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The Impact of Prior Settings in Early Childhood on Kindergarten Readiness

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BY

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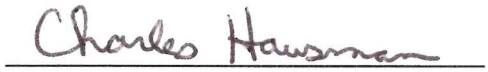

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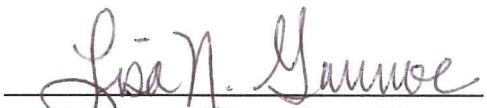

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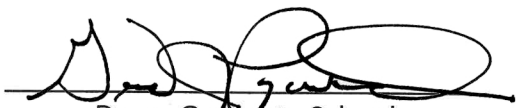

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DOCTORATE OF EDUCATION
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DEDICATION

There is no way I could have pursued this dream without the love, support, and encouragement of my husband, Travis. To say he is my biggest fan would be an understatement. He has stepped in, while I have stepped out, when it comes to family and household responsibilities. Although I don't think he ever saw it as just my dream. He played a crucial role in the completion of this journey. My kids, Grace and Addison, have missed waking up to their Mom on weekends. They missed seeing me at their games and events for several months. They heard the speech a million times about how the sacrifice for all will also lead lots of different benefits for us all, and lots and lots of kids and families. Blessings counted.

I also dedicate this degree to our youngest citizens, without the right to vote, who are being taken advantage of. We ask them to wait until the start of school before they start to learn. Being ready for kindergarten should be a right and not a privilege.

Finally, Molly. My ears perked up the very first time I met her and she said two words that resonated with me heavily. Head Start and Owenton. From there we were classmates and worked in groups together. But, when we decided to focus on the dissertation and be each other's accountability coach, we were set to be lifetime friends. We set timelines and deadlines and met every weekend for months to make sure we were not ABD's for any longer than we had to be. Without her, I would still not be finished with this paper. Blessings counted.

ACKNOWLEDGEMENTS

My dissertation team is an amazing group of educators and I cannot thank them enough. All of the support and guidance through the dissertation process were so helpful. I learned so much through the coursework as well. I was able to meet very talented individuals in the teaching process as well as fellow classmates who have had vast experiences. They have all left an impression on me. Through seminars, group discussions, and classroom interactions, I was able to gain an enormous amount of knowledge and skill.

ABSTRACT

Learning begins at birth, and 90% of the brain is developed by the age of five. This is one reason why it is critical that children spend time in a quality early childhood prior setting that provides continuous opportunities for optimal cognitive and social development. For this study, the researcher examined Brigance Screener scores for all children in Scott County Kentucky that would enter kindergarten in 2018. From that screener, prior early childhood settings information was gathered. The data in this study discovered that children who attended public preschool were more ready for kindergarten than children who did not attend preschool. The study proved that the most kindergarten ready group of students were those coming from private child care centers. The findings of this study are valuable, as Kentucky continues to navigate the best way to prepare the future generation of students.

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CHAPTER 1: INTRODUCTION

The road to kindergarten readiness starts before birth. The most rapid brain growth takes place before a child is 5, the typical age they would enter kindergarten. But, by the time a child enters kindergarten 90% of their brain has developed (Barnett, 1995). As a nation, we cannot continue to underinvest in early childhood education, while simultaneously raising the bar when it comes to the expectations in kindergarten. The cost of not having access to a quality early learning environment puts children in jeopardy of not achieving their full potential (Heckman, 2011). Typically, the age for early childhood education is three to five. When children do not attend preschool they enter the race late, and it is almost impossible to catch up. If a parent decides to send their child to kindergarten at age 5, there are about 1,825 days from birth to the time of kindergarten entry. The Center for the Developing Child at Harvard University reminds us that those 1,825 days are when the brain is growing most rapidly. This is a highly crucial time and quality early childhood education matters. These experiences that occur in early care and education settings can be life altering (The Center for the Developing Child, 2016).

One organization working diligently to create public awareness and response to the early care and education crisis is The Prichard Committee for Academic Excellence, an independent, non-partisan, non-profit citizen's advocacy group. In 2017 they published the Cost of Quality Report and highlighted that Kentucky substantially underinvests in supports for both high-quality child care and preschool. The child care

reimbursement rate for families who receive subsidy in Kentucky is significantly lower than the national average, as is the dollar spent per student in public preschool. Another report, containing a cost benefit analysis, was published by America's Edge Strengthening Businesses Through proven Investments in Kids. The report was titled Strengthening Kentucky Businesses Through Investments in Early Care and Education. That report found that investments made by Kentucky in expanded early childhood education would yield a return of $5 in public and private benefits for every $1 of public investment. Other research from across the country such as the Abecedarian and Perry studies, have found the cost-benefit ratio of investing in early childhood ranging from $2.5:1 to $9:1 (Prichard, 2017). Some states that are influenced by the volumes of research are taking steps to ensure that their youngest citizens have the foundation they need for future success in school and in life. In Kentucky, it is clear that more progress must be made and that investing economically will pay off in the future.

James J. Heckman is a Nobel Memorial Prize winner in economics and a dedicated maven in the early childhood world. His pioneering research and collaborations have resulted in proclaimed publications, that pointed to the significant gains of children in economic and social outcomes when they experience quality early childhood programs. He notes the increased potential for the United States depends on the creation of a problem solving and progressive work force, individuals who are free and innovative thinkers. He speaks to the notion that societies will thrive with people who are inclusive and open-minded and we need a community who works together and shares ideals. Heckman recognizes that these crucial skills are learned through

intentional play, healthy relationships, experiences, and positive interactions. These are the skills and talents get their roots in a quality early learning environment (Heckman, 2013).

Choosing that setting, a quality early learning environment, could be one of the contributions of families to their child's level of kindergarten readiness. However, access to them, and affording the tuition, are challenging for families. There are countless benefits that come from providing families with opportunities for an early start in a quality early childhood program (DeSiato, 2004). There are many factors for families to consider, observe, and ask questions about when choosing where their child will spend most of their time. There are lots of components that influence quality when it comes to early childhood programs. The two most important ones identified by Degotardi (2010) were the teacher to student ratio in the classroom and the education and experience history of the teacher. An environment that is rich in language and literacy encounters, relationships, and physical environment are also attributes of a quality program where children can flourish (Degotardi, 2010).

Because choosing a quality setting is such a task, there are different resources for families to utilize when determining which early learning environment is the best. One of those resources is the National Association for the Education of Young Children (NAEYC). Since the 1920's (NAEYC) has been a trustworthy source for the early childhood community. Focusing on children birth through age eight, NAEYC uses researched based information to create best practice initiatives. Through position statements and their voluntary accreditation program, NAEYC is a valuable and reliable

resource for both families and child care professionals. NAEYC is committed to creating standards that enhance children's outcomes by providing the foundation they need; not just academically but including all areas of development; cognitive, emotional, physical, and social. A quality early learning environment as defined by NAEYC encompasses these 10 standards:

Relationships- "The program promotes positive relationships among all children and adults. It encourages each child's sense of individual worth and belonging as part of a community and fosters each child's ability to contribute as a responsible community member (NAEYC, 2008)."

Curriculum- "The program implements a curriculum that is consistent with its goals for children and promotes learning and development in each of the following areas: social, emotional, physical, language, and cognitive (NAEYC, 2008)."

Teaching- "The program uses developmentally, culturally, and linguistically appropriate and effective teaching approaches that enhance each child's learning and development in the context of the curriculum goals (NAEYC, 2008)."

Assessment of Child Progress- "The program is informed by ongoing systematic, formal, and informal assessment approaches to provide information on children's learning and development. These assessments occur within the context of reciprocal communications with families and with sensitivity to the cultural contexts in which children develop (NAEYC, 2008)."

Health- "The program promotes the nutrition and health of children and protects children and staff from illness and injury. Children must be healthy and safe in order to

learn and grow. Programs must be healthy and safe to support children's healthy development (NAEYC, 2008)."

Teachers- "The program employs and supports a teaching staff with the educational qualifications, knowledge, and professional commitment necessary to promote children's learning and development and to support families' diverse needs and interests (NAEYC, 2008)."

Families- "The program establishes and maintains collaborative relationships with each child's family to foster children's development in all settings. These relationships are sensitive to family composition, language, and culture. To support children's optimal learning and development, programs need to establish relationships with families based on mutual trust and respect, involve families in their children's educational growth, and encourage families to fully participate in the program (NAEYC, 2008)."

Community Relationships- "The program establishes relationships with and uses the resources of the children's communities to support the achievement of program goals. Relationships with agencies and institutions in the community can help a program achieve its goals and connect families with resources that support children's healthy development and learning (NAEYC, 2008)."

Physical Environment- "The program has a safe and healthful environment that provides appropriate and well-maintained indoor and outdoor physical environments. The environment includes facilities, equipment, and materials to facilitate child and staff learning and development (NAEYC, 2008)."

Leadership and Management- "The program effectively implements policies, procedures, and systems that support stable staff and strong personnel, and fiscal, and program management so all children, families, and staff have high-quality experiences (NAEYC, 2008)."

Within these standards NAEYC provides rational, supported by research of why each of these components is critical to the holistic development of young children (NAEYC, 2008).

In addition to ensuring cognize and social development, the importance of a quality early childhood education has been immensely researched in the areas of improved health, increased cognition, decreased risk for incarceration, and an improved chance for school readiness and success (Weikart, 1967). Before, much research had been conducted on brain development it was believed that genetics were the key factor to determining intellect. However, research has proven that it is genes coupled with experiences that matter most. This is really the quintessential match that promotes optimal growth (UNICEF, 2014). Educational experiences created in the classroom, by highly trained and experienced teachers, can improve cognition and prepare children for a love of learning. A literacy rich environment will foster knowledge. Social and emotional recognition, navigation, and maturation are a gigantic part of early childhood education. Building strong parental involvement and school familiarity will help create a positive relationship between the family and the school early on. The importance of these tools and these relationships are immeasurable (Weikart, 1967).

In Kentucky, all students entering kindergarten are assessed using the Brigance assessment tool. The Brigance Early Childhood Screening assesses multiple key domains of early childhood functioning, such as language development, literacy, mathematics, and physical health and development (Glascoe, 2010). The Brigance is administered by a trained screener and usually takes 10-15 minutes to complete. This screener is given to students within the first 30 days of kindergarten. The screener is aligned to both Kentucky's School Readiness Definition and Kentucky's Early Childhood Standards. In Kentucky, school readiness is defined as a child entering school prepared to participate and benefit from, early learning experiences that promote the success of the child (Governor's Task Force on Early Childhood Development and Education, 2015, para. 2). The Brigance is sufficiently sensitive, correctly identifying children with delays or difficulty 82% of the time (Glascoe, 2010). The Brigance has also shown strong internal consistency, test-retest 28 reliability, and inter-rater reliability as well as strong construct validity, concurrent validity, predictive validity, and discriminant validity (Glascoe, 2010). There are limitations to the Brigance that will be addressed. NAEYC additionally has a positon statement on the assessment and screening of young children. NAEYC identifies three goals for assessing and screening. The first goal is to make sound decisions about teaching and learning. The evidence should be used for improvement. The results should be combined with an intended purpose that is rooted in ethical principles. Secondly, it is used to identify concerns. In order for the screening tool to be effective, it needs to de developmentally and characteristically important. It must consider the child's culture, home status, socio-economic status, abilities and

home language. The evidence can be used for improvement, but the screener must take many factors into consideration. The third goal is to improve intervention. For this to be successful families and teachers must be knowledgeable about screening. Follow up must occur for early intervention to have progress (NAEYC, 2008). There are skills and abilities that cannot be addressed or measure by a screener. Some critics argue that the Brigance Screener is not a good predictor of kindergarten readiness. There are limitations and there are variables that cannot be controlled.

