

**Preventing the Preschool to Prison Pipeline: A Preliminary Study of the Effects of  
E-Coaching Head Start Teachers on Behavior-Specific Praise**

by

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## Abstract

The number of preschoolers expelled and suspended from school is the highest among all student groups. In the long run, preschool expulsions and suspensions can have statistically detrimental effects on a child's life trajectory. In addition, students who are expelled or suspended have a higher dropout rate than other students. Researchers suggested that professional development of evidence-based strategies for preschool teachers could effectively address this issue, as challenging behavior is the leading cause of suspension and expulsion for students. However, traditional methods of professional development have not proven to be effective. According to researchers, consistent coaching has been suggested as an effective way to develop professional competence. In this of this study, the effect of virtual coaching on Head Start teachers use of behavior-specific praise is examined. Head Start programs need cost-effective ways for their teachers to learn evidence-based strategies. Providing virtual coaching could alleviate these costs.

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## CHAPTER 1. INTRODUCTION

Ninety percent of a child's brain development happens from birth to age five or six (Brown and Jernigan, 2012). This period in a person's life is called early childhood. Therefore, the early years in a person's life are critical for learning. Scientists, philosophers, and educators alike have agreed on the importance of quality early childhood (EC) programs. Many researchers have concluded that quality EC programs benefit children, especially children from low-income areas. When children attend quality EC programs, they make better grades, have better relationships, and have higher graduation rates (Bakken et al., 2017). However, a significant issue in EC education programs is preschool-age children's suspension and expulsion rates.

Walter Gilliam and his team at Yale University conducted the first national study examining suspension and expulsion rates. In the United States, students in preschool and other EC programs are suspended and expelled at higher rates than any other group of students (Gilliam, 2005; Gilliam & Shahar, 2006; U.S. Department of Education Office for Civil Rights, 2014). When programs expel children from schools, their risk of educational difficulties increases. This risk increases as children progress through elementary and secondary schools (American Academy of Pediatrics Committee on School Health, 2003). A U.S. Department of Education Office of Civil Rights (2014) study reported that African-Americans made up 18% of preschool enrollees, but accounted for 48% of out-of-school suspensions. This is concerning because these statistics mirror those of the U.S. prison system. While African Americans make up 12% of the population, they make up 33% of the prison population. The research also indicates that young children who are expelled and suspended are ten times more likely to drop out of high school and be imprisoned (Albritten et al, 2020). These findings are often referred to



as the "preschool to prison pipeline."

As stated earlier, children gain many benefits from attending quality EC programs. The suspension and expulsion rates are alarming for everyone. To help alleviate the issues of suspension and expulsion, The U.S Department of Education, along with Gilliam, suggested several strategies to provide guidance. Those strategies consisted of collaboration, partnering, and professional development for EC teachers (Gilliam, 2005; U.S. Department of Education, 2014). Researchers suggested professional development as a strategy to decrease expulsion rates because the vast majority of teachers expelled or suspended students due to challenging behaviors (Gilliam, 2005). The suggestion to focus on professional development for preschool teachers also aligns with what preschool teachers have stated. Preschool teachers reported being frustrated because they did not have the skills to teach children with challenging behavior (Hemmeter et al., 2008).

Current research suggests preschool teachers should implement evidence-based practices related to behavior to improve behavior management and reduce challenging behaviors. (Davenport et al., 2019; Simonsen et al., 2008). Evidence-based practices for challenging behavior include teaching explicit behavior expectations, such as pre-correction, or giving behavior-specific feedback, such as behavior-specific praise (BSP) (Stormont et al., 2007; Cook et al., 2006; Hemmeter et al., 2011). Professional development (PD) is the best way for teachers to learn and implement these practices with fidelity. PD is a critical practice throughout the early childhood education sector that supports teachers in implementing quality education (Snyder et al., 2012). Griffin (1983) defined PD as a strategy that will change the practices and perspectives of a teacher toward an established articulated area.

## Statement of the Research Problem

Teacher preparation programs and professional development are supposed to prepare teachers for teaching all students. However, many teacher preparation programs lack classes that teach the skills to train teachers on behavior management, and lecture-style PD has been ineffective in addressing challenging behavior in the classroom (Joyce & Showers, 1987). Preschool teachers' training in using appropriate classroom management practices is insufficient; therefore, preschool students continue to be expelled or flagged for behavior problems. If alternative methods for conducting professional development for preschool teachers were used, such as coaching, those teachers would be better able to handle challenging behavior in their classroom and less likely to expel or flag students for negative or disruptive behavior. Which could alleviate the preschool to prison pipeline.

Joyce and Showers (1981) conducted a study on PD and coaching. They investigated the effects of in-service coaching on the teachers' transfer of newly learned classroom strategies. The researchers also investigated teachers' problems in transferring the skills they learned in training to the classroom. The study concluded that teachers with traditional lecture-style PD implemented less than 20 percent of the new practices. In contrast, teachers who received high-quality coaching implemented at least 80 percent of the new techniques. The study's novel research has since influenced the advancement and popularity of coaching as an effective form of PD.

Other researchers have also conducted studies on coaching, and through their research, they also found coaching to be a promising practice for PD (Reinke et al., 2014). For example, Sailors and Price (2010) investigated the effectiveness of two professional development models on elementary and middle school teachers' instructional comprehension practices. The

researchers also examined the impact the models had on students' achievement in reading. The authors' primary goal was to explore if classroom-based coaching demonstrated a more effective PD model compared to the traditional lecture model of PD. The study's outcomes indicated that coaching is a more effective model than traditional PD. Based on the findings, this study will focus on providing professional development to teachers in the form of coaching.

### **Justification for the Study**

To ensure research translates into practice, current research suggests that coaching with performance feedback is a useful professional development strategy. Stormont et al. (2007) investigated the effects of pre-correction and descriptive praise on children's challenging behavior. Researchers define pre-correction as instructions by the teacher or other caregivers that state the behavior expectations for an upcoming transition or activity (Stormont et al., 2007). Descriptive praise is defined as the feedback teachers give students that describe the behavior expectation observed using positive statements. The study involved the researchers giving performance feedback to the teachers to improve their practice of providing students pre-corrections and descriptive praise, also known as behavior-specific praise. The finding from the study revealed a relationship between performance feedback and the implementation of evidence-based practices.

In a study conducted by Hemmeter et al. (2011), the researchers examined the effects of behavior-specific praise without pre-correction among teachers. The study aimed to determine if training and emailed feedback would increase teachers' use of descriptive praise in the classroom setting. The researchers conducted a multiple probe single case design across four teachers. The findings indicated that for some teachers, the feedback alone did increase the use of descriptive

praise. However, some of the teachers struggled with increasing their use of praise and needed more support; implicating feedback alone was not effective for all teachers.

