between child care quality and child outcomes for low-income children in prekindergarten programs. *Early Childhood Quarterly*, 25(2010), 166-176.
- Canter, R., & Schrouf, B. (2012). *Title I prek in Mississippi: Preliminary report*. Retrieved from http://www.mississippifirst.org/prekindergarten.

- Connor, C., Morrison, F., Sliminski, L. (2006). Preschool instruction and children's emergent literacy growth. *Journal of Educational Psychology*, *98*(4), 665-689.
- Corredor, G., Justicia-Arráez, A., Martínez, M. C., & Justicia, F. (2013). Aprender a Convivir.
   Un programa para la mejora de la competencia social del alumnado de Educación Infantil y
   Primaria. *Electronic Journal of Research in Educational Psychology*, 11(31), 883-894.
- Cross, C. (2008). A historical perspective of the development of prekindergarten and the evolution of quality elements (Unpublished doctoral dissertation). Gainsville, FL: University of Florida.
- Curby, T., Brock, L., & Hamre, B. (2013). Teachers' emotional support consistency predicts children's achievement gains and social skills. *Early Education & Development*, 24(3), 292-309.
- Darling-Churchill, K. (2016). Early childhood social and emotional development: Advancing the field of measurement. *Journal of Applied Developmental Psychology*, 45, 1-7.
- De los Reyes-Aragon, C., Amar, J., Carrea, A., Harb, S., Madariaga, C., & Abellow-Llanos. (2016). The care and development of children living in contexts of poverty. *Journal of Child and Family Studies*, 25(12), 3636-3643.
- Denham, S., Bassett, H., & Zinsser, K. (2012). Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Educational Journal*, 40(3), 137–143.
- Denham, S. A., Bassett, H. H., Zinsser, K., & Wyatt, T. M. (2014). How preschoolers' socialemotional learning predicts their early school success: Developing theory-promoting, competency-based assessments. *Infant Child Development*, 23(4), 426-454.

- Diffey, L., Parker, E., & Atchinson, B. (2017). *State prek funding 2017-2017 fiscal year: Trends and opportunities*. Denver, CO: Education Commission of the States.
- Doina, W., & Georgiana, C. (2014). A demarche for the development of preschoolers' socioemotional competences-design and testing. *Journal Plus Education*, 379-387.
- Durlak, J. A., Taylor, R. D., Kawashima, K., Pachan, M. K., DuPre, E. P., Celio, C.
  I.,...Weissberg, R. P. (2007). Effects of positive youth development programs on school, family and community systems. *Community of Psychology*, *39*(4), 269-286. Retrieved from http://onlinelibrary.wiley.com/doi/10.1007/s10464-007-9112-5/full
- Durlak, J., Weissberg, R., Dymnicki, A., Taylor, R., & Schellinger, K. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432.
- Early Childhood Learning & Knowledge Center. (2016). *Head Start performance standards*.Washington, DC: Department of Health and Human Services Administration for Children and Families.
- Early, D., Iruka, I., Ritchie, S., Barbarin, O., Winn, D., Crawford, G.,...Howes, C. (2010). How do prekindergartners spend time? Gender, ethnicity, and income as predictors of experiences in prekindergarten classroom. *Early Childhood Research Quarterly*, 25(2), 177-193.
- Emanoil, P. (2000). Control yourself! Social and emotional skill development in preschoolers. *Human* Ecology, 28(1), 9-11.
- Engle, P., & Black, M. (2008). The effects of poverty on child development and educational outcome. U.S. National Library of Medicine National Institute of Health, 1136(1), 243-256.

- Fantuzzo, J., Bulotsky, R., McDermott, P., Mosca, S., & Lutz, M. N. (2003). A multivariate analysis of emotional and behavioral adjustment and preschool educational outcomes. *School Psychology Review*, 32, 185-203.
- FitzPatrick, S., Twohig, M., & Morgan, M. (2014). Priorities for primary education? From subjects to life-skills and children social and emotional development. *Irish Educational Studies*, 33(3), 269-286.
- Florida Department of Health. (2012). *Infant toddler development training*. Retrieved from http://www.floridahealth.gov/alternatesites/cms-

kids/providers/early\_steps/training/itds/module1.html.

- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8<sup>th</sup> ed.).Boston, MA: Pearson.
- Goble, P., Hanish, L., Martin, C., Eggum-Wilkens, N., Foster, S., & Fabes, R. (2016). Preschool contexts and teacher interactions: Relations with school readiness. *Early Education and Development*, 27(5), 623-641.
- Goldstein, P., Warde, B., & Peluso, P. (2013). Children's readiness gain in publicly funded, community-based prekindergarten programs for 4-year-olds and preschool for 3-yearolds. *Child Youth Care Forum*, 42, 507-523.
- Gormley Jr., W. T., Phillips, D. A., Newmark, K., Welti, K., & Adelstein, S. (2011). Socialemotional effects of early childhood education programs in Tulsa. *Child Development*, 82(6), 2095-2109.
- Grieder, C. (1993). Foundations of cognitive theory: A concise review. Retrieved from https://eric.ed.gov/?id=ED372324.

- Gunter, L., Caldarella, P., Korth, B., & Young, R. (2012). Promoting social and economical learning in preschool students: A study of strong start prek. *Early Childhood Education Journal*, 40(3), 151-159.
- Han, S. S., Catron, T., Weiss, B., & Marciel, K. K. (2006). A teacher-consultation approach to social skills training for prekindergarten children: Treatment model and short-term outcome effects. *Journal of Abnormal Children Psychology*, 33(6), 681-695.
- Hawkins, J., Kosterman, R., Catalano, R., Kill, K., & Abbott, R. (2005). Promoting positive adult functioning through social development intervention in childhood. Archives of Pediatrics and Adolescent Medical Journal, 159, 25-31.
- Howes, C., Burchinal, M., Early, D., Pianta, R., Bryant, D., Clifford, R., . . . Barbarin, O. (2008). Ready to learn? Children's preacademic achievement in prekindergarten programs. *Early Childhood Research Quarterly*, 23, 27-50.

Improving Head Start for School Readiness Act of 2007 (2007), 42 USC 9801

- Islam, B., Islam, K., Ahmed, A., Shamsuddin, A. (2013). Interactive digital learning materials for kindergarten students in Bangladesh. *International Journal of Trends in Computer Science*, 2(11).
- Jacobson, L. (2004). Prek standards said to slight social, emotional skills. *Education Week*, 42(23), 13-13.
- 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*, 105, 2283-2290.

- Jones, S., Brown, J., & Aber, J. (2011). Two-year impacts of a universal school-based socialemotional and literacy intervention: An experiment in translational development research. *Child Development*, 82(2), 533-534.
- Joy, J. (2016). Evaluating positive social competence in preschool populations. *School Community Journal*, *26*(2), 263-289.
- Jyoti, C. (2013). Do you need to pay for preschool? *Learnvest Planning Services*. Retrieved from https://www.learnvest.com/2013/03/do-you-need-to-pay-for-preschool/
- Keys, T., Farkas, G., Burchinal, M., Duncan, G., Vandell, D., Li, W., . . . Howes, C. (2013).
   Preschool center quality and school readiness: Quality effects and variations by demographic and child characteristics. *Child Development*, 84(4), 1171-1190.
- Luby, J., Belden, A., Botteron, K., Marrus, N., Harms, M. P., Babb, C., & Barch, D. (2013). The effects of poverty on childhood brain development: The mediating effect of caregiving and stressful life events. *JAMA Pediatrics*, *167*(12), 1135-1142.
- Lynch, S. A., & Simpson, C. G. (2010). Social skills: Laying the foundation for success. Dimensions of Early Childhood, 38(2), 3-12.
- Marks, B. (1943). Educational news and editorial comment. *The Elementary School Journal*, *43*(8), 439-450.
- Martinez, V., Justicia, J., & Fernandez, E. (2016). Teacher assertiveness in the development of students' social competence. *Journal of Research in Education Psychology*, 14(2), 31-332.
- Maryland Department of Education. (2017). *The 2016–2017 Kindergarten Readiness Assessment technical report*. Retrieved from www.msde.state.md.us