When children are enrolled in high quality early childhood prior settings, it has been proven with research that there is increased school readiness and success (Braverman & Gottleib 2014). However, children can be enrolled in early childhood programs of varying quality and environments. In Kentucky licensed early childhood programs and homes that wish to receive subsidy must participate in a state-monitored quality rating system. They must also obtain a rating of 3 or above. This program is called The Kentucky All Stars Program. This rating system gives programs a 1-5 rating based on the results of an environmental ratings scale conducted in their classrooms. It is a comprehensive rating system that has numerous components of quality for the child care center and its staff (Willoughby, 2017). The reality is, children are being enrolled in early learning programs that may be achieving a 3, 4, or 5. There is a gap in the level of quality in those settings. The child that went to the level three program will enter kindergarten with the same expectations as the child who was lucky enough to go to the level 5 center. The experiences that might lead to increased readiness levels could be

different for those children. Families should have access to quality when it comes to child care, no matter what their zip code or financial status. Brains are built, not born.

The current infrastructure of early childhood in Kentucky is complicated. This makes the awareness level that may lead to decision making difficult for parents. There are basically three silos of early childhood education for Kentucky. The first is public preschool programs which are normally found within the walls of public schools. The qualifying requirements and funding are different in each state. In Kentucky, a child can qualify for preschool at the age of three only if there is a diagnosed disability or developmental delay. A child who is four can enter the program based on the family's gross income earnings, or also with a developmental need. In districts that have low public preschool enrollment, there are paid enrollment slots that children without a delay, disability, or qualifying income have access to enroll in.

Second, they are recognized as private preschool programs that are corporate, individually owned, or administered by churches. Typically, children can enter these programs when they are 6 weeks old. These programs are regulated by the Office of Inspector General for the Commonwealth of Kentucky to ensure basic health, safety, and educational needs are being met. These owners and directors of these programs are held to a standard of care. There are low educational requirements for administration and teaching staff. The education requirement for a licensed child care center is a High School Diploma. The workforce of most privately-owned child care centers is grossly underpaid and receive minimal, if any benefits (Razavi & Staab, 2010). The level of quality they provide is self-determined. While there are some programs of

high quality, the bottom line is what often is most influential when making decisions that would impact outcomes for the children who attend (Brownlee et. al., 2009).

The third is our federally funded Head Start programs. Early Head Start is a program for children ages 18 months to 3 years of age. There is also a home visiting option for children who are on the waiting list for the school-based enrollment. Head Start begins at age 3. Children gain access to these programs based on their family's income. The Health and Human Service Poverty Guidelines and Section 645 of the Head Start Act are used to determine income eligibility for participation in Head Start and Early Head Start programs (Department for Health and Human Services, 2017).

If policy and legislation were created to make preschool available to all children starting at the age of three or four, the will enable children to receive one or two years of early education in a setting where credentialed teachers who have experience working with young children can meet the educational, social, and emotional needs of our youngest citizens. In 2015 60% of Kentucky's three and four-year-old children were not in school (factfinder2.census.gov/). Research, while limited, indicates that the exposure to the school environment allows students to have increased access to hearing multitudes of vocabulary (Fish & Reynolds 2010). Students, especially those at risk, need to have a quality early childhood experience to meet their educational, social, and mental health needs (DeSiato, 2004).

When children are attending quality early childhood programs prior to entering kindergarten, they have access to more learning and social time. They have the ability to engage in the learning process early when the brain is most active in the growth

process (Gopnik et al., 1999). Teachers can get students absorbed in the learning process because they are familiar with the routines of school and have a strong foundation built for the learning process to continue (Miller & Bassok, 2016). Without a healthy balance of cognition, mental health and social well-being, a student cannot bloom to their full potential. A student may not be able meet the demands of kindergarten when they are unprepared. Changes that reflect the optimal learning environment for children should be made to the education system to ensure that every child has an opportunity to start their school career with the tools they need for success. As the number of state funded prekindergarten programs grows, it is important to determine how effective they are in improving children's learning and development as they enter school. While research has found that preschool children vary considerably in their pre-education experiences as well as their readiness upon entry into formal education, the literature also notes that children's skills at school entry are highly correlated with later abilities and educational outcomes (Duncan et al., 2007). Therefore, assuring early competence is important.

There have been research studies and articles published about the increasing expectations for children entering kindergarten. In 2009 Alliance in Childhood published a report titled Crisis in Kindergarten. It cautioned that the kindergarten as we knew it had drastically changed. The developmentally appropriate practices were replaced with academic pressures that led to a focus on skill building, but in all the wrong ways. The play based and experience learning were a thing of the past. The rigor of this grade level is steadily and quickly increasing. Many comments from parents and teachers

about kindergarten being the new first grade has administrators and policy makers thinking quickly and creatively about how we can ensure that students entering kindergarten are prepared for what will be expected of them (Miller & Almon, 2009).

Early development is influenced by parenting knowledge and interaction (Chazan-Cohen et. al., 2008). The 30-million-word gap research has been cited countless times for its astounding discoveries on the language gap that exists between children of socio-economic stability and poverty. Psychologists Betty Hart and Todd Risley conducted a study that highlighted the staggering statistic that children in poverty hear 30 million less words by the age of four compared to kids who live above the poverty level (Hart & Risley, 2003). Children living in the disadvantaged group need access to school before the academic pressures of kindergarten create a feeling of dread towards school.

Teachers need access to children during the years of early childhood education so they have a chance to minimize if not completely close the gap that exists between rich and poor students. Todd and Risley point out that children who are in homes where learning experiences happened through everyday life and where financial stress is limited have an advantage. This small step ahead, with children who receive quality early learning experiences, develops into giant leaps ahead in skill level. These gaps will continue to present obstacles in life that can effect health, income, and well-being (Shonkoff, 2010).

For the purpose of this study, the student population of Scott County Kentucky were selected. The Annie E. Casey Foundation, & Center for the Study of Social Policy in

2017 published the Kids Count Data Book. This data based resource identifies by county, in each state, the number of children who are identified as Kindergarten Ready based on the Brigance Screener. In Scott County the percentage of students who enter kindergarten ready to learn as defined by the Commonwealth of Kentucky was in 2016 were 49.2% percent. Parents with low educational attainment do not have the child development knowledge to identify developmental delays that could be decreased with early intervention. When children are enrolled in quality early childhood programs, trained teachers are able to detect potential issues early that could influence a child's development.

There are over 1,000 All STAR rated child development centers in Kentucky (Mitchell, 2012). The Kentucky ALL STARS is a quality rating system that Kentucky has in place to identify child development centers that are performing above the minimal licensing standards. Programs that participate in this voluntary program will receive a score of 1-5 stars based on the outcome of the rating visit. The rating visit includes a comprehensive review of program standards as well as an Environmental Rating Scale (ERS) score that will indicate the level of quality for the program. All programs that receive public funds, including child care centers, Head Start and public preschool, are required to participate in Kentucky All STARS. Child care centers, Head Start and public preschool programs that do not receive public funds are also eligible to participate in Kentucky All STARS. The unified system is based on Kentucky's Early Childhood Standards and research-based indicators of quality. Kentucky All STARS purpose is to recognize programs that have made a commitment to continuous quality improvement

and provides programs with additional support including training, technical assistance and coaching. In 2016 the quality rating system was revised. With these revisions came a re-certification process for its participants. In the re-certification process, public preschool classrooms were automatically given a score of 3 out of 5, leaving little or no incentive to go beyond that level of quality (Mitchell et al., 2015).

Entering kindergarten prepared has a lasting impact on the educational future of each child. The chances of a child going to college is also influenced by SOS (Duncan et al., 1998). Kindergarten readiness not only effects the ability to learn in the short term, but has lasting impacts on the students learning style throughout their academic career (Ansari & Crosnoe, 2016). Half of the children in Kentucky who started kindergarten were classified as not ready based on their Brigance screening assessment score when they entered school in 2016 (Kentucky Department of Education). Brigance is a screening tool widely used by schools for students in Pre-Kindergarten, Kindergarten and First Grade. The test is not an IQ test nor is it a full-scale educational assessment, it is a norm referenced test that compares each child's results with the performance of other examinees. Brigance Testing covers a variety of school-based curriculum topics through a series of 12 assessments, including language development, science and math proficiencies and gross motor skills. The test is administered in a one-on-one setting and takes approximately 15 minutes. In many schools the test can be done by the reading specialist, the classroom teacher, or school psychologist. The test is scored by the test administrator in 3 steps. First, the administrator scores each of the 12 assessment areas individually. They do this by multiplying the total correct answers for that section by a

specific point value per question. Each section has questions weighed at a different amount based on the skill level required and age of testing. For example, a Kindergartener will only get ½ point for each uppercase letter named correctly but gets 3 points for each correct question related to number readiness. Second, after they have determined the child's scores for each section, they compile the results. The test is based on a total score of 100 points. Third, the total score is compared to a national average scale to indicate if the student is above, below, or of average ability level (Glascoe, 2002).

The quality of and access to the early childhood experiences, and who should fund it, is a debate that has garnered interest from both sides of the political aisle. There is bipartisan support of early childhood development. Research supports that the success of a child in school depends on what types of interaction and experience take place before they enter school (Jemison, 2002). According to statistics about 98% of age eligible children attend kindergarten each year (West & Brick, 1991). All of these children are coming from immensely different backgrounds. These children also have varying early childhood experiences and prior knowledge. Some have spent time in private child care, public preschool, Head Start, or have no formal early learning experiences at all.

Problem Statement

School readiness is defined as each child enters school ready to engage in and benefit from early learning experiences that best promote the child's success (Governor's Task Force on Early Childhood Development and Education). Kindergarten

readiness test scores for Kentucky in 2016 reveal that 50.1% children are starting their school career not school ready as defined by the taskforce (http://kidscount.org). Increased academic expectations for Kindergarten require greater availability of quality early childhood education programs. Access to quality child development programs are limited. The financial burden that parents are faced with cripple their decision making (Feller et al., 2016). Families are making decisions that will ultimately affect their child for the rest of their life. The average cost of early childhood programs is about $10,468 a year. Nearly one in three families spend 20 percent or more of their annual household income on early childhood tuition (Herbst, 2018).