Coaching that includes modeling and performance feedback provides additional support for teachers to implement evidence-based practices (Kretlow & Bartholomew, 2010; Marzano, 2013). Brock and Beaman-Digilia (2018) investigated the effects of coaching on teachers implementing evidence-based classroom strategies. Their approach to coaching included modeling and performance feedback. Specifically, the researchers used a single case, multiple-baseline design on two preschool teachers to examine the effects of coaching, modeling, and performance feedback on teachers' implementation of evidence-based practices. The results indicated that coaching, modeling, and performance feedback improved the teachers' implementation of evidence-based practices in their classrooms. Although the children's behavior in this study was not part of the experimental design, descriptive results indicated that the students' challenging behaviors decreased after the teachers' coaching intervention.

Head Start is a preschool program funded through grants. Unlike K-12 education programs, they do not mandate children to attend Head Start and other proeschool programs. Because of this, Head Start programs face cost issues pertaining to professional development(Powell et al, 2010) . The financial impact of Head Start programs hiring coaches trained in the area of behavior management would be more than most programs can bear. An alternative to face-to-face coaching is virtual coaching. The previous study by Brock and Beaman-Digilia delivered coaching, and training sessions to teachers face to face. Today professional development can also be implemented using technology. An increasing body of literature suggests that virtual/electronic coaching can also be effective for teachers(Rock et al, 2013; Israel et al, 2013; Ottley et al, 2015 Coogle et al, 2016) . The benefits of virtual coaching

for many preschools and Head Start programs include flexibility in scheduling and cost-effectiveness.

### **Purpose of Study**

This research study aimed to examine if coaching Head Start teachers virtually on descriptive/behavior-specific praise would increase their use of the behavior-specific praise strategy, which is an evidence-based strategy. The study examined if an increase in behavior statements would reduce challenging behavior. Probes assessed the number of occurrences the teachers provided behavior-specific praise to the students.

### **Research Questions**

1. What are the effects of virtual coaching on Head Start teachers' use of behavior-specific praise?
2. What are the effects of a teacher's behavior-specific praise on challenging behavior?

### **Definition of Terms**

**Early Childhood Education:** an educational program that serves children in their preschool years before they are old enough to enter kindergarten.

**Suspension:** child is temporally removed from classroom and/or class peers.

**Expulsion:** child is permanently removed from classroom or program.

**Professional Development:** a strategy that changes the practices and perspectives of a teacher towards an established articulated area

**Coaching:** ongoing and continuous support to assist teachers with the implementation of a new practice

**Virtual Coaching:** ongoing and continuous support provided to teachers through online technologies.

**Behavior Specific Praise:** praise given to a student after they have performed a desired behavior.

### **Limitations of the Study**

The Covid-19 Pandemic caused several limitations to the study. Only two teachers participated in the study due to teacher illness or staff turnover. The researcher included two teachers from the same Head Start center instead of different Head Start centers in the study. The teachers also reported internet issues with uploading observation videos. The present study did not investigate the comparison between face-to-face and virtual coaching. The researcher did not collect data on individual students due to the guidance from the institutional review board at Auburn University.

### **Summary**

This study aimed to extend the work of Brock and Beamon-Digilia's research (2018). The current study focused on coaching preschool teachers, similar to the previous study. However, unlike the earlier studies, the current research focuses on Head Start teachers only because of their unique challenges. These centers cater to a different population of young children than most preschool programs, as well as receiving different funding. In contrast to other preschool programs, Head Start serves children from low-income families and does not receive state funds. Unlike the previous study, this study also provided virtual coaching to Head Start teachers instead of in person. The researcher offered virtual coaching to Head Start teachers to increase their use of behavior-specific praise statements, an evidenced-based practice for managing challenging behavior.

## CHAPTER II. LITERATURE REVIEW

### Introduction

The experiences and education that a child receives in their early years impact their trajectory. When suspension and expulsion are part of these experiences, the effects of these actions often lead to continued adverse outcomes for the child. Being expelled may also disturb a child's social-emotional and cognitive development (American Academy of Pediatrics Committee on School Health, 2003). Research also reveals that students expelled from school in the early years are ten times more likely to drop out of school (Dunlap et al., 2006). Pioneers of the early childhood field ensured it provided all students with learning opportunities. People even saw EC as a way to help society and alleviate some social issues, such as poverty. However, currently, some of the children living in poverty and from underrepresented groups are not able to receive those opportunities because they are being suspended or expelled. In the preschool-to-prison pipeline, students are expelled, suspended, and punished harshly out of school and then placed in the criminal justice system (Gonsoulin, 2012).

Effective classroom management is essential in supporting children with challenging behavior. Gilliam's study (2005) proclaimed challenging behavior as the number one cause of preschool-age children's high suspension and expulsion rate. However, Most Head Start teachers matriculated through an early childhood teacher preparation program, and the emphasis of these programs is on child development and the pedagogy for teaching young children (Brock et al., 2018). Rarely do early childhood teacher preparation programs constitute courses that focus on managing challenging behavior. Therefore, teachers rarely are educated on behavioral approaches and behavioral learning theory. Preschool teachers have reported being frustrated because they did not have the skills to teach children with challenging behavior (Hemmeter et

al., 2011). Also, when asked about career struggles, teachers reported a lack of PD and lack of training in behavior management.

Considering that most preschool teachers receive little to no training in their preparation programs around managing behavior, PD is regarded as the best and most consistent route to train teachers on the science of managing behavior. In reviewing some early childhood teacher preparation programs, pre-service teachers learn why children might act out, but little consideration is placed on how to handle the challenging behavior. Ideally, as teachers gather new information from PD, the expectation is to implement the new information regarding best practices in the classrooms. Typical Head Start and other preschool PD, deliver training in a didactic workshop style, which has not been effective (Johnson & Colleagues, 2017). Instead, scholars have noted that PD must also include feedback to teachers and opportunities for the teacher to practice (Han, 2014). Research further reveals the gap between effective practices and the teachers' actual implementation of these strategies. Trainers instruct teachers on how to perform the strategy, but they rarely implement the strategy to fidelity after the workshop-style training (Cook & Odom, 2013).

Chapter Two presents the Literature Review for this study, which explores the pioneers of EC and the approaches and theories that shape modern EC programs. Finally, the chapter concludes with current studies on professional development in the form of coaching. These studies also discuss how coaching teachers effectively changed teacher practices and decreased challenging behavior using evidence-based strategies.