- Mashburn, A., Pianta, A., Hamre, B., Downer, J., Barbarin, O., Bryant D., . . . Early, D. (2008).
  Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development*, 79(3), 732-749.
- McDermott, P. A., Leigh, N. M., & Perry, M. A. (2002). Development and validation of the Preschool Learning Behaviors Scale. *Psychology in the Schools*, *39*, 353-365.
- McIntyre, L. L., Eckert, T. L., Fiese, B. H., DiGennaro, F. D., & Wildenger, L. K. (2007). The transition to kindergarten: Family experiences and involvement. *Early Childhood Education Journal*, 35, 83-88.
- Mead, S. (2015). Prek for all. U.S. News. Retrieved from

https://www.usnews.com/opinion/knowledge-bank/2015/03/26/5-reasons-we-needuniversal-pre-k.

- Miller, M., & Goldsmith, H. (2017). Profiles of social-emotional readiness for 4-year old kindergarten. *Frontier Psychology*, 8, 132.
- Monkeviciene, O. (2014). Influence of the early prevention programme "Zippy Friends" on selfdevelopment of children's social competence and establishment of safe emotional environment in educational institutions. *Pedagogy*, *116*(4), 71-93.
- Moraleda, M., González, A., & García-Gallo, J. (1998). AECS. Actitudes y Estrategias Cognitivas Sociales. Madrid: TEA.
- Murray, S., Hurley, J., & Ahmed, S. (2015). Supporting the whole child through coordinated policies, process and practices. *Journal of School Health*, 85(11), 795-801.
- National Center for Education Research. (2011). *Efficacy of schoolwide programs to promote social and character development and reduce problem behavior in elementary school children*. Retrieved from https://ies.ed.gov/ncer/pubs/20112001/pdf/20112001.pdf.

Ohio Department of Education. (2014). Ready for Kindergarten: Kindergarten Readiness
 Assessment Technical Report. Retrieved from
 https://education.ohio.gov/getattachment/Topics/Early-Learning/Kindergarten/Ohios-Kindergarten-Readiness-Assessment/Kindergarten-Readiness-Assessment-for-Data-Manager/KRA\_Technical\_Report\_2014\_Final.pdf.aspx.

- Ohio Department of Education. (2016). *Kindergarten Readiness Assessment facts*. Retrieved from http://education.ohio.gov/Topics/Early-Learning/Kindergarten/Ohios-Kindergarten-Readiness-Assessment/New-Kindergarten-Readiness-Assessment-FAQ
- Pennsylvania State University. (2017). Promoting social and emotional learning in preschool. Retrieved from http://prevention.psu.edu/uploads/files/penn\_state\_middle\_high\_brief\_ final.pdf
- Pianta, R., & Walsh, D. (1998). Applying the construct of resilience in schools: Cautious from a developmental systems perspective. *School Psychology Review*, 27(3), 407-418.
- Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of prekindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child–teacher interactions? *Applied Developmental Science*, 9, 144-159.
- Quesenberry, A., Mustian, A., & Clark Bischke, C. (2016). Tuning in: Strategies for incorporating technology into social skills instruction in preschool and kindergarten. *Young Children*, 71(1), 74-80.
- Ramey, C., & Ramey, S. (2004). Early learning and school readiness: Can early intervention make a difference? *Merrill Palmer Quarterly*, 50(4), 471-491.

Resmovits, J. (2013, February). Obama evaluating early childhood education push in second term. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/2013/01/18/obama-on-education-early-childhood\_n\_ 2455662.html

- Rimm-Kaufman, S., Pianta, R., & Cox, M. (2000). Teachers' judgements of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, *15*(2), 147-166.
- Robinson, C., & Diamond, K. (2014). A quantitative study of Head Start children's strengths, families' perspective, and teacher's ratings in the transition to kindergarten. *Early Childhood Education Journal*, 2014(77), 77-84.
- Rose, E. (2010). *The promise of preschool: From Head Start to universal prek*. New York, NY: Oxford University Press.
- Schell, A., Albers, L., von Kries, R., Hillenbrand, C., & Hinnermann, T. (2015). Preventing behavioral disorders via supporting social and emotional competence at preschool age. *Deutches Aerzteblatt International*, 112, 647-654.
- Schmitt, S. A., McClelland, M. M., Tominey, S. L., & Acock, A. C. (2015). Strengthening school readiness for Head Start children: Evaluation of a self-regulation intervention. *Early Childhood Research Quarterly*, 30, 20-31.
- Snow, K. (2006). Measuring school readiness: Conceptual and practical considerations. *Early Education and Development*, 17, 7-41.
- Sparks, S. (2011). Study finds social skills teaching boosts academics. *Education Week* http://www.edweek.org/ew/articles/2011/02/04/20sel.h30.html
- Spivak, A., & Farran, D. (2016). Predicting first graders' social competence from their preschool classroom interpersonal context. *Early Childhood and Development*, 27(6), 735-750.