There should be more public preschool availability and funding to meet the need for children to be kindergarten ready. Quality public preschool should be funded to the cost of quality outlined by the Prichard Committee's Cost of Quality report. This is a step toward ensuring the critical foundation of knowledge for students need to be school ready and successful in life. In 2016 there were 35,511 children enrolled in public preschool or Head Start. That is only 30% of Kentucky's children and we are currently coming in near the bottom for overall preschool enrollment for our states compared to others in the nation (http://kidscount.org). Some of the children who are unable to attend one of these programs will most likely live below 200% of the poverty line (factfinder.census.gov). This means that children will be exposed to different experiences for learning based on the parental interactions and environments where they live.

The scholastic gaps that are present at the beginning for socio-economically disadvantaged children will only grow without increased access to public preschool. The increased frustration surrounding the struggle to meet the expectations of school can lead to more students dropping out of school. This is a cycle that must be broken. Our educational system must expand its funding to include the young developing minds of young learners. Our society depends on it, and will benefit from it. In 2005 research highlighted the astonishing statistic that for every $1 we spend on quality early childhood education we save $12. There is decreased crime, lower rates of placement in special education, increased level of taxes from higher earnings, and less reliance on public welfare (Schweinhart, 2005).

The economic advantages of an early start in a quality early learning program have been researched and proven. James Heckman, a Nobel Memorial Prize winner in economics is dedicating countless time and resources to educate society on the 13.1% return on investment that is gained by investing in quality early child care and education. Heckman's research has proven that there are increased benefits in social and economic outcomes for children who have access to quality early learning environments. There are also increased health benefits for children who attend quality programs. All of these positive results warrant a change in the focus of our educational roadmap. Early childhood education implemented with fidelity, through publicly funded preschools, who offer full day services will increase the kindergarten readiness scores for our state. When we have students who are more prepared we have citizens who thrive (Heckman, 2013).

Research Questions

1. Does participation in prior early childhood settings increase kindergarten readiness outcomes for children?
2. Which prior early childhood settings will have the greatest impact on kindergarten readiness when considering these four categories; Public preschool, private childcare, Head Start, or no prior setting?

Significance of the Study

This study has significant implications for public policy and funding of public preschool education, school district practice, and program development. The purpose of this quantitative study is to use data to demonstrate differences in preparedness for children entering kindergarten from four areas:

- Not attending preschool
- Attending public preschool
- Attending a private child care center
- Attending Head Start

This information can be used to guide educational policy decisions. There is an immediate need for adequate funding to create an educational system that gives every child the best start to their school career. The researcher believes that with increased availability for public preschool more children can enter Kindergarten ready to learn and equipped to live a better life (Barnett, 1995). Public preschool should be available to all children regardless of income of ability. All children should have the opportunity to attend these programs to better prepare them for academic achievement (Cascia & Schanzenbach, 2013).

Early learning experiences, that occur in quality prior early childhood settings, are critical to the growth and development of young children during the early stages of their lives. These early stages of growth and development should include learning experiences from a positive environment that includes social-emotional, cognitive, and physical activities that will enable children to build that strong foundation of skills that will enable them to be kindergarten ready (Frabutt & Waldron, 2013).

The early formative developmental experiences that early learners encounter from ages 0 to 5, categorically support and shape their young lives academically and in many other ways. A child's social environment is important in the progress of early stages of development (Frabutt & Waldron, 2013). In addition, these early formative developmental contexts can be experienced while a child receives a solid foundational education through an early childhood setting. As children enter this phase of developmental (foundational) learning, experiences should include early skills in literacy, science, math, and language development. As children are receiving foundational skills, an understanding of how to prepare early learners accurately for kindergarten readiness is important. In order for early learners to experience effective pre-academic skills before kindergarten, many early childhood programs are moving towards implementing more highly-skilled practices (Reynolds et al., 2010). According to L. Goldstein (2007), early childhood education has been transformed because of the overall expectations and goals related to pre-academic skills. In essence, teachers of early learners are required to not only meet early learners' physical and emotional needs, but they must also ensure all early learners are equipped with pre-academic skills

for kindergarten readiness (Goldstein, 2007). To emphasize the importance of the varying values of early learning, many states have taken steps to develop and implement standards for preschool learning (Hatcher et al., 2012).

Limitations of the Study

Two of the limitations for this study are, teacher or program effectiveness, and facilitator reliability of the Brigance screening tool. The level of quality for the early childhood program that children are exposed to, the level of teacher education and training, and the professional abilities of the teacher were not measured. The environment of the early learning setting is impactful but were not factored in for the purposes of this study.

The Brigance screener is used to asses children in various settings. The assessor can also vary. The assessor could be a kindergarten teacher, family resource coordinator, principal, or another school administrator, or paraprofessional who is administering the test to incoming kindergarten students. This is a fidelity issue because of various factors. The comfort level of the child with the adult, the adult's capability and comfort level of delivering the screener, the mood of the child at that time, and their social comfort level (Gredler,1997). The child may also know all of the information that is trying to be gathered but are too shy to communicate with someone they do not know. For an outgoing child who is enthusiastic about showing others what they know this process is perfect. But, for a shy and timid child who has no idea how important this data collection process is, this process is broken. It does not give the child a chance

to show what they know. It is possible that this anxiety towards testing is put in motion at the beginning of the test taking environment that school has become.

Hypothesis

Children who have access to public preschool are more prepared for kindergarten, as determined by the Brigance Early Childhood Screener, than children who are entering from private child care centers or who have no prior early childhood experience before entering kindergarten.

Research Method

For this study, the kindergarten readiness scores were the dependent variables. The independent variables are the factors that can potentially impact readiness. Such as, having an early childhood experience prior to entering kindergarten and the child's family socio-economic status. Data for this study were individual child data from Scott County School in Kentucky.

In order to determine if prior settings in early learning had an impact on Kindergarten Readiness as measured by the Brigance Kindergarten Screener, scores of students who had an early education experience in a prior setting such as preschool, Head Start, private child care, were compared to students with no prior setting. Students were identified as kindergarten ready, ready with support, or ready with enrichments. A Chi-Square test to show significant relationship between having an early childhood experience and kindergarten readiness.

Definition of Terms

This study attempts to identify which prior early childhood setting best prepares children for kindergarten. The following terms are defined in order to clarify their usage during the study. These terms were gathered from the Merriam Webster Jejunum. (2003) In Merriam-Webster's dictionary (11th ed.). Springfield, MA: Merriam-Webster, Inc.

Quality Indicators are refer to characteristics of child care that are considered to be the best practice by accrediting bodies and by a review of research-based literature.

Kindergarten Ready means that a child enters school ready to engage in and benefit from early learning experiences that best promote the child's success.

Kindergarten Ready with support indicates that a child is not ready for kindergarten.

Kindergarten ready with enhancements are children who are above the level determined to be kindergarten ready.

What score must a student receive in order to be considered Kindergarten ready? The Brigance Screener- Kentucky's Common Kindergarten Entry Screener, the BRIGANCE Early Childhood Kindergarten Screen III, provides assessment of a child's development in five areas: Academic/Cognitive, Language, Development, Physical Development, Self-Help and Social-Emotional Development.

Public Preschool is preschool services that are operated by the local school system. Kentucky's preschool education programs are available for all four-year-old children whose family income is no more than 160% of poverty; all three and four-year-

old children with developmental delays and disabilities, regardless of income; and other four-year-old children as placements are available based on district decision. The preschool program is designed to be developmentally appropriate for young children.

Developmentally appropriate is defined in law to mean that the program focuses on the child's physical, intellectual, social and emotional development, including interpersonal, intrapersonal, and socialization skills. Also refers to activities and materials that meet the learning needs and developmental milestones of the children enrolled in the child care program.

Head Start is a program of the United States Department of Health and Human Services that provides comprehensive early childhood education, health, nutrition, and parent involvement services to low-income children and their families.

Private Preschool is a program where preschool curricula is utilized but not regulated by the department of education. These programs are regulated by the office of inspector general for Kentucky.

Child care refers to the early education program the child is enrolled in and the type of care (basic needs and education) that each family selects for their children when the child is apart from the adults in the family.

Child care Provider refers to the adult caring for a young child in an early childhood education program. This title is also considered the classroom teacher.

Quality Indicators refer to characteristics of child care that are considered to be the best practice by accrediting bodies and by a review of research-based literature.

School Readiness Curriculum refers to an early childhood education curriculum that prepares the children to be successful when entering a kindergarten classroom. This type of curriculum furthers the children's development in cognitive skills and problem-solving, social and emotional development, language development, fine and gross motor skills, self-help skills, physical health and nutrition, and pre-academic skills.

Family Systems Theory as defined by the Bowen Center for the Study of the Family states that this is a theory of human behavior that views the family as an emotional unit and uses systems thinking to describe the complex interactions in the unit. It is the nature of a family that its members are intensely connected emotionally.

Resiliency is an ability to recover from or adjust easily to misfortune or change.

CHAPTER 2: LITERATURE REVIEW

This literature review will begin by reviewing the historical journey of early childhood education. It will illuminate the benefits of quality early childhood experiences. Additionally, there is brain development research to consider. There are articles that denote best practice in terms of a quality public early childhood programs. Attributes of kindergarten readiness will be highlighted. All of the factors mentioned above are important elements to consider as the educational framework is redefined to include public preschool programming across the nation. Additional literature regarding variables that influence kindergarten readiness such as prior settings where children received early education experiences will be discussed. The purpose of this literature review is to validate the need for all students to have access to quality early childhood programs.

Historical Framework of Early Childhood Education

One primary focus of early childhood programing since its induction was to decrease poverty and increase prosperity. With the Industrial Revolution keeping mothers busy in factories, infant schools were established. The first infant school in the United States were started in Boston, Massachusetts in 1828 (Vinovskis, 1992). While their publicized reason for these schools were to care for infants while their mothers were working, there were an underlying social justice outreach. Civic minded individuals assumed that children from poor families needed morality and character training in order to be a good citizen later in life. Thus, the very first infant schools were derived from social elites who had a desire to ensure morality across all economic levels

(Cahan, 1989). When more affluent families began to want to take advantage of these early educational opportunities, private infant schools were established in progressive cities. These schools focused on early education. Since these were economically advantaged families, morals were expected to be taught at home (Cahan, 1989). The concept of early learning and appropriate child development practices were on the horizon.