## **Early Explorations of Early Childhood**

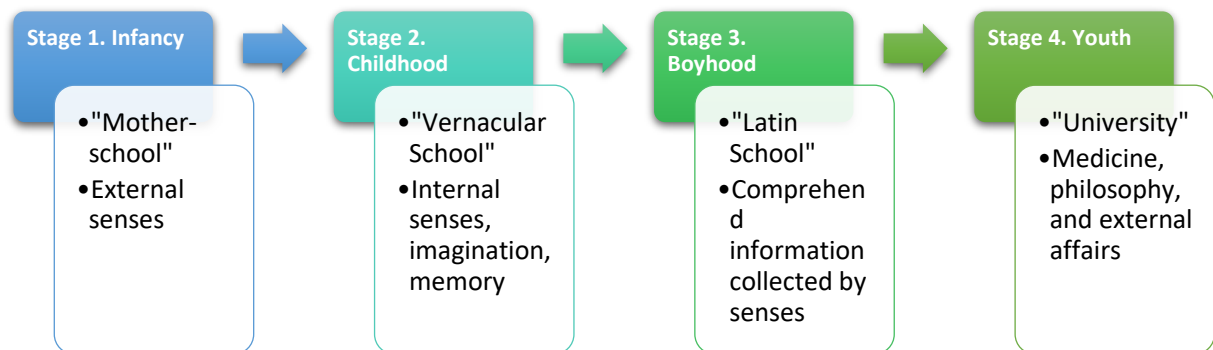
Several individuals impacted the field of early childhood. Many of these philosophers' influences are seen throughout the teachings and curriculum of early childhood education today. It is important to discuss these persons and their perspectives to provide the reader with a better understanding of early childhood origins to demonstrate how suspension and expulsion are against the very nature of EC philosophy. It is also important to discuss the beginnings of early childhood education (ECE) programs as we see them today and the different theories we currently view shape early childhood education. The exploration of the pioneers gives the readers a sense of why challenging behavior may not have been included in the beginnings of early childhood teachings and why it is important not to expel young children.

John Comenius believed education should be universal (Margilia,2016). His inspiration was based on his religion, which was also the driving force for this belief. As such, Comenius felt that educating children would alleviate human suffering and demonstrate the glory of God. Further, he believed that the purpose of education was to impose knowledge and have children think critically. He wanted children to learn to think for themselves. Comenius' religious inspiration led him to also believe that as children grew older and learned to read, they would see God's importance and glory.

Comenius also introduced the art of systematic pedagogy (Maviglia, 2016). Comenius's ideas further pushed the thought that pedagogy was an independent science separate from psychology. To that end, he became the founder of systematic pedagogy. He provided step-by-step details of learning and believed that learning occurred in stages. He developed four different types of schools that correlated with the stage the person was experiencing. Figure 1 illustrates Comenius' four schools and associated states.

Figure 1

*Comenius' Systematic Pedagogy*



The first stage was infancy. During this stage, the child attended a "mother-school." The "mother-school" was in each household and focused on a child's external senses. Mothers taught children about the different objects surrounding them (Comenius, 1967). The next stage was childhood, and children in this stage attended "Vernacular-School." Children explore their internal senses, imagination, and memory during this stage. The educator trained children to read, write, paint, sing, count, measure, and commit facts to memory. The next stage was "boyhood," and students attended the Latin-School. During this stage, children can comprehend and pass judgment on the information collected by the senses. The fourth stage was "youth," and students attended the "University" school. At this level, students studied medicine, philosophy, and external affairs. Collectively, these schools summed up Comenius's idea of what people needed to grow into harmonious adults.

Comenius believed that an individual's soul was nurtured by the school, family, and social relationships (Maviglia, 2016). He was a strong advocate of a holistic view of education. He understood that educating children only to know how to read was insufficient. Instead, there

had to be harmony in all sectors of the learner's experience. Comenius' philosophy on education influenced many of today's early childhood school settings. Many programs adopted this holistic approach when educating young children. It is believed that young children need more than just academic instruction; their social and emotional needs are also to be taken care of.

Further, Comenius had compassion for families and realized that not all families could adequately educate their children. Therefore, he believed it was up to highly skilled people who had a passion for education to teach children. Comenius's early understanding that families needed help with educating their children is an idea that many countries with public schools also promote today. Comenius set the foundation by noticing that educating young children was more than reading and writing, but it also consisted of social and emotional support.

Johann Pestalozzi was another educator who emphasized the importance of children, the family, and society. Initially, Pestalozzi's focus on educating children was to teach them practical skills and socialization (Bowers, 2004). Pestalozzi bought land and used it to open an industrial school for the poor; however, the school was not a success. From this experience, Pestalozzi came to the same conclusions as Comenius, children needed to be loved and cared for before teaching them industrial skills. In his opinion, failure to address the children's social and emotional needs contributed to the school's failure.

Pestalozzi emphasized that love should be the guiding factor in the relationship between the teachers and the students. During a five-month experiment in Stanz, Switzerland, Pestalozzi became interested in students' internal work rather than their exterior work based on his discovery. To that end, he reasoned that education should encompass morality and be a preparation for occupations. He believed this would be good for society and help children become contributing members of their community in adulthood. Two essential tenets of

Pestalozzi's philosophy were that learning occurred through observation and that language should be grounded in observing objects (Bowers, 2004).

In 1801, Pestalozzi wrote a book that commemorated his philosophy on how to teach children. He also founded Yverdon, where people worldwide could gather to share ideas and thoughts about education. Many philosophers, educators, and other prominent leaders visited regularly, and it later became known as the origin of teacher education (Bowers, 2004). In contrast to Comenius, religion was not an inspiration to Pestalozzi. However, both pioneers highlighted the importance of going above academics and preparing for occupations.

Fredrich Froebel was another major contributor to the beginnings of early childhood education. He was regarded as the founder of kindergarten and was the first person who described children as learning best through play (Hoskins & Smedley, 2015). Through play, children create experiences and make different observations. He believed play allowed children to express themselves freely. Froebel believed the teacher's role was to be passive and not interfere with the child's actions because he believed children were their own sources of knowledge. Therefore, the classrooms were child-led and child-focused. For example, the beginning of a lesson starts with what the child is interested in learning (Hoskins & Smedley, 2015). In this approach, Froebel stated teachers should also consider the child's abilities to guide their own instruction.

In Froebel's kindergarten program, students had an individual garden. Students also worked together in a community garden, where he introduced manipulatives. He called manipulatives "gifts and occupations" (Hoskins & Smedley, 2015), which encouraged students to explore their creativity in the setting. Gifts were items like wooden blocks. These blocks allowed the children to use their imagination to create different learning products. The

occupations were things that would help a student learn a particular skill, like sewing (Hoskins & Smedley, 2015). Froebel's practices can be seen as a precursor to some of today's practices and many early childhood programs that utilize different centers or areas focused on play using blocks and community figures. His idea of students' learning through observation is compared to Pestalozzi's beliefs.

Lev Vygotsky is another early childhood philosopher similar to Froebel in that he believed play was important for children to learn. Specifically, Vygotsky believed children learned through social interactions that were guided by others (Jaramillo, 1996), which was later known as the socio-cultural theory. In contrast to Froebel, Vygotsky believed children's cognitive development was co-constructed and not constructed individually, meaning they were not their own sources of knowledge. Vygotsky emphasized the importance of children's environments as he believed that a child's environment influenced how the child perceived the world as well as his/her thoughts (Jaramilli, 1996). Vygotsky heavily emphasized how a child's environment plays a key role in their learning and how they view the world.

Two critical concepts emphasized in Vygotsky's work were the "More Knowledgeable Other" and the "Zone of Proximal Development." The "More Knowledgeable Other" (MKO) referred to someone that was on a higher ability level than the child (Jaramillo, 1996). In most cases, this person was the parent/ guardian or teacher. The MKO could also be another child who was on a higher level than the learner. The "Zone of Proximal Development" referred to the area of difference between what a learner could do without any help compared to what they could do with help (Jaramillo, 1996). From the "Zone of Proximal Development," Vygotsky suggested that teachers could teach students anything through modeling and scaffolding. Like other

pioneers in the field, he believed that teachers must address children academically, socially, and emotionally to ensure learning occurs for the student fully.