- Stefan, C., & Miclea, M. (2013). Effects of a multifocused prevention program on preschool children's competencies and behavior problems. *Psychology in the Schools*, 50(4), 382-401.
- U.S. Census Bureau. (2016). Income data and tables. Retrieved from www.census.gov

U.S. Department of Education. (2015). *Improving basic programs operated by local education agencies (Title I, Part A)*. Retrieved from https://www2.ed.gov/programs/titleiparta/index.html?exp=0

- U.S. Department of Health and Human Services: Annual Update to the HHS Poverty Guidelines, 82 Fed. Reg. Section 673 (2) (2017).
- U.S. Department of Health and Human Services. (2010). National Head Start Impact Study. Retrieved from

https://www.acf.hhs.gov/sites/default/files/opre/executive\_summary\_final.pdf

- Van Lier, P., & Deater-Deckard, K. (2015). Children's elementary school social experience and executive functions development: Introduction to a special section. *Journal of Abnormal Child Psychology*, 44(1), 1-6.
- Vygotsky, L. (1978). Interactions between learning and development. *Mind and Society*, (pp. 79-91). Cambridge, MA: Harvard University Press.
- Webb, L., Metha, A., & Jordan, K. (2000). *Foundations of American education*, (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Pearson Education.
- White, A., Moore, D., Fleer, M., & Anderson, A. (2017). A thematic and content analysis of instructional and rehearsal procedures of preschool social emotional learning programs. *Australasian Journal of Early Childhood*, 42(3), 82-91.

- Williams, J., Landry, S., Anthony, J., Swank, P., & Crawford, A. (2012). An empirically-based statewide system for identifying quality prekindergarten programs. *Education Policy Analysis Archives*, 20(17), 1-37.
- Winsler, A., Tran, H., Hartman, S., Madigan, A., Manfra, L., & Bleiker, C. (2008). School readiness gains made by ethnically diverse children in poverty attending center-based childcare and public school prekindergarten programs. *Early Childhood Research Quarterly*, 23(2008), 314-329.
- Wong, A. (2014). The case against universal preschool. *The Atlantic*. Retrieved from https://www.theatlantic.com/education/archive/2014/11/the-case-against-universalpreschool/382853/.
- Wong, V. C., Cook, T. D., Barnett, W. S., & Jung, K. (2008). An effectiveness-based evaluation of five state pre-kindergarten programs. *Journal of Policy Analysis and Management*, 27(1), 122-154.
- Yates, T., Ostrosky, M., Cheatham, G., Fettig, S., & Santos, R. (2008). Research synthesis on screening and assessing social-emotional competence. *Center of Social Emotional Foundations for Early Learning*. Retrieved from http://csefel.vanderbilt.edu/documents/rs screening assessment.pdf
- Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M., Espinosa, L., Gormley, W., ...
  Zaslow, M. (2013). Investing in our future: The evidence base on preschool education.
  Social for Research in Child Development. Retrieved from https://eric.ed.gov/?id=ED579818.
- Zigler, E., & Styfco, S. (2010). *The hidden history of Head Start*. New York, NY: Oxford University Press.

Ziv, Y. (2013). Social information processing patterns, social skills, and school readiness in preschool children. *Journal of Experimental Child Psychology*, 114(2), 306-320.