Infant schools enrolled children from 18 months to 4 years-old. In 1840 Massachusetts had 40% of their 3-year-olds enrolled in a private or public infant school. Unfortunately, this quickly growing phenomenon of early education were cut short. A book was written by Amariah Bringham in 1832 titled *Influence of Mental Cultivation and Mental Excitement.* Bringham was a self-proclaimed psychologist most noted for his Liquid Brain Theory. He named the primary cause for insanity as "the predominance given to the nervous system by too early cultivating the mind and exciting the feelings of children." He debated through his liquid brain theory message that an infant who is exposed too early learning stresses the brain. He argued that learning too early causes stunted growth and brain deterioration. Magazines and Journals that previously supported the infant schools now turned against them. Donations to these schools abruptly stopped and due to lack of funding these schools closed. The social determination was made that infants are best served in their homes with their mothers (Vinovskis, 1999).

This theory and body of research had serious detrimental implications for child development. Auspiciously, knowledgeable psychologists like Jean Piaget and Lev Vygotsky came onto the scene with research based theories that change the trajectory of child development. Both placing great emphasis and importance on child development and the early years of learning and experiences. Jean Piaget is responsible for developing entirely new fields of scientific study, having a major impact on the areas of cognitive theory and developmental psychology. Swiss psychologist Jean Piaget (1896-1990), created a cognitive-developmental stage theory that described how children's ways of thinking developed as they interacted with the world around them. Piaget's theory has four stages: sensorimotor, preoperational, concrete operational, and formal operational. The relationship between play and cognitive development is described differently in the two theories of cognitive development which dominate early childhood education (Keenan et al., 2016).

Piaget in 1962 defined play as assimilation, or the child's efforts to make environmental stimuli match his or her own concepts. Piagetian theory holds that play, in and of itself, does not necessarily result in the formation of new cognitive structures. Piaget claimed that play was just for pleasure, and while it allowed children to practice things they had previously learned, it did not necessarily result in the learning of new things. In other words, play reflects what the child has already learned but does necessarily teach the child anything new. In this view, play is seen as a "process reflective of emerging symbolic development, but contributing little to it" (Johnsen & Christie, 1986). In contrast, Vygotskian theory states that play actually facilitates

cognitive development. Children not only practice what they already know-they also learn new things. Observations of children at play yield examples to support both Piagetian and Vygotskian theories of play. Whether children are practicing what they have learned in other settings or are constructing new knowledge, it is clear that play has a valuable role in the early childhood classroom (Baldwin, 1967).

Impact of Brain Development Research

In the 1960's new research about brain development that was published by J. McVicker Hunt. Her book, titled *Intelligence and Experience,* proved to be heavily influential to the field of early childhood. She determined that early experiences could absolutely contribute to intellectual development and brain function (Hunt, 1961). In 1964, Benjamin Bloom made revolutionary discoveries with his book, *Stability and Change in the Human Characteristics*. Bloom integrated longitudinal data from the past 50 years to conclude that there was precipitous brain growth in the first 4 years of life as opposed to a slower rate of growth in the later years. Bloom concluded early childhood education experiences had a great effect on the child's approaches to learning (Cahan, 1989). Approaches to learning encompasses a child's ability to adapt to challenges and flexibility in thinking. How curious are they about learning and how eager are they to incorporate new ways of completing tasks? These skills are an integral part of a successful learning process. A child's approaches to learning will be the foundation. Future skills set accomplishment and mastery will depend upon objectives met in a quality early learning environment (Cascia & Schanzenbach 2013).

The works of Bloom and Hunt were highly regarded. It was made clear that policy should be created to maximize the small window of time that the brain is growing. Their research and findings were in line with the socially charged atmosphere of the United States. In 1964 President Johnson declared the War on Poverty. A war the United States still fights today. Almost immediately a panel of experts were established to create a child development program that could accommodate the needs of communities and families in disadvantaged situations. A panel of participants consisting of pediatricians, child development experts, researchers, educators, and administrators made a recommendation to the Office of Economic Opportunity. They endorsed the commitment that preschool programs exist in order to ensure that children in poverty have access to programs that enable them to succeed in school and in life. Early childhood education and experiences are once again a suggested ingredient for the recipe to end poverty (Cahan, 1989).

The federally funded program that was created in 1965 would be Head Start. It was created to combat the effects of poverty on children and their educational success. It was also created as a holistic approach to meet the needs of the family, not just the child. Emotional, psychological, social, health, and nutritional needs would be addressed in this program to enable economically disadvantaged children the opportunity to break the cycle of poverty (Zigler & Valentine, 1979). As of 2017, about 32 million children and their families have been served by this Head Start. Head Start is administered by the Administration for Children and Family in the Department of Health

and Human Services. Head Start is available in all states and serves about a million children and families each year (Delalibera & Ferreira 2019).

Head Start supports and promotes the message that parents are their child's first teachers. This program is not only designed to support children and create impactful environments for them, but it serves a tool for serving the family. Head Start serves the family holistically by giving parents an opportunity to gain skills for the workplace and enhanced parenting abilities. Building this home-to-school connection early for families is a healthy routine. The goal is that this will continue throughout their school career (Mantzicopoulos, 1997).

Importance of School Readiness

It was in 1989 that President Bush proclaimed that all children in America would be ready to learn when they started school (Klein, 2014). While the goal of every child entering school ready to learn is commendable, "readiness" is too generally defined and has varying meanings to different people. Kindergarten readiness for teachers, parents, administrators, and community members have much variation. The skills that children are expected acquired before they enter kindergarten have increased tremendously. These expectations keep growing and growing. However, the support for quality early learning programs that will equip children with these skills are not available to all children (Burkham, Lee 2002).

School readiness skills enable our students to accomplish the educational, emotional, and physical objectives that have been established by our educational system. A comprehensive blueprint for a successful universal preschool education

system for all children does exist. But, the current funding available for public schools is so minimal. Budget cuts are closing programs and forcing administrators to make impossible choices. However, policy makers cannot ignore the enormous and significant benefits of quality early learning experiences like public preschool. All children should be on the same path to kindergarten readiness. Research findings indicate that not only children from low socio-economic backgrounds benefit from quality early childhood experiences but all children gain from this experience (Magnuson et al., 2007). Research has determined that there are four social factors that have influence on a child's development and school readiness level. Those indicators are: family, health, the educational system, and the child care system (Chapman & Scott 2001).

There are successful ways to measure the physical, academic, and social emotional readiness of children. A study called, *The Effects of State Prekindergarten Programs on Young Children's School Readiness in Five States* were able to conclude that children who were exposed to a quality state-funded preschool experience gained significant growth in the areas of literacy, math, and vocabulary. These five states in the study included Michigan, New Jersey, Oklahoma, South Carolina, and West Virginia for a total of 5071 children. The findings of this study indicate that there are greater gains in school success for children who are enrolled in quality state-funded preschool programs. There are comprehensive gains in critical skills that children need for school readiness and achievement. The increase in skills were studied over a period of one year. A common factor across the study was that almost every teacher in these state-funded programs had a four-year degree in the field of early childhood education. The

same level of education cannot be assumed for teachers in child care or Head Start classrooms. It can be concluded from this study and others that the type of early learning program that students are enrolled in makes an impact on the level of skills gained during this early educational experience (Barnett et al., 2008).

The U.S Department for Education Early Childhood Longitudinal Study Kindergarten Cohort (ECLS-K) gives staggering statistics and findings about the cognitive gap that exists within children before they enter kindergarten. This longitudinal study captured pre-kindergarten test scores in literacy and math based on race, ethnicity, and socio-economic status. The report highlights the fact that the public is well aware of the gap. But, what is not highly publicized, are the challenges that these children are facing at home that are preventing them obtaining equity from their school experience. Once children get to school this gap is carved into a gorge by our current educational structure. Kids are separated by level of achievement and schools receive funding based on attendance. Children who are able to participate in an early learning experience get to practice being at an educational facility each day. They are accustomed to this routine of attendance. When children do not have access to this routine early, a vicious and unrelenting cycle begins and the people who are suffering are children (Duncan, Yeung, Brooks-Gunn, Smith 1998). It must be considered that not all children have access to a quality early childhood program that can teach students the prerequisite skills necessary prior to entering Kindergarten (Havnes & Mogstad, 2015). With the new cognitive, social and emotional objectives that students are expected to master while in kindergarten, educators, policy makers, and administrators are taking a serious look at

the early childhood experiences that are affecting students' progress and readiness level (Magnuson et al., 2007).

Within Family Systems Theory the focus is on with how we relate to one another. What does it mean to say a family is a system? A family is greater than the sum of its parts. As members of a family system every member is interconnected. Movement of one affect the whole system. We build a collection of interactions called a system. The system can be a family or a workgroup or a collection of friends. Our focus is on the system rather than just on individuals. With the system there are qualitatively different elements that help determine what we are and what we can become. Families are systems of interconnected and interdependent individuals, and to understand the individual, we must understand the family system of that individual. People cannot be understood in isolation from one another (Kerr, 2000).

Dr. Nicholas Long and his works with the Conflict Cycle is a crucial resource for individuals working with kids and families. This model is a reminder of how interconnected family and school life is. Issues that children are experiencing at home, will have an effect on their outcomes in the classroom. Teachers must engage students in a way that is non-threatening and proactive. When an awareness of home life exists, and considerations are made, students are able to feel respected and cared for. These feelings are important to foster increased success in learning (Long, Morse, 1996).

Benefits of Quality Early Childhood Experiences

When considering standards and practices that will promote optimal outcomes NAEYC provides a benchmark for quality programming. The NAEYC also serves as a

supporting organization for early childhood teachers and professionals. Another leading organization in best practice is ZERO TO THREE. This organization supports the caring adults who touch the lives of infants and toddlers to maximize the long-term impact in ensuring all infants and toddlers have a bright future. ZERO TO THREE has been forward-thinking and progressive in their messaging on the proven power of nurturing relationships. Both of these entities focus heavily on the building relationships aspect of quality (ZERO TO THREE, 2015).

This theme of relationship, and how they touch all aspects of learning, is also the forefront of Dr. Larry Brendtro's work. The Circle of Courage is a model of positive youth development based on the principles of belonging, mastery, independence and generosity. The model integrates the cultural wisdom of tribal peoples and findings of modern youth development research. In the belonging principal it states that a child cannot fully engage in the learning process without having a positive relationship. Children learn best from people with which they have a secure attachment. Relationship is the number one standard listed for the NAECY indicators of quality. In mastery, there must be peer learning and goal setting. Respect for independence and responsibility are highly valued. Children are a part of the learning process. Their interests are considered when learning objectives are created. These are also aspects of quality mentioned in the NAEYC standards (Brendtro et al., 2005).