The works of John Dewey have also played a significant role in early childhood education. He believed an excellent democracy came from having an excellent public school system connected to that democracy (Sabia, 2012). Consistent with Comenius, who understood that society must help educate all children. It was not enough for people to only be concerned about their own children, but the welfare of all children was necessary for a better society (Jackson, 1998).

In addition to Dewey advocating for education and democracy, he also had certain beliefs on how children learned. As a Froebel follower, he believed that children learned things by doing and being active in play. Dewey believed that education should consist of engaged learners, and they should create their own experiences. Education should start with a child's interest, and teachers should be observers of the child and learn as well. Compared to the other early philosophers, Dewey also felt that education was a universal right and should be treated as such (Jackson, 1998).

Erick Erikson was another prominent pioneer of early childhood education. His psychosocial theory focused on how a learners' parents, society, and personality contributed to child development. Therefore, in comparison with Vygotsky, he believed in co-construction as well, with the learner's knowledge being influenced by others. He suggested eight stages every person must go through in their lifetime. The first several stages directly impacted early childhood education. This theory was unique because it described conflicts that led to progress through the stages.

The first stage starts with babies. This is called the trust vs. mistrust stage. During this stage, babies experience the world around them and contact their parents (Graves & Larkin, 2006). Depending on the parents' responsiveness, the infant establishes trust in the world around them. In doing so, the caregiver lays the foundation for the child to navigate through the environment. The next stage of Erikson's theory is autonomy vs. shame and guilt. Children between the ages of one and three develop their muscles and engage with their environment. They are less likely to want to be held and instead explore what is going on in their surroundings. This stage acknowledges the ideas of some of the pioneers mentioned earlier in that the environment was an influential teacher. According to Erikson, parents and or caregivers need to allow flexibility in this stage. At the same time, adults must establish clear boundaries to make sure children are safe (Graves & Larkin, 2006). According to Erikson, children explore things and develop a natural curiosity in this stage, which leads to healthy self-esteem.

The last stage is the initiative vs. guilt stage. Children explore their power in their environments (Graves & Larkin, 2006). This stage usually occurs between the ages of three and five years old. Children start initiating different activities with their friends around them. However, children were also less likely to understand that other people might not want to do what they say (Graves & Larkin, 2006). Because of this disconnect, children may feel guilt. Erikson's stages suggest that preschool-age children could experience some behavior challenges because some children may not understand how to view another person's perspective in this age range. Therefore, it is important for parents and teachers to understand what facilitates healthy interactions with the child. Teachers and parents must also permit the child to make decisions and figure things out, which is vital for the child's development as a compassionate individual.

It is also important to discuss the contributions of Patty Smith Hill in early childhood education. Hill was a student of John Dewey's, and his core ideas were influential in her groundwork in early childhood education in the United States. She was both an educator for early childhood students and an educator for teachers working in early childhood (Crawford, 2017). Hill is known for founding the National Association for Nursery Education (NANE) in 1929 to improve the quality of all nursery programs and ensure they exemplified high-quality characteristics (Rudnitski, 1993). Similar to Pestalozzi, Hill believed that teaching preschool-aged children required a substantive amount of knowledge and skill. She also believed that teaching younger children required more skill than teaching older children (Crawford, 2017). Thus, she laid a pedagogical foundation for all kindergarten programs in the United States.

Hill believed early childhood education programs should consist of creative spaces. Froebel inspired Hill, but his methodology was not something Hill felt was appropriate for the small children. Instead of using Froebel's blocks, Hill created her own blocks and called them the "Patty Smith Hill Blocks" (Crawford, 2017). Hill and a psychologist developed 84 desired habits expected of kindergarteners. The "Tentative Inventory of Habit" became the foundational instruction planned around the characteristics and expectations for kindergarten (Crawford, 2017).

In 1964, Hill's NANE was restructured and renamed the National Association for the Education of Young Children (NAEYC). The organization made a significant impact in the field of early childhood education by establishing a set of standards for early childhood education programs across the nation and has influenced other programs internationally. The organization has issued many position statements on early childhood education practices, some of which addressed professional development for early childhood educators (National Association for the



Education of Young Children [NAEYC], n.d.). The organization continues to uphold Hill's legacy regarding the nature of early childhood programs and how teachers should teach the students.

## **History of Preschool**

This section provides background information on how the preschool classrooms evolved from their beginnings in 1779 to the prevalence of preschool programs known today. Some of the people who helped shape the early childhood field were discussed earlier. Early childhood advocates such as J.F. Oberlin, Robert Owens, and Samuel Wilderspin each uniquely influenced that transition and contributed to the advancement of pre-school structure and curriculums.

Settings to care for young children did not open until 1779. J. F Oberlin and Louise Scheppler founded a school in Strasburg, France. The purpose of this first center for preschool-aged children was to care for and educate children whose parents were not present with them during the day. Oberlin was inspired to start a school because children under age six were often left home alone unsupervised. In Oberlin's schools, children were knitting, drawing, and speaking French. While Oberlin's schools focused more on social skills, other pioneers believed schools equipped children for the workplace, similar to what some of the earlier philosophers stated the purpose of teaching small children consisted of.

In 1816, Robert Owens opened a school for infants in New Lanark, Scotland. Owens provided the children with moral education, and he focused on helping students become more fit in the workplace (Davidson, 2010). Most of the children at Owen's schools were from low-income families that worked in his cotton mills. Owens named the school the New Institute for the Formation of Character. The school was part of a larger social experiment in which Owens attempted to develop a Utopian society. He wanted to transform the lives of the people who lived

in his cotton mill. It was Owen's philosophy that character comes from the environment and education. He believed a solid education system that taught character would benefit society.

Owens' school was very child-centered and punishment was not permitted at any of his schools. Owen instructed all the teachers to be kind to the students. Dancing and singing were also integral in the curriculum as Owens felt that these were necessary for children to feel good and be joyful (Davidson, 2010). Although he didn't use the term social and emotional learning, teaching about character provided a guide for how students should behave. If a child was old enough to walk, he or she went to the infant school. From the infant school, the children went into the workplace nursery school. When children were old enough to work at the mills, they worked and attended classes during the evening time, along with their parents (Davidson, 2010). It was important to Owens that he provided care and education for the families that worked on his cotton mills. He advocated for everyone to help struggling families.

Samuel Wilderspin opened an infant school in London in the 1820s. The classrooms had up to one hundred students. He viewed his approach as child-centered, but much of his teaching method consisted of rote learning (Read, 2006). The students listened to instruction from their teacher most of the day. He later founded the Queen Street School in the 1840s, and his methods evolved into more child-centered activities. Play became necessary, and children were expected to be inquisitive.