# APPENDIX A: SCHOOL DISTRICT APPROVAL

#### 5/31/2018

Mail - smiller&@liberty.edu

Re: Kindergarten Readiness Assessment Scores Data Request for Research

	Mon 11/27/2017 11:36 AM
	To:Miller, Sabrina
	1 attachments (148 KB)
-	
	Sabrina,
/	from 2016-17 that you requested regarding Social Foundation Scores.
(	Dn Mon, Nov 27, 2017 at 9:23 AM, Miller, Sabrina wrote:
	Good Morning,
	My name is Sabrina Miller and I am currently a graduate student at Liberty University pursing my Doctorate in Education. As a part of the requirements, I am completing a dissertation. The title of my dissertation is "The Effects of Pre-kindergarten on Kindergarten Readiness Assessment (KRA) Social Foundation Scores." The purpose of this study is to determine whether attending pre-kindergarten effects students' social foundation at the elementary level. During this study, I plan to examine the differences between students who attend Head Start, private pre-school, school-based pre-kindergarten, or no pre-kindergarten program.
	As a part of this process, I am requesting to use the individual 2016-2017 KRA social foundation scores. I am not requesting any identifiable information from the students, simply the scores and their prior schooling (Head Start, private pre-school, school-based pre-kindergarten, or no kindergarten).
	I am conducting this research to enhance the understanding of the impact of pre-kindergarten education. This study will also provide decision makers and families with data that shows the different impacts that pre-kindergarten environments can have on the overall social development of students. The analysis of this data will only be used in the dissertation and will be available to the Garrett County School System.
	Can you please let me know if this research is possible and what other information is needed to complete this request.
	Thank You,
	Sabrina Miller
h	ttps://outlook.office.com/owa/?realm=liberty.edu 1/2

1/2

### APPENDIX B: IRB APPROVAL

# LIBERTY UNIVERSITY. INSTITUTIONAL REVIEW BOARD

December 13, 2017

Sabrina Bede Miller

IRB Application 2995: The Effects of Pre-Kindergarten on Kindergarten Readiness Assessment (KRA) Social Foundation Scores

Dear Sabrina Bede Miller,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your research with the data safeguarding methods mentioned in your IRB application.

Your study does not classify as human subjects research because it will not involve the collection of identifiable, private information.

Please note that this decision only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued non-human subjects research status. You may report these changes by submitting a new application to the IRB and referencing the above IRB Application number.

If you have any questions about this determination or need assistance in identifying whether possible changes to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely, LIBERTY UNIVERSITY. Liberty University | Training Champions for Christ since 1971

# APPENDIX C: SOCIAL FOUNDATIONS STANDARDS AND SKILLS

#### Common Language Standards KRA 1.5 Content

Domain	Strand	Standard (yellow) Essential Skill and Knowledge (white)	Learning Progression	
	-	Recognize and identify emotions of self and others.	Awareness and Expression of	
	Social	Express, understand, and respond to feelings (emotions) of self and others.	Emotion	
		Look to adults for emotional support and guidance.	Relationships with Adults	
	Emotional	Seek security and support from familiar adults in anticipation of challenging situations.		
	13	Request and accept guidance from familiar adults.		
	1	Manage the expression of feelings, thoughts, impulses, and behaviors.	Self Control	
		Demonstrate the ability to delay gratification for short periods of time.		
	(SF) Approaches to Learning / Executive Functioning Executive Functioning Executive Functioning Executive Executive Functioning Executive Functioning Executive Executive Functioning Executive Functioning Executive Executive Functioning Executive Ex	Demonstrate the ability to persist with a task.	Persistence	
		Focus on an activity with deliberate concentration despite distractions and/or temptations.		
Social		Demonstrate the ability to retain and apply information.		
oundations (SF)		Follow routines and multi-step directions.	Working Memory	
		Use prior knowledge and information to assess, inform, and plan for future actions and learning.		
		Seek and gather new information to plan for projects and activities.	Initiative	
		Express a desire to learn by asking questions and seeking new information.	Initiative	
		Demonstrate cooperative behavior in interactions with others.		
		Interact with peers in complex pretend play, including planning, coordination of roles, and cooperation.	Cooperation with Peers	
		Share materials and equipment with other children, with adult modeling and support.		
	6 110 E	Demonstrate understanding of rules and responsible behavior.		
	Social Studies	Explain how rules promote order, safety, and fairness.	Responsible Behavior	

Source: Maryland Department of Education (2017)