The importance of an effective early childhood education program is critical if students are to be ready to meet the academic rigor which now awaits them in kindergarten. Although learning can occur at any age, starting a child off with a solid

foundation rooted in knowledge and skills necessary for future school success is advantageous. Early childhood development lays the foundation for future learning and economic growth (Washington et al., 2006). By the time children reach kindergarten, they are expected to have specific social, cognitive, and motor skills to handle the increasing demands of classroom learning (Boyd et al., 2005). Children who enter kindergarten without the social, emotional, and academic readiness tend to remain academically behind and risk harmful behaviors in adulthood such as dropping out of school, criminal behavior, and unemployment (Stredron & Berger, 2010). Davis and Gardner (1993) found that laying a strong foundation in the early years makes learning in the future possible. Takanishi and Kauerz (2008) add that the years between preschool and third grade are the cornerstone of any P-16 system. A child lacking a solid foundation will begin his/her educational career at a disadvantage. According to Kagan (1992), the National Conference of State Legislatures preschool programs are the keystone to productive and active citizens.

Georgia and Oklahoma have been offering state-funded universal preschool since 1990. While it has increased enrollment for all children; the most significant cognitive and social gains are occurring for children with low socio-economic families. However, there has been a reduction in cost for families who were economically able to send their child to preschool before the state-funded universal program was initiated (Bassok et al., 2016).

The *Long-Term Effects of Early Childhood Programs on Cognitive and School* led by Steven Barrett in 1995 demonstrated through research that lasting cognitive and

social gains for low socio-economic children were created when they are enrolled in a quality early childhood setting. The study included various types of early childhood settings by examining 36 previous studies of Head Start, state-funded preschool, child care, and home visiting programs (Barrett, 1995).

It was concluded that long-term benefits provided increased cognitive performance and grade level preservation. These children were less likely to need individualized education or have social adjustment difficulties. The level of quality of the program was an indicator of increased outcomes for children. But there is lack of financial interest and investment in the U.S. as it pertains to funding for early childhood programs and initiatives (Barnett, 1995).

James J. Heckman is the Henry Schultz Distinguished Service Professor of Economics at The University of Chicago, a Nobel Laureate in Economics and an expert in the economics of human development. He has been a long-standing supporter of investing in quality early childhood for all children. Heckman has proven that the return on investment for children growing up in poverty is 13:1 (Heckman, 2012). He pleads that these investments must be made in order to bridge the gap. He states that the savings in social costs for later developmental delays and issues far outweigh the dollars that should be spent in the first years of life for these children. Future economic growth depends on the investments made in the education. Meaningful experiences of young children matter and make a difference in future learning capabilities. When our children thrive, our society reaps the rewards. A prepared workforce that is cognitively, mentally, and socially equipped will take our country to the expectation level, and

beyond. These are only some of the reasons why funding for quality early childhood education is crucial. These positive experiences create and sustain a love of school and learning that will enable children to overcome academic obstacles and succeed in school and in life (Heckman 2012).

Socio-Economic Impacts on Kindergarten Readiness

The financial state of a family is more influential on academic achievement than health or behavior. A longitudinal study titled *How Poverty Affects Classroom Engagement*, including data from about 5,000 U.S. households, was used to complete two sets of analysis. They have measured that parental educational completion and marital status at the time of a child's birth are related to parental income. They unleashed alarming evidence that suggests family low socio-economic status is more detrimental to children in early childhood than in any other stage of life. In that article Jensen highlights that children in poverty have a hard time with classroom involvement. Jensen concludes that there are seven reasons that contribute to their difficulty with this task. Health and nutrition, vocabulary, effort, hope and growth mindset, cognition, relationships, and distress are all factors that are having a negative effect on the willingness, skill, and self-esteem needed to be successful when it comes to engagement (Jensen, 2013). Jensen provides teachers with tools to improve these skills to hopefully circumvent future lack of engagement issues in the classroom for these children. He also emphasizes that in order to identify and notice some of these issues you must be personal to your students and knowledgeable about their circumstances. The better you know the student the easier it will be to interact and

intervene to improve their learning outcomes through successful and productive classroom engagement (Jensen, 2013).

Longitudinal studies that have followed individuals from infancy to adulthood have consistently shown that even among children exposed to multiple stressors, only a minority develop serious emotional disturbances or persistent behavior problems. Their findings challenge us to consider resiliency, a dynamic process that leads to positive adaptation, even with a context of adversity (Luthar, 2003). The Kauai Longitudinal Study is the only study to date that has examined development from birth to midlife. The study examines the impact of biological and psychosocial risk factors, stressful life events, and protective factors on a multi-racial population of 698 children born in 1955 on the Hawaiian island of Kauai in Hawaii. In the Kauai study, a team of mental health workers, pediatricians, public health nurses, and social workers monitored the development of all children born on the island at ages 1, 2, 10, 18, 32, and 40 years. Those ages were chosen they are the critical ages for the development of trust, autonomy, industry, identity, intimacy, and generativity. Thirty percent of the individuals for the study were born and raised in poverty, had experienced pre- or perinatal complications; lived in families troubled by chronic discord, divorce, or parental psychopathology; and were reared by mothers with less than 8 grades of education. Two-thirds of the children who had experienced four or more of such risk factors by age two developed learning or behavior problems by age 10 or had delinquency records and/or mental health problems by age 18. However, one out of

three of these children grew into competent, confident and caring adults (Werner, Smith, 1992).

Summary and Conclusion

There is research and numerous studies that have been published and presented that make the case for publicly funded preschool and increased access to quality early childhood programs. Studies show the best way for children to become prepared for school and to be kindergarten ready is to participate in a quality early learning program. The research proves that the benefits of these programs is dependent upon the quality and fidelity in which they are implemented. Creating a budget that supports more preschool programs a must. When early learning starts in public schools in classrooms that consist of certified preschool teachers, students are catapulted into success for school and in life.

The Governor's Office of Early Childhood shares data each year about how many kids in Kentucky are entering school kindergarten ready as measured by the Brigance Screener. In 2016 and for several years past, only about 50% of Kentucky children are entering school ready to learn according to the Annie E. Casey Foundation, & Center for the Study of Social Policy in 2017 published the Kids Count Data Book. There is inequality at the beginning of the race for a successful livelihood and too much time and money is spent trying to catch these students up for their entire school career. Investing in these children by providing public preschool for all children early will enable them to have more confidence in the academic process because they will be prepared for what comes next.

There are vital skills that we know cannot be measured by a screening tool. Persistence, social emotional IQ, grit, mindset, creativity, character, curiosity, critical thinking, and creativity are all important ingredients in a recipe for success (Schulz, 2008). But, they are not measured by the Brigance. When considering kindergarten readiness the historical framework for their parents experience in school can have an effect on the way parents feel about their child's experience. Culture and race will also play a large role in how the parents integrate into the world of school (Benner et al., 2016).

CHAPTER 3: METHODOLOGY

This chapter describes the research methodology, methods, and data selected for this study. It will compare the kindergarten readiness factor, by looking at Brigance scores of children who had previous early childhood experiences before entering kindergarten with those who had no early childhood experiences prior to entering kindergarten. By comparing these two groups, the researcher is able to examine the benefits of quality early childhood experience and its effects on kindergarten readiness. There will be a description of the methods used to collect and analyze these data.

Research Questions

This quantitative study will focus on the collection and analysis of numeric data to answer the following research questions:

1. Do formal early learning experiences increase kindergarten readiness outcomes?

HA1: Students who have had formal early learning experiences are more ready for kindergarten.

2. Which learning experiences have the greatest impact on readiness? Public preschool, Head Start, Private Child care, or no experience?

HA2: The greatest impact for kindergarten readiness will be seen in students who were enrolled in public preschool.

Research Sample

Data used in this study were collected from 737 students who are entering into Kindergarten within the Kentucky Public Schools system in Scott County Kentucky.

Students who are entering kindergarten are screened using the Brigance assessment. This assessment is based on the student's abilities in adaptiveness, cognition, motor, communication, and social emotional skills. This form includes mandatory information on whether or not the child had any previous early childhood experiences.

Research Setting

Scott County Public Schools is located in central Kentucky. Georgetown is the city closest to this district. Georgetown Kentucky, is the home of Georgetown College. Scott County has a large agricultural output and is also home to the Toyota car manufacturing plant. 49.2% of children entering kindergarten in Scott County in 2016 were ready for kindergarten as published by the Annie E. Casey Foundation, & Center for the Study of Social Policy in 2017 in the Kids Count Data Book.

Data Collection

As part of the federal agreement that came with Race to the Top-Early Learning Challenge funds, the Kentucky Department of Education instituted the use of the Brigance Screener in the 2013-2014 school year. All entering kindergarten students are required to take the Brigance Kindergarten III Screener within the first 30 days of the start of school. The Brigance composite score for entering kindergarten students is reported as ready with enrichments, ready, or not ready. Students that have a high overall score are labeled ready with enrichments and above the level considered ready to begin kindergarten. Students performing moderately are considered ready or at the developmental level ready to start kindergarten. Students performing at lower levels are labeled not ready and are considered developmentally not ready to begin

kindergarten. Each student is determined to have a prior setting before entrance into kindergarten that relates to their experiences prior to a formal school setting. The five prior settings used by the state of Kentucky are: State Funded Preschool, Head Start, Child Care, Home, and Other.

Students that are 4 years of age on or before August 1st and who live at 160% of poverty are be eligible for state funded, school based preschool ("Age Eligibility Requirement for Kentucky State-Funded Preschool Guidance for School Districts," 2015). Children placed in the Head Start category are typically at risk students ages 0 to 5 that have attended a Head Start program. A requirement for participation in Head Start is that family income is at 100% of poverty or lower. Head Start uses federal tax money as grants to local Head Start agencies. In Kentucky, there are 32 Head Start local agencies. The Head Start program uses classroom teachers to provide emotional and academic growth for students and a family social worker to work in the home environment with parenting skills and knowledge of social services if they are needed ("Head Start and Early Head Start," 2016). Students in the Child Care prior setting attended a private, tuition based child care center, preschool, or day care setting preceding kindergarten attendance at a public elementary school. Students in the Home prior setting were at home under the supervision of a parent, grandparent, relative, neighbor or adult before attending public school kindergarten. The Other prior setting is used for anything that does not fit into the other four categories and therefore will be eliminated from the study because there is no way to delineate information from that category. All data examined are archival and used in the Kentucky Common Kindergarten Screen process

implemented by the Kentucky Department of Education. Data collected at the school level were entered into the Kentucky Department of Education data base and were reported as state level Brigance Screener information.

The data collection for this study were obtained through Kentucky Educational Data System and Scott County Public Schools. Chi-Square test was used to show significant relationships between having an early childhood experience and kindergarten readiness. The setting and environment for this study is Kentucky Public Schools. The researcher chose to use this state data due to her geographical location and interest.