Following the teachings of Froebel, Margarethe Schurz opened the first preschool/ kindergarten in the United States. The first center opened in 1856, and the lessons were in German (Doris, 2006). Although this was the first kindergarten, other day nursery schools attending to pre-school-aged children had opened in the early 1850s. In the United States, preschools have traditionally come from two viewpoints regarding how children should receive

early care. The first type of school was referred to as "day nurseries." The purpose of these environments was to provide childcare for mothers, focusing on primary care and monitoring of the children (Doris, 2006). The second type of environment for young children was nursery schools. Unlike their day nursery counterparts, these establishments were specific to the nature of educating children, not just basic care providers.

Another major influencer of early childhood education was Maria Montessori, who also started her schools based on her beliefs about how children should learn. Similar to Froebel, Maria believed that children were their own sources of knowledge. Montessori believed that the maturation of child to adult was not successive. Montessori believed that children were quite different from adults and had their own thoughts and ways of doing things (Carnes, 2015). As an educator, she thought teachers were social engineers, meaning they should guide the instruction, but the children would be active learners. Froebel and Montessori both believed in adults and teachers being children's guides. Montessori's studies and observations are well documented in her previous work with younger students with disabilities in Rome. The Rome location was a critical factor in their learning because she felt that children were absorbing their environment (Carnes, 2015). Montessori opened her first center in 1907 in Italy. A few years later, the first Montessori school in the United States opened in 1911. In a Montessori school, the teacher's primary role is to make observations of the child as they naturally navigate their environment (Gobry, 2018). In this child-centered, child-led approach, the teacher connects the child with materials and shows them the proper way to use the materials. According to the Montessori approach, children learn best by being involved and doing rather than being told by an adult what to do.

Montessori schools implemented four major components – the family, combined age groups, sensory learning, and environment. Montessori programs operate on the belief that the family plays a significant role in a child's development and learning. Therefore, the school and the family link is essential and stressed throughout this approach.

Most Montessori classrooms consist of different age groups within a single class (Gobry, 2018). The purpose behind this is to give children a chance to learn from each other. During class time, the teacher demonstrated how to use certain materials. It was important because students could only use materials that the teacher had previously shown them. Children could not use any material that they had not seen their teacher engage with the item properly. This approach ensured they learned the correct way the first time.

A vital component of the Montessori schools was the sensory learning approach. Montessori schools emphasized the need for children to touch, taste, smell, explore, and see. This is a part of the "doing" in the Montessori approach. Therefore, the materials in the Montessori schools are didactic or are a part of the teaching process that enables students to self-correct (Gobry, 2018). Montessori designed the materials herself to ensure children learned what they needed to learn before matriculating. For instance, some materials helped students with their fine motor development in the classroom, which set the stage for students to learn later to handwrite.

As stated earlier, the environment at a Montessori school is important and intentional. Maria Montessori believed that classroom environments should be aesthetically pleasing to help children focus and concentrate. The classroom mirrored a home to help children learn practical skills and allow opportunities for self-help skills, such as handwashing. The chairs and materials

were comfortable for the children because Maria believed this was a part of making the child's experience pleasing.

Compared to other schools and approaches, another unique thing about this approach is the lack of pretend play in the classroom. Montessori schools aimed to teach children organization skills. The environment consisted of self-correcting materials that demonstrated work and not play. Materials were self-correcting if a piece of the material did not fit or was leftover. The child immediately identified the problem and thus was able to rectify their mistake independently. For Montessori advocates, this has been a successful approach to helping young children.

Another Pioneer, Loris Malaguzzi, created schools focused on The Reggio Emilia Approach, which he founded. The approach for these schools received its name after a small town in Northern Italy, Reggio Emilia. This approach to schools drew important concepts from constructivism and co-constructivism (McNally & Slutsky, 2017). Consequently, children developed and obtained knowledge and understanding according to their interests. The primary components of the Reggio Emilia approach are the classroom community, co-construction, long-term projects, flow charts, documentation, and naming conventions for educators.

Malaguzzi believed the classroom community was important to teach young children. He thought the classrooms should be set up to support social exchanges. The first thing that students learned was how to cooperate and build trust within their community. After establishing trust, students would effectively collaborate with the teachers and have a constructive conflict. This allowed students and teachers to gain new insight from each other. It is evident that the Reggio Emilia approach draws from the socio-cultural theory described earlier.

Co-construction increases the depth of knowledge for students, by working with others during active learning (McNally & Slutsky, 2017). This emphasis on co-construction in this approach details how children gained meaning from their experiences in a social context. The teachers listen to each student in the classroom and facilitate in a way that all children can freely express their thoughts. Students learn when they check, evaluate, and add to their work (McNally & Slutsky, 2017).

Long-term projects were another component of the Reggio Emilia Approach. Teachers and students worked on projects of interest to the students and teachers. The projects were usually three weeks long. The purpose of these projects was for the teachers and students to explore different concepts in great detail. To ensure all students contribute, teachers spend an adequate amount of time on the projects. The projects promote critical thinking for the children.

Another critical component of the Reggio Emilia schools was the active use of flowcharts. Teachers used this system to organize their planning of the curriculum and assessments (McNally & Slutsky, 2017). Flowcharts supported and enhanced the curriculum by allowing teachers to understand the step-by-step process completely. The flowcharts also helped with another major component, documentation.

Documentation in the Reggio Emilia Approach was a way to use the environment to teach the background of projects and the school community (McNally & Slutsky, 2017). In many Reggio Emilia schools, the artwork was an important component and part of the documentation. The documentation provided a way for students to make sense of the things around them and build connections. This involved but was not limited to concrete drawings and examples of the processes and the products of that child's education experience (McNally & Slutsky, 2017).

The Reggio Emilia approach used a naming convention for staff members compared to other approaches and models. The first is an Atelierista, a teacher with specialized training (McNally & Stutsky, 2017). This person supported the curriculum development of other teachers and the children. Every Reggio Emilia pre-primary school had an Atelierista at their school to support them. The second staff member was the Pedagogistas. The person in this role contributed expertise and provided educational consultations for the teachers. Their purpose was to implement the philosophy of the Reggio Emilia system. They ensured that teachers saw and treated the children as capable learners. Additionally, as part of implementing the philosophy to the fullest potential, they ensured a connection between the families, schools, and the community.

## **Learning Theories**

Many brilliant people shaped early childhood practices and centers. However, many of the pioneers studied the work of several theorists in order to form their thoughts about learning. This section of the paper focuses on the different learning theories. The researcher provided background information on the influencers prior to discussing the learning theories to give the reader an opportunity to understand the foundation of EC. As the researcher explores the different theories that shape how children learn, the influences of these theorists can be seen in some of the discussions from earlier. The reader can also explore how certain theorists did not significantly impact early childhood but how their ideas could help with young children's challenging behavior.