Student level data were coded as 1=students entering kindergarten from the public preschool setting, 2=students entering kindergarten from Head Start, 3=students entering kindergarten from private child care, 4=students entering kindergarten with no prior setting in early childhood.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) is a software package used in statistical analysis of data. The dependent variable for this study is the readiness of a child entering kindergarten based on prior settings before entering Kindergarten. The goal of the research is to test whether children who are enrolled in and have access to quality early learning experiences are more likely to be kindergarten ready than their counterparts who had no previous experiences. Based on the research questions and hypothesis identified for this study, dependent and independent variables were identified. The dependent variable in this study is the kindergarten readiness level of the student. The independent variables are the previous quality early childhood

experience. An Independent T-test was used to show significant relationship between having an early childhood experience and kindergarten readiness. A Chi-Square test was run to answer both research questions. Significance was set at the .05 level.

Benefits and Risks of the Study

There are significant benefits to this study. The Commonwealth of Kentucky would benefit if every child enters school at the age of three. If all children could enter school at the age of three, they would be more prepared to successfully complete their educational journey. The risk of this study is that more programs are created that are not developmentally appropriate for children. Learning should take place on the level of the child and their learning experiences should come from their curiosity. And, a curriculum designed to support early learners.

Limitations

The data are pre-existing. Using pre-existing data can be a limitation. The selection of the population to study, which data to collect, the quality of data gathered, and how variables were measured and recorded are all predetermined (Lohr, 2010). The data available for prior settings before children enter kindergarten are limited. The data for prior settings are entered by the parents of the child as part of the registration process for entering kindergarten. These data are not verified. The only choices for parents to list what type of programming they chose prior to entering kindergarten is; public preschool, Head Start, child care center, Other, None. The quality of each of these child care service entities are not reflected in the data.

Additionally, some of the prior settings included students that qualify with disabilities and socioeconomic disadvantages and other prior settings that did not. Students that were in the State Funded and Head Start categories are placed there because of qualifications factors that can severely affect their development. When you start to compare categories that include qualifications with categories that do not require qualifications there are disparities to that comparison (Duncan et al., 2007).

Due to limited capacity, most publicly-funded preschool programs target students at the greatest need, often operationalized as children from low-income homes or those deemed at risk for not being ready for kindergarten. However, school readiness is the product of a multitude of factors, and there are views existing that promote there are no standardized method for assessing or calculating school readiness (Carolan & Connors-Tadros, 2015).

Summary and Conclusion

This quantitative study were conducted to determine whether there were any differences between the type of early childhood prior setting and the kindergarten readiness scores of students in Scott County Kentucky. Evaluating these results answers the question whether prior settings were preparing their students for kindergarten entry with the basic academic and social skills needed for success. Results from the Brigance Early Childhood Screener were used to determine the difference between the program type and the students' kindergarten readiness scores. The results of this study reveal what prior setting or early childhood experience best prepares children for

entering school and being determined kindergarten ready. The results are presented in the following chapter.

CHAPTER 4: FINDINGS

Parents may not be aware of the value of a quality early educational prior setting for their child's education. A universal preschool program for our state could ensure that children are getting the right start to their education and would ease the financial burden on parents. Funding for our youngest citizens has not been a priority, but this is changing. The National Assessment of Educational Progress (NAEP) that there is a positive correlation between the amount of money allocated to preschool programs and an increase in reading and math scores (Manna, 2012). Therefore, creative strategies must be used in our communities to ensure that all students get the opportunity to receive a quality preschool education to allow them to enter kindergarten eager and ready to learn.

The purpose of this quantitative study was to use data to demonstrate differences in preparedness for children entering kindergarten from four areas: not attending preschool, attending public preschool, attending a private child care center, and attending Head Start. This information can be used to guide educational policy decisions. There is an immediate need for adequate funding to create an educational system that gives every child the best start to their school career. The researcher believes that with increased availability for public preschool more children can enter Kindergarten ready to learn and equipped to live a better life (Barnett, 1995). Public preschool should be available to all children regardless of income of ability. All children should have the opportunity to attend these programs to better prepare them for academic achievement (Cascia & Schanzenbach, 2013).

Prior Settings and Kindergarten Readiness

The data collection for this study was obtained through Kentucky Educational Data System and Scott County Public Schools. An Independent T-test was used to show significant relationships between having an early childhood experience and kindergarten readiness. The setting and environment for this study is Kentucky Public Schools. Data from 737 children entering kindergarten were obtained for analysis. This quantitative study focused on two research questions.

1. Do formal early learning experiences increase kindergarten readiness outcomes?

HO1: Students who have had formal early learning experiences are more ready for kindergarten.

There were more children who attended public preschool that were kindergarten ready. 70.5% of children who attended public preschool were classified as kindergarten ready compared to 29.5% of children that tested ready from the not preschool category. The hypothesis for research question one is proven. Children who attend preschool are more likely to score as kindergarten ready on the Brigance Early Childhood Screener. Please refer to table 1.1 and 1.2 for results.

Table 1.1
Test Result Prior Setting Cross Tabulation

			Prior Setting		
			No Preschool	Preschool	Total
Test Result	Not Ready	Count	8	19	27
		% within Test Result	29.6%	70.4%	100.0%
		% within Prior Setting	2.8%	3.5%	3.3%
	Ready	Count	89	213	302
		% within Test Result	29.5%	70.5%	100.0%
		% within Prior Setting	31.2%	39.5%	36.7%
	Ready with Enrichments	Count	17	64	81
		% within Test Result	21.0%	79.0%	100.0%
		% within Prior Setting	6.0%	11.9%	9.8%
	Ready with Interventions	Count	171	243	414
		% within Test Result	41.3%	58.7%	100.0%
		% within Prior Setting	60.0%	45.1%	50.2%
Total		Count	285	539	824
		% within Test Result	34.6%	65.4%	100.0%
		% within Prior Setting	100.0%	100.0%	100.0%

Table 1.2 Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.666[a]	3	.000
Likelihood Ratio	19.120	3	.000
N of Valid Cases	824		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.34.

Data gathered from Scott County Public Schools Brigance Screener results for 2017.

Prior Setting Type and Kindergarten Readiness

Before findings are discussed it is important to discuss the population of children who would be attending public preschool. It is not alarming that these students did not score as well on Brigance testing, due to their level of development. Students 3 to 4 years old that attend state funded preschools must meet certain criteria to attend. Kentucky's preschool education programs are available for all four-year-old children whose family income is no more than 160% of poverty; all three and four-year-old children with developmental delays and disabilities, regardless of income; and other four-year- old children as placements are available based on district decision. There are two ways to qualify. Children that are 3 years of age on or before August 1 and diagnosed with a disability can attend state funded preschools (“Age Eligibility Requirement for Kentucky State-Funded Preschool Guidance for School Districts,” 2015). The preschool program is designed to be developmentally appropriate for young children. "Developmentally appropriate" is defined in law to mean that the program

focuses on the child's physical, intellectual, social and emotional development, including interpersonal, intrapersonal, and socialization skills.

2. Which learning experiences have the greatest impact on readiness? Public preschool, Head Start, Private Child care, or no experience.

HO2: The greatest impact for kindergarten readiness will be seen in students who were enrolled in public preschool.

The second research question for this study, which prior setting best prepare children for kindergarten readiness, were indicated by performing a cross tabulation with prior setting type. The analysis that were performed indicated that there was statistical significance. Prior settings is significant in predicting kindergarten non-readiness. In this case, the hypothesis is not supported. It was not students who were enrolled in public preschool who were best performed the best on the Brigance Kindergarten readiness Screener. Children whose parents reported using private child care outperformed students on this test. Please refer to table 2.1 and 2.2 for results.

Table 2.1

Chi Square on Kindergarten Readiness by Program Type

Prior Setting Type Test Result Cross Tabulation

			Test Result				
			Not Ready	Ready	Ready with Enrichments	Ready with Interventions	Total
Prior Setting Type	State Funded Preschool	Count	15	76	11	163	265
		% within Prior Setting Type	5.7%	28.7%	4.2%	61.5%	100.0%
		% within Test Result	60.0%	28.3%	15.7%	43.7%	36.0%
	Head Start	Count	0	6	0	6	12
		% within Prior Setting Type	0.0%	50.0%	0.0%	50.0%	100.0%
		% within Test Result	0.0%	2.2%	0.0%	1.6%	1.6%
	Childcare	Count	4	131	53	74	262
		% within Prior Setting Type	1.5%	50.0%	20.2%	28.2%	100.0%
		% within Test Result	16.0%	48.7%	75.7%	19.8%	35.5%
	Home	Count	6	56	6	130	198
		% within Prior Setting Type	3.0%	28.3%	3.0%	65.7%	100.0%
		% within Test Result	24.0%	20.8%	8.6%	34.9%	26.9%
Total		Count	25	269	70	373	737
		% within Prior Setting Type	3.4%	36.5%	9.5%	50.6%	100.0%
		% within Test Result	100.0%	100.0%	100.0%	100.0%	100.0%

Data gathered from Scott County Public Schools Brigance Screener results for 2017.

Table 2.2
Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	119.552[a]	9	.000
Likelihood Ratio	121.645	9	.000
N of Valid Cases	737		

a. 3 cells (18.8%) have expected count less than 5. The minimum expected count is .41.

Kindergarten has dramatically changed in recent years. Some students are reaping the academic and developmental benefits of participating in quality early educational prior settings before kindergarten, but not all. Nonetheless, all kindergarten students, whether pre-exposed to early learning or not, are expected to meet the increased demands of the current kindergarten classroom. Out of the 265 children who attended public preschool 28.7% scored in the ready for kindergarten range. Parents may not be aware of the value of a quality early educational prior setting for their child's education. A universal preschool program for our state could ensure that children are getting the right start to their education and would ease the financial burden on parents. Funding for our youngest citizens has not been a priority, but this is changing. The National Assessment of Educational Progress (NAEP) that there is a positive correlation between the amount of money allocated to preschool programs and an increase in reading and math scores (Manna & Hartwood, 2011). Therefore, creative strategies must be used in our communities to ensure that all students get the

opportunity to receive a quality preschool education to allow them to enter kindergarten eager and ready to learn.

The purpose of this quantitative study was to use data to demonstrate differences in preparedness for children entering kindergarten from three areas: not attending preschool, attending public preschool, attending a private child care center, and attending Head Start. This information can be used to guide educational policy decisions. There is an immediate need for adequate funding to create an educational system that gives every child the best start to their school career. The researcher believes that with increased availability for public preschool more children can enter Kindergarten ready to learn and equipped to live a better life (Barnett, 1995). Public preschool should be available to all children regardless of income of ability. All children should have the opportunity to attend these programs to better prepare them for academic achievement (Cascia & Schanzenbach, 2013).

CHAPTER 5: DISCUSSION

Findings

Out of the 265 children that attended public preschool, 60% were identified as not ready for kindergarten, and 28.3% were ready. Out of the 262 children that attended child care, 16% were identified as not ready for kindergarten and 48.7% were ready. As this data is absorbed one must keep this thought at the forefront of the considerations as previously discussed in the paper. In Kentucky the children who have access to and are attending public preschool are those who have been identified as developmentally delayed or living in poverty. These two factors have a huge impact on readiness.

One could interpret the findings as a call to action. Due to the rapid brain development, increased adverse childhood experiences that children are facing, and all of the factors of being kindergarten ready, all children need access to quality care. That care, due to the high demand and skill level, should require more regulations of facilities and especially of teacher qualifications.

Environments young children are exposed to and experience are crucial for the optimum development of their brains. The windows of learning opportunity are wide open and ready to assimilate knowledge well before a child enters the kindergarten classroom. It is up to parents, families, caregivers, teachers and the community to provide appropriate opportunities for all children. The role of children in society has changed since the early days of Plato. Though theories of how children learn are varied, none of them deny nor dispute the importance of early childhood education. Early

childhood education provides support for children's academic success, measurable societal returns on investment, and a clear strategy for supporting school completion, especially for children at risk of school failure (School Success - Encyclopedia On Early Childhood Development, n.d.). Children learn best in environments that allow them to explore, problem solve, and discover new concepts through active participation. New concepts are gained when children can make connections with what they know and what they learn. With the rigorous standards of today's elementary schools, children are expected to come to school ready to learn. Students must possess the fundamental cognitive and social skills necessary to meet the increasing demands of the kindergarten standards. To achieve these rigorous demands, children must be provided with a firm foundation before they enter school. Though the investment in early childhood education is not small, the commitment to ensuring a quality early childhood education for preschoolers is a commitment that will pay off in the end. Early childhood education is a proactive means of ensuring that all children, regardless of gender, ethnicity, or socioeconomic status, are prepared to enter the rigor of the kindergarten classroom.

Brain Development

The Center for Disease Control states that genetics are important for healthy brain development but there are additional factors that contribute, such as; nutrition, exposure to disease or sickness, and the experiences the child has with other individuals and its surroundings. With the research that exists surrounding brain science, a serious consideration must be made. Is universal public preschool starting too late in the game? If funding could me mandated that every four-year-old have access to enrollment in a

public preschool, have we already missed the bus on optimal opportunities for brain development? When a child is born and handed to their parent, does anyone tell them that the brain is not finished growing? The heart, lungs, kidneys and other major organs do not need any additional stimulation from the parent. However, that is certainly not the case for the child's brain. It needs stimulation, emotional connections, language, play, experiences, routine, and rest. Parental and caregiver education regarding the brain is so important. Yet, not much focus is put into educating parents about brain science.

Adverse Early Childhood Experiences

The CDC-Kaiser Permanente Adverse Childhood Experiences (ACE) Study is one of the largest investigations of childhood abuse and neglect and later-life health and well-being. The original ACE Study was conducted from 1995 to 1997. Over 17,000 Health Maintenance Organization members from Southern California receiving physical exams completed confidential surveys regarding their childhood experiences and current health status and behaviors. Adverse Childhood Experiences (ACEs) are divided into three categories: abuse, neglect, and family/household challenges. Each category is further divided into multiple subcategories. The prevalence of ACEs is organized by category (Center for Disease Control, 2018). The more ACEs a child experiences, the more likely he or she is to suffer from things like heart disease and diabetes, poor academic achievement, and substance abuse later in life (The Center for the Developing Child, 2018). There are emotionally intelligent responses and trauma informed care practices that can decrease negative outcomes for children. Being proactive in mental

health screenings and interventions can also lead to increased positive outcomes for children. Early intervention in childhood may mitigate the long-term effects of ACEs on mental health diagnoses. Many children are resilient to these effects of ACEs. Studying factors associated with resilience in these children can suggest directions for development of future interventions (Bronfenbrenner, Morris, 2006).

Educational Requirements for Early Childhood Educators

The early care and education profession is at the bottom of the pay hierarchy thus, the cognitive and emotional competence of the county is dependent on this workforce of individuals. The field of early childhood education is flooded with unusually high rates of employee turnover. Yet, relationships is listed as the number one indicator of quality for early childhood environments. There is a great amount of child development knowledge needed to ensure that children are in the optimal environment for emotional and cognitive learning. Due to the crucial and limited period of time there is to take advantage of brain growth and emotional well-being, the education and experience of early childhood teachers is fundamental. The future of our society lays in the hands of professionals who have a broad range in education levels. Some early childhood teachers hold Bachelor's Degree's with a student teaching component, while others have just graduated high school. They also have a multibillion-dollar impact on the economy. "In 2016, 675,000 child care businesses, which are mostly small businesses, produced revenue of $47.2 billion and provided employment for 1.5 million wage and salary and self-employed workers," according to Child Care in the State of Economies Report 2018.

A potential implication is for fostering a long term focus on the impact of teacher professional development hours on kindergarten readiness rates. This could determine if teacher training is a quality indicator for ECE programs. This agrees with Vygotsky's social-cultural theory which states that there is a relationship between environmental factors such as culture and language and a child's academic and social development (Stoltz, Piske, de Freitas, D'Aroz & Machado, 2015).

Implications for Further Research

With the huge significance of kindergarten readiness on success later in life, the traditional K-12 framework needs an overhaul. A transformation that considers our littlest minds. How the brain grows is strongly affected by the child's experiences with other people and the world. Nurturing care for the mind is critical for brain growth, with plenty of opportunities to play and explore (Center for Disease Control, 2018). Children are born ready to learn. Preschool cannot be an afterthought. Some research suggests that the preschool experience is has larger impact on success in life than the college you choose (Bouffard, 2017).

Preschool, and the time before, is when the foundation for further and lifelong learning will embed. It should be identified with research as to where the best prior early learning setting exists. Early Childhood teachers and their relationships with children have a beyond significant impact on their future intelligence both academically and emotionally. Teachers should be highly trained and able to provide enriching experiences and development that enhance the child's abilities and positive outcomes or the rest of their life. There should be policies and regulations in place that make early

childhood, kindergarten readiness, and reading proficiency a priority. It is time that proactive measures and supports are in place so that children thrive. It needs to be realized that early care and education requires a skill set beyond a high school diploma or a credential.

Preschool is a financial burden on parents and they are drowning. Parents are making choices for their child's early education and care that have nothing to do with relationships or any quality indicators. Parents have to consider what they can afford, what location they can accommodate, and what program will best fit into their working lives and schedules. Providing free preschool for all of Kentucky's four-year-old children will enable an increased skilled workforce, and it will remove a stressor from family budgets that can be more costly than a monthly mortgage. Investing in quality early education by creating access to public preschool for all four-year-old is a win for our state now, and for the future.

Finally, an expansive campaign to educate people on early brain development and the factors that contribute positively to that process is needed. Across the economic spectrum parents do not know enough about the quality early experiences their baby needs to have healthy brain development. There is so much that parents can do in their everyday routines that can contribute to learning and growing the brain. This small window of opportunity should not be missed due to lack of awareness.

REFERENCES

Annie E. Casey Foundation, & Center for the Study of Social Policy (Washington. (2001). *Kids count data book*. Center for the Study of Social Policy.

Baldwin, A.L. (1967). *Theories of child development*. Oxford, England: Wiley.

Barnett, W. (1995). Long-Term Effects of Early Childhood Programs on Cognitive and School Outcomes. *The Future of Children*, 5(3), 25-50. doi:10.2307/1602366

Barnett, W. S., Lamy, C., & Jung, K. (2005). The effects of state prekindergarten programs on young children's school readiness in five states. New Brunswick, NJ: *National Institute for Early Education Research*.

Bassok, D., Miller, L. C., & Galdo, E. (2016). The effects of universal state pre-kindergarten on the child care sector: The case of Florida's voluntary pre-kindergarten program. *Economics of Education Review*, 53, 87-98.

Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental involvement and adolescents' educational success: The roles of prior achievement and socioeconomic status. *Journal of Youth and Adolescence*, 45(6), 1053-1064.

Bredekamp, S. & Copple, C. (Eds.). (2009). *Developmentally appropriate practice in early childhood programs: Serving children from birth through age 8.* Washington, DC: National Association of Education for Young Children.

Brendtro, L. K., Brokenleg, M., & Van Bockern, S. (2005). The circle of courage and positive psychology. *Reclaiming Children & Youth*, 14(3).

Brendtro, L. K., & Longhurst, J. E. (2005). The resilient brain. *Reclaiming Children and Youth*, 14(1), 52-60.

Bronfenbrenner, U., & Morris, P. A. (2006). The bio ecological model of human development. *Handbook of child psychology*.

Cahan, E. D. (1989). Past caring: A history of US preschool care and education for the poor, 1820–1965. *National Center for Children in Poverty*.

Chapman, D. A., & Scott, K. G. (2001). The impact of maternal intergenerational risk factors on adverse developmental outcomes. *Developmental Review*, 21(3), 305-325.

Cascia, E., & Schanzenbach, D. (2013). The Impacts of Expanding Access to High-Quality Preschool Education. *Brookings Papers on Economic Activity*, 127-178. Retrieved from http://www.jstor.org/stable/23723436

Delalibera, B. R., & Ferreira, P. C. (2019). Early childhood education and economic growth. *Journal of Economic Dynamics and Control*, 98, 82-104.

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P.,. & Sexton, H. (2007). School readiness and later achievement. *Developmental psychology*, 43(6), 1428.

Vinovskis, M. A. (1992). Schooling and poor children in 19th-century America. *American Behavioral Scientist*, 35(3), 313-331.

Duncan, G., Yeung, W., Brooks-Gunn, J., & Smith, J. (1998). How Much Does Childhood Affect the Life Chances of Children? *American Sociological Review*, (3), 406-423. Retrieved from http://www.jstor.org/stable/2657556

Fowler, S. A., Thomas, D. V., Tompkins, J., Hartle, L., & Corr, C. (2013). Strategies for enrolling traditionally underserved families in early childhood education programs. *Early Childhood Research & Practice*, 15(2).

Head Start Statistics. (n.d.). Retrieved February 12, 2018, from https://www.acf.hhs.gov/

Heckman, J (2012). Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy. *The Heckman Equation*. Retrieved from https://heckmanequation.org/assets/2013/07/F_HeckmanDeficitPieceCUSTOM-Generic_052714-3-1.pdf

Eliot, L. What's Going On in There? *How the Brain and Mind Develop in the First Five Years* (New York, NY: Bantam Books, 1999).

Feller, Avi, Todd Grindal, Luke Miratrix, and Lindsay C. Page. 2016. "Compared to What? Variation in the Impacts of Early Childhood Education by Alternative Care Type." *The Annals of Applied Statistics* 10 (3) (September): 1245–1285. doi:10.1214/16-aoas910

Fitzpatrick, M. D. (2010). Preschoolers enrolled and mothers at work? The effects of universal prekindergarten. *Journal of Labor Economics*, 28(1), 51-85.

Glascoe, F. P. (2002). BRIGANCE SCREENS. North Billerica, MA: Curriculum Associates.

Gopnik, A., and A.N. Meltzoff, P.K. Kuhl. *The Scientist In The Crib, What Early Learning Tells Us About The Mind.* (William Morrow and Co., 1999).