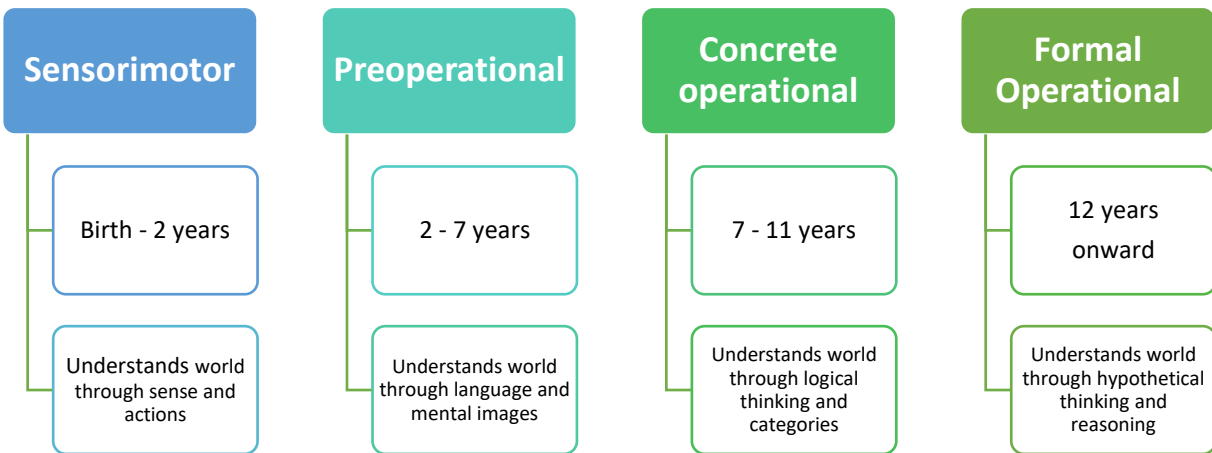
### ***Cognitive Learning Theory***

One of the earliest and most recognized theories in child development is Cognitive Development Theory, created by Jean Piaget. In his cognitive development theory, Piaget

believed children learn through their interactions with the world around them (Siegler & Ellis, 1996). Piaget believed children develop through four stages of cognitive development. Figure 2 illustrates Piaget's four stages of cognitive development in children.

Figure 2.

*Piaget's Stages of Cognitive Development*



The first stage is sensorimotor. During this stage, children learn about the world around them through their senses by touching and manipulating objects around them. This first stage occurs from birth to the age of two. The second stage is the "preoperational" stage. Children develop imaginations, establish memories, and understand symbolism during this stage. For example, children can understand the concepts of past and present. Typically, children experience this development between the ages of two and seven. The third stage is "concrete operational." In this stage, children become more familiar with the world around them and



understand other people's feelings. During this stage, the child becomes less egocentric. This stage occurs between seven and eleven years of age. The last stage is the "formal operational" stage, which occurs at age 12 and beyond. During this stage, children make sense of things through logic. They can plan for the future based on things they experience and can make reasonable predictions based on their knowledge.

Piaget believed children must be active participants in their learning process (Siegler & Ellis, 1996). At the core of the cognitive theory, children learn by someone first exposing them to knowledge. Their knowledge is built from previous knowledge of another person, usually an adult. Although Piaget described the stages in which children learn, the theory only addressed how a child understands the world and what they should be able to do at the different stages. There is no direct mention of how students learn behavior expectations; a child could learn it through exposure to other people.

### ***Behavioral Learning Theory***

Behavioral Learning Theory, however, is a theory that addresses behavior. The core of Behavioral Learning Theory is the idea that behaviors are learned and unlearned. Behavioral Learning theorists argue that behavior is learned through an individual's interaction with their environment. Individuals acquire behavior through conditioning, which is the learner's interaction with their environment (Harzem, 2004). Behaviorists believe the environment shapes actions. Learning is a systematic and observable process for behaviorists, and only behavior observed should be studied and considered.

Behaviorist Ivan Pavlov was a Russian psychologist famous for his work with salivation in dogs. Through his work, he discovered classical conditioning. Classical conditioning involved automatic and reflexive responses that took place when neutral stimuli were paired with

unconditioned stimuli. A neutral stimulus was anything that caused a response or reaction to the human or animal (Harzem, 2004). The unconditional stimuli caused a reaction or response from the human or animal.

In Pavlov's salivation study with dogs, the neutral stimulus was a bell, and meat powder was an unconditional stimulus. Pavlov would ring the bell right before presenting the dog with the meat powder. The meat powder naturally caused the dog to salivate, while the bell did not cause any natural response. By ringing the bell before each presentation of the meat powder, the dog began to associate the bell with the meat powder. Consequently, at the sound of the bell, the dog began to salivate.

Pavlov's work inspired the works of John Watson, an American psychologist who believed this theory of classical conditioning applied to humans as well. Watson coined the term "behaviorism" in 1913. His publication "Psychology as the Behaviour Views it" (1913) discussed learning through the lens of behaviorists. Behaviorists believed there were two types of conditioning: classical conditioning and operant conditioning. Furthering the work of Pavlov, John Watson conducted an experiment that proved his instinct had some merit and classical conditioning could be observed with humans as well. Watson conducted a study on a little boy named Albert. The neutral stimulus for Albert was a picture of a white rat. After presenting a picture of a white rat, he made a loud sound with a hammer which made Albert cry. The loud sound of the hammer was the unconditioned stimulus. Consistent with Pavlov's study, after several combined presentations, the child began to cry at the sight of the white rat picture. Furthermore, when the child saw anything resembling the white rat, he also cried. From this experiment, the child became conditioned to fear white rats.

B.F. Skinner promoted operant conditioning. Specifically, Skinner studied behavior in the context of what caused action and the consequences (Malone, 2001). Skinner believed behavior followed by positive or pleasant consequences would continue to repeat. In contrast, behavior followed by undesirable consequences was less likely to repeat. Skinner used the term reinforcement, which can be positive or negative. Behavior reinforced will repeat, and behavior not reinforced will weaken or extinguish.

Positive reinforcement occurs when the consequence involves adding a stimulus to the environment, leading to increased behavior. For example, if a child's parent praised a child each time they finished their homework and, over time, the child continued to complete the homework, the praise was the positive reinforcer. Negative reinforcement was defined as the removal of an aversive stimulus leading to an increase in behavior. For example, if the child hated having to run two miles if they did not complete their homework on time, they would complete the homework, so they wouldn't have to run the two miles. The running for not completing homework was the negative reinforcer. The goal of both positive and negative reinforcement is to increase desired behavior, such as completing homework.

Another component of Skinner's theory was punishment. Punishment was the opposite of reinforcement, meaning a consequence would decrease a behavior. Positive punishment involved presentation of a stimulus that decreased the behavior. The removal of a stimulus to decrease the likelihood of behavior was called negative punishment. An example of positive punishment was when a parent yelled at a child for bringing home bad homework grades. A negative punishment would be when a parent took a child's phone away for bringing home bad homework grades. Behaviorists give a systematic way of how children can learn and unlearn behaviors which helps in the management of challenging behavior.

### ***Social Learning Theory***

Social Learning Theory also guides how to teach behavior. It was viewed as a bridge between the behavioral and cognitive learning theories. Social Learning theory was the idea that humans could learn through observing other people. Observing other people's behavior and attitudes and the consequences of behavior could inform a learner on how to behave (Grusec, 1992).

Albert Bandura, the theory's creator, suggested that most learning occurred through the influence of a model (Grusec, 1992). Social Learning theory was generally comprised of two steps. First, the individual observed the behavior and formed a mental picture of the behavior in their mind. Second, the person behaved in the manner modeled to them. If the consequence was desirable, they repeated the behavior; if the consequence was undesirable, they discontinued the behavior. This theory suggests that children can also learn appropriate behaviors through observing others based on how others respond to the person engaging in the observed behavior.

### ***Ecological Systems Theory***

Urie Bronfenbrenner, a Cornell developmental psychologist, developed and published the Ecological Systems Theory (EST), later revised to Bioecological Systems Theory (Bronfenbrenner, 1979). Although this theory does not provide much information about behavior, it supports social learning theory in that children can learn things through observation, including learning behaviors. This theory offers more detail about the environmental influences on a child's learning. The uniqueness of EST is that it is based on Bronfenbrenner's field observations and purports that humans create the ecologies in which they live and develop, which then impact the way people bring up their children (Bronfenbrenner, 1979). In addition to the importance of conducting field research in a cultural context, Bronfenbrenner also observed

that public policy had the ability to shape the conditions under which human beings live, influencing their well-being and development (Bronfenbrenner, 1979). This belief compelled him to be an active advocate to help children and their families in the U.S.

Bronfenbrenner defined the environment as a set of interconnected structures, each inside the next (Bronfenbrenner, 1979). In ecological systems theory, Bronfenbrenner describes five ecological systems or structures: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. These five systems were interconnected, meaning the impact of one system on the child's development was contingent on its relationships with the other systems. Bronfenbrenner arranged the systems in the order that he believed had the most impact on the child.

The first level was the microsystem. This level refers to the child's immediate environment, such as the home or the classroom. The second level was the mesosystem. Bronfenbrenner described this level as being the interactions between the microsystems. An example of mesosystems would be the relationship or interactions between the school and the home structures. The third level was the exosystem. The exosystem was those microsystems that the learner was not physically present in, but the events in those structures affected the child. An example of this would be the parent's workplace. The fourth system was the macrosystem which included attributes and beliefs connected to culture or society. The final level was the chronosystem which was the changes to the environment over the lifespan. Bronfenbrenner further theorized that if things that impacted a child's environment beyond the physical setting were mitigated, positive change would result for the child. Even if children's home environments were not conducive to a child's learning, the classroom environment or other structures would still help the child have positive outcomes. This is important because it suggests that many

factors influence a child's development and trajectory. However, it acknowledges the power and influence of the adults in a child's life, including their teachers.

### *Adult Learning Theory*

Throughout all of the theories, there is evidence that the practices and actions of adults can shape the child's learning, including what they learn about behavior. Therefore, it can be inferred that if we want to help children, we must first target and help the adults in the child's environment. In order to help adults, it is critical to understand their needs and how they learn as well. Adult Learning Theory focuses on learning after childhood. Scholars such as Malcolm Knowles have researched and described the factors that influence adult learning, which is important when considering PD options for teachers in early childhood education.

Malcolm Knowles created a theory that focused on learning that took place when a person reached adulthood. Most of the concepts in Adult Learning Theory, also called Andragogy, are similar to what previous scholars theorized about learning at a young age. However, Knowles argues that some core principles differ between how adults learn and children learn; he describes these based on six assumptions.

First, adults need to know the why, what, and how behind the learning (Knowles et al., 2005). The "need to know" was because adults need to understand why learning a particular topic was valuable. They also need to know how they will learn the information. The second principle was the "self-concept of the learner." This principle highlights the concept of self-directed learning and being autonomous. Knowles's third principle focused on the importance of the learner's prior experience. Unlike children, adults have many more experiences they bring to the classroom. The fourth principle was the readiness to learn from the adult. Their life goals or developmental tasks shape this readiness to learn. The fifth principle states that adults learn

better when the content is problem-centered and put in the context of addressing a need. Finally, Knowles's last principle was that adults' motivation to learn is primarily intrinsic, although external motivators such as getting paid a larger salary at work would also be effective.

Knowles acknowledges that it was not enough to look at the core principles and think this prescribed method would work for teaching all adults. Knowles further discussed that for an adult learning professional to be effective, the professional needed to use their knowledge of individual differences and characteristics to differentiate the adult learning experience in several ways. The professionals do this by differentiating the core principles to the learner based on their learning style and cognitive ability. Professionals also need to consider which principles are more important to a learner and define goals that will expand the learning experience for the adult. Therefore, Andragogy in practice is summed up in three dimensions that are (1) goals and purposes for learning, (2) individual and situation differences, and (3) andragogy: core adult learning principles (Knowles et al., 2005).

It is important to note that Knowles initially developed these principles in the 1970s when the traditional way of teaching children was very authoritarian. As stated earlier, many concepts in Knowles's framework of adult learning are the same or similar to the concepts presented by earlier theorists when discussing children. In the world of early childhood education today, the importance of building on prior knowledge, differentiating instruction based on the learners' needs, and engaging students in their learning are becoming the norm. Vygotsky also discussed how this building on prior knowledge or scaffolding was an excellent way for kids to learn as well.

The previous literature suggests there are many ways children and adults learn. Current researchers have put these theories into practice and have conducted more modern studies

exploring the modern child and their families. The outcome of these studies has contributed to the development of two popular approaches or curriculums used to teach modern children. Exploring these curriculums provides the reader with context on how preschool programs educate young children.

### ***The High/Scope Approach***

Dave Weikart and Connie Kamil developed the High/Scope approach, which stemmed from their work with the "Perry Preschool Project." The researchers developed the program initially to help students from poor areas to be successful in high school. They believed the earlier students were prepped, the greater success they would have in high school (Schweinhart & Hohman, 1992).

High/Scope framed its approach around the constructivist theory. In constructivist theory, children learn by physically and mentally interacting with the world around them and other people. Students were not shielded from making mistakes which encouraged them to continue learning. Like the Montessori approach, High/Scope also believes in the children's concept of learning by doing (Schweinhart & Hohmann, 1992). However, in contrast, High/Scope emphasizes creative imagination and learning, which involves pretend play.

In the High/Scope approach, children were active learners and were encouraged by adults in the classroom that supported their learning. This approach emphasized the need for asking children open-ended questions. Teachers encouraged children to discuss their thinking with other students and their teachers (Schweinhart & Hohman, 1992). This facilitated discussion, thinking, and conversation and encouraged language skills.

Social Interactions constitute a significant component of the High/Scope approach. It is through social interactions that teachers help facilitate problem-solving and conflict resolution.



In this approach, the need for children to handle conflict was important in the growth and development of a child (Schweinhart & Hohmann, 1992). Therefore, the classroom community focused on making sure students had opportunities to truly experience what it was like to solve problems and address conflicts that may arise.