Gredler, G. R. (1997). Issues in early childhood screening and assessment. *Psychology in the Schools*, 34(2), 99-106.

Hart, B., & Risley, T. R. (2003). The early catastrophe: The 30 million word gap by age 3. *American educator*, 27(1), 4-9.

Hart, B., & Risley, T. R. (2003). The early catastrophe: The 30 million word gap by age 3. *American educator*, 27(1), 4-9.

Havnes, T., & Mogstad, M. (2015). Is universal child care leveling the playing field?. *Journal of Public Economics*, 127, 100-114.

Herbst, C. M. (2018). The rising cost of child care in the United States: A reassessment of the evidence. *Economics of Education Review*, 64, 13-30.

Hunt, J. M. (1961). *Intelligence and experience*.

Jensen, E. (2013). How poverty affects classroom engagement. *Educational Leadership*, 70(8), 24-30.

Johnsen, E. P., & Christie, J. F. (1986). Pretend play and logical operations. *The many faces of play*, 50-58.

Keenan, T., Evans, S., & Crowley, K. (2016). *An introduction to child development*. Sage.

Kerr, Michael E. “One Family’s Story: A Primer on Bowen Theory.” The Bowen Center for the Study of the Family. 2000. http://www.thebowencenter.org.

Koziol, N., & Arthur, A. (2011). An introduction to secondary data analysis. Research Methodology Series.

Lee, V. E., & Burkam, D. T. (2002). Inequality at the starting gate: Social background differences in achievement as children begin school. *Economic Policy Institute*, 1660 L Street, NW, Suite 1200, Washington, DC 20036.

Long, N. J., & Morse, W. C. (1996). Conflict in the classroom: The education of at-risk and troubled students. PRO-ED, 8700 Shoal Creek Blvd., Austin, TX 78757-6897.

Luthar, S. (2003). Resilience and vulnerability: Adaptation in the context of childhood adversities. *Cambridge University Press*. https://doi.org/10.1017/CBO9780511615788

Magnuson, K. A., Ruhm, C., & Waldfogel, J. (2007). Does prekindergarten improve school preparation and performance?. *Economics of Education review*, 26(1), 33-51.

Manna, P. (2012). State education governance and policy: Dynamic challenges, diverse approaches, and new frontiers. Peabody Journal of Education, 87(5), 627-643. children's preacademic competence. *Early Education and Development*, 8(4), 357-375.

Miller, E., & Almon, J. (2009). Crisis in the kindergarten: Why children need to play in school. *Alliance for Childhood* (NJ3a).

Miller, Bassok. "The Effects of Universal Preschool on Grade Retention." Manuscript, 2016.

Mitchell, A. (2012). Quality rating and improvement systems: A state by state listing of QRIS websites.

Mitchell, A., Kerr, K., & Armenta, J. (2008). Comparison of financial incentives in states' quality rating and improvement systems. *Alliance for Early Childhood Finance*. As of February, 1, 2015.

Razavi, S., & Staab, S. (2010). Underpaid and overworked: A cross-national perspective on care workers. *International Labour Review*, 149(4), 407-422.

Reynolds, A. J., Richardson, B. A., Hayakawa, M., Lease, E. M., Warner-Richter, M., Englund, M. M., & Sullivan, M. (2014). Association of a full-day vs part-day preschool intervention with school readiness, attendance, and parent involvement. *Jama*, 312(20), 2126-2134.

Saluja, G., Scott-Little, C., & Clifford, R. M. (2000). Readiness for School: A Survey of State Policies and Definitions.

Schulz, B. (2008). The importance of soft skills: Education beyond academic knowledge.

Sheehan, R., Cryan, J. R., Wiechel, J., & Bandy, I. G. (1991). Factors contributing to success in elementary schools: Research findings for early childhood educators. *Journal of Research in Childhood Education*, 6(1), 66-75.

Shonkoff, J. P. (2010). Building a new biodevelopmental framework to guide the future of early childhood policy. *Child development*, 81(1), 357-367.

Shonkoff, J.P., From Neurons to Neighborhoods: The Science of Early Childhood Development (Washington, D.C.: National Academy Press, 2000).

Stoltz, T., Piske, F. H. R., de Fátima Quintal de Freitas, M., D'Aroz, M. S., & Machado, J. M. (2015). Creativity in Gifted Education: Contributions from Vygotsky and Piaget. Online Submission, 6, 64-70.Vinovskis, M. A. (1999). *History and educational policymaking*. Yale University Press.

Weikart, D. P., & Ypsilanti Public Schools, M. (1967). Preliminary Results From a Longitudinal Study of Disadvantaged Preschool Children.

Werner, E. E., & Smith, R. S. (1992). Overcoming the odds: High risk children from birth to adulthood. Cornell University Press.

Willoughby, M. T., Magnus, B., Vernon-Feagans, L., & Blair, C. B. (2017). Developmental Delays in Executive Function from 3 to 5 Years of Age Predict Kindergarten Academic Readiness. *Journal of Learning Disabilities*, 50(4), 359–372. https://doi.org/10.1177/0022219415619754

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.

Zigler, E., & Valentine, J. (1979). Project Head Start: A Legacy of the War on Poverty.

APPENDICIES

APPENDIX A:

Signed Agreement from Scott County Schools

SCOTT COUNTY SCHOOLS

P.O. Box 578
2168 Frankfort Road
Georgetown, KY 40324

Phone: 502-863-3663 **Fax: 502-863-5367**

To: April Trent, Early Childhood Education Program Specialist
Save the Children
295 Prince Royal Drive
Berea, KY 40403

From: Maurice Chappell
Assistance Superintendent for Student Learning

Date: 1/14/2019

Re: Request for Dissertation Research

This is to notify you that the Scott County Public Schools Office of Student Learning has evaluated your proposal and has granted you tentative approval to conduct research for your dissertation using the district's 2017-18 Kindergarten Readiness data. Full approval will be given when we receive evidence that this study has been approved by your institution's IRB.

This approval is good for one calendar year from the date on this memo. If any changes are made during the course of the study, you will be required to submit a new application for re-approval. You will be expected to submit a copy of your results to this office after completion of the study.

If you have any questions about this process you may email me at maurice.chappell@scott.kyschools.us

APPENDIX B:

IRB Exemption Approval Notification: Protocol Number #2127

Hello April Trent,
Congratulations! The Institutional Review Board at Eastern Kentucky University has approved your IRB Application for Exemption Certification for your study entitled, "The Impact of Prior Settings in Early Childhood on Kindergarten Readiness" as research protocol number 2127. Your approval is effective immediately and expires three years from the approval date.
Exempt status means that your research is exempt from further review for a period of three years from the original notification date if no changes are made to the original protocol. If you plan to continue the project beyond three years, you are required to reapply for exemption.
Principal Investigator Responsibilities: It is the responsibility of the principal investigator to ensure that all investigators and staff associated with this study meet the training requirements for conducting research involving human subjects and follow the approved protocol.
Adverse Events: Any adverse or unexpected events that occur in conjunction with this study must be reported to the IRB within ten calendar days of the occurrence.
Changes to Approved Research Protocol: If changes to the approved research protocol become necessary, a description of those changes must be submitted for IRB review and approval prior to implementation. If the changes result in a change in your project's exempt status, you will be required to submit an application for expedited or full IRB review. Changes include, but are not limited to, those involving study personnel, subjects, and procedures.
Other Provisions of Approval, if applicable: None
Please contact Sponsored Programs at 859-622-3636 or send email to lisa.royalty@eku.edu with questions.
For your reference, we have included feedback on your application that was submitted during the review process.

APPENDIX C:

VITA

VITA

April Trent

Education

Doctorate of Education in Educational Policy and Leadership, Eastern Kentucky University,
Graduation date is May 2019

- Dissertation Topic: The Impact of Prior Setting in Early Childhood Education and its Effects on Kindergarten Readiness

Masters of Science in Public Administration, Emphasis on Human Resources, Kentucky State
University, 2008
Bachelor of Arts in Child Development and family Studies, Berea College, 2000

Credentials

Kentucky Early Care and Education Trainer's Credential, Cabinet for Health and Family Services
Researched Early Math Assessment (REMA) Trainer and Assesor, Marsico Institute for Early Learning & Literacy Morgridge College of Education at the University of Denver

Certifications

Beyond Shelter From the Storm Trainer, Certified by Zero to Three, October 2018

Work Experience

Early Childhood Specialist, Save the Children, Berea, KY, 40403
April 2018 to Present

- Visit each assigned site in compliance with the program model to conduct observation, coaching, and mentoring. Complete Site Visit Reports.
- Provide community education and training on brain science, kindergarten readiness, and positive caregiver interactions.
- Lead partner management activities that relate to the program area, annual partner planning, sub-award budget and spending, grant budgets and reports, annual district/site stakeholder meetings, and partnership performance management.
- Support program partners as appropriate, with local, regional, and state community engagement activities, community partnerships/coalitions, and state level relationships.

Teacher, Ohio Valley Educational Cooperative Head Start, Owenton, KY, 2015-2018

- Supervised 3 and 4 year old students with and without disabilities
- Conducted developmental assessments on students enrolled in the classroom
- Attended IEP meetings and assisting in planning developmental goals
- Planed and implemented weekly lesson plans

Director of Child Care, Kentucky State University, Frankfort, KY, 2013-2015

- Supervised and evaluated 17 teachers
- Selected curriculum and policies for children ages 6 weeks to 12 years old
- Revenue and expenditures tracking and budgeting
- Grant Writing

Owner, Amazing Creations Preschool, Frankfort, KY, 2010-2014

- Oversaw the interview and hiring process of classroom personnel to ensure qualified staff for students and parents.
- Established school policies and communicated them to staff and parents to ensure well-coordinated and high-quality daily operations.
- Developed educational curricula that promoted development in key behavioral and educational areas.
- Provided training and professional development for teachers.
- Recruited new students for admission through marketing and events.
- Planned and executed activities to promote development.

Systems Specialist, Eastern Kentucky University, KY, 2008-2009
Director of Child Care, New Horizons Child Development Center, Frankfort, KY, 2004-2008

- Supervised and evaluated 17 teachers
- Selected curriculum and policies for children ages 6 weeks to 12 years old
- Revenue and expenditures tracking and budgeting
- Grant Writing

Program Director, Child Care Assistance Program, Child Care Council of Kentucky, KY, 2001-2004

- Supervised 5 staff
- Provided program services to over 1000 families
- Determined and documented eligibility requirements
- Maintained a case load of over 300 families

Professional Organizations
The Prichard Committee, Strong Start Coalition
Zero to Three
National Association for the Education of Young Children
Regional & National Conference Presentations
Beyond Shelter From the Storm, Kentucky 2018, Regional Conference
Beyond Shelter From the Storm, Washington 2018, Regional Conference