Materials are another important part of the High/Scope approach. Teachers arrange a High/Scope classroom with abundant materials to further students' exploration of their environment. High/Scope emphasized the need for routine in the classroom. Labeling areas of the classroom and materials in the High/Scope classroom were part of what helps the children maintain a routine. The routing helped students stay organized and feel secure in their learning environment.

Although the sole purpose of the High/Scope approach was not based on the real world as it was in a Montessori school, everything in the classroom helped children with organizational skills. The areas arranged in the classroom were intentional and purposeful, such as having the sand and water table next to a sink. All materials were easily accessible to the students by the arrangement of the classroom. The materials were usually at eye level, which helped children actively explore their environment. It also catered to the interests of the children. Ideally, in the High/Scope classroom, children would use the materials even if a teacher did not deliver instruction on the proper use.

In the High/Scope approach, the teacher's role is to be active and not act as a passive facilitator. Teachers engage with students and allow them to explore for themselves. The teachers and students interact with each other and are encouraged to engage in pretend play with other students. Each day in the classroom, a teacher records children's actions and how the children respond to different things and each other. This observation record is unique to the

High/Scope Approach (Schweinhart & Hohmann, 1992). For example, the Reggio Emilia approach developed many years before High/Scope also encouraged observations, but there was no formal record like the one adopted in the High/Scope approach. Although this curriculum was more up-to-date and modern, it still lacks targeted methods on how to address challenging behavior for young children.

### ***Creative Curriculum***

Similar to High/Scope, Creative Curriculum was based on a large preschool study called the Carolina Abecedarian Project. The study's original purpose was to bring researchers together to demonstrate that intellectual disability could be prevented and describe how the prevention strategies affected psychological and biological processes (Ramey et al., 1974). Ramey et al. (1974) suggested that poverty was why many children had intellectual disabilities. Thus, they wanted to prove that prevention measures could positively affect a child's IQ.

The intervention consisted of a whole day, year-round early childhood program for the children. The children received the intensive intervention and had access to several resources, including a family support social worker, nutritional supplements, medical care, transportation, payment for the parents for participation, and disposable diapers (Ramey et al., 1974). Ramey et al. (1974) also developed a curriculum known as "The Creative Curriculum."

In Creative Curriculum, teachers observe the students, facilitate learning, and assess the students (Campbell et al., 2002). The Creative Curriculum focused on the learning environment where teachers set up ten interest areas for the students in the classroom. These interest areas included computers, outdoors, music and moving, sand and water, discovery, library, dramatic play, art, cooking, and toys and games. Daily routines were another critical component of the curriculum, and they include circle time, choice time, and small group. A Creative Curriculum

was considered a flexible curriculum that pays attention to the needs of the individual students. However, it does not provide teachers or schools with effective ways to help children with challenging behavior.

As evident in the previous section, researchers created these approaches and curriculums because of some children's difficulties. Early childhood education has come to be viewed as an intervention for helping students. It was no longer viewed as only a structure to take care of children or teach them character and skills. It was beginning to address learning deficits and also poverty.

### **Head Start Programs**

In 1964, President Lyndon B. Johnson, in his State of the Union Address, declared a "War on Poverty." Claudia Johnson, the wife of President Johnson, heard Urie Bronfenbrenner speak to Congress and invited him to discuss his theory with her and others. The Director of the Office of Economic Opportunity brought together experts in the field of early childhood to create a child development program. They designed the program to meet the needs of disadvantaged preschool children. The purpose was to help communities become more knowledgeable of the needs of children living in poverty (Zigler, 1978).

Given the growing research on education and poverty, educating children in low-income areas was not the only priority of the Head Start program. One of the main components of Head Start was that the program be culturally responsive to the communities they served and that the communities be invested in the program's success by volunteering and giving donations (Zigler, 1978). The program also addresses the children's emotional, social, nutritional, health, and psychological needs.

Initially, Head Start staffed volunteers from all over the country. The initial budget for this program was \$96.4 million. Head Start's focal point was to prepare students for elementary school. It began as an eight-week summer program. The first few years of the program grew to be a nine-month program. In 1969, under President Nixon, Head Start transferred from the Office of Economic Opportunity to the Office of Child Development in the U.S. Department of Health, Education, and Welfare. Currently, the Office of Head Start resides within the Administration on Children and Families in the U.S. Department of Health and Human Services (Zigler,1978).

The United States Congress required the Head Start programs to collaborate with the parents. The parents were not to be passive bystanders. Head Start required parents to participate in the development of the program, the leadership of the program, and the program's direction. This concept of parental involvement aligned with many of the early childhood pioneers. Parental involvement also ensured the program was culturally responsive to the community's needs.

In 1994, Head Start became two programs. The first program was for children three to five years old and retained the original Head Start title. The second program was Early Head Start, which provided services from prenatal to the age of three. This program also offered assistance to expectant mothers and their families.

Head Start programs address most of the different ecologies for a child to support their development. The influence from many of the theories, and approaches can be seen throughout Head Start. Specifically, Bronfenbrenner's Ecological Systems Theory is evident in all aspects of Head Start. Most Head Start programs also use High/Scope or Creative Curriculum as the foundation for their teaching.

## **Head Start Studies**

The U.S. Department of Health and Human Services Administration for Children and Families contracted with Westat to conduct an extensive study on the effectiveness of Head Start in 1998 called the "Head Start Impact Study." This study was mandated by Congress, which wanted a national measurement of Head Start's impact on children and families. Several research questions were asked: 1) What difference does Head start make to key outcomes of development and learning (particularly the multiple domains of school readiness) on low-income children?; 2) What difference does Head Start make on parental practices that contribute to children's school readiness?; 3) Under what circumstances does Head Start achieve the greatest impact?; 4) What worked for which children?; and 5) What services provided the greatest impact? (Head Start Impact Study, 2014).

The Head Start Impact Study was a longitudinal study conducted with a nationally representative sample of 84 grantee/delegates agencies. The researchers collected data in the Fall of 2002 through 2006, following the children and their families from program application to the spring semester of their first-grade year. The sample included almost 5,000 three and four-year-olds new to the Head Start program, who were randomly assigned to two groups. The first group of children was given access to Head Start and its suite of services. The second group of children did not have access to Head Start or its services. Although the second group did not have access to Head Start services, it was noted that some of them enrolled in other early childhood education programs (Head Start Impact Study, 2014).

At each of the Head Start centers in the study, the staff provided information to the parents at the time they completed enrollment applications. The staff discussed how enrollment procedures would differ for the 2002-2003 School year. The Head Start staffers told parents that

the enrollment process would be like a lottery system. The researchers placed 16 children in the Head Start service group at each center and 11 children in the control group (Head Start Impact Study, 2014). At the local level, the sample consisted on average of 27 children per center spread across 23 states.

The collection of data was comprehensive. It consisted of child assessment data for both groups of students, interviews with parents and teachers, and surveys from both Head Start and non-Head Start teachers. The response rate from parents and students was about 80 percent (Head Start Impact Study, 2014). The Head Start teachers and non-Head Start teachers also completed interviews and their respective center directors. Lastly, direct observations documented the quality of care for both groups.

The direct assessments used in the study were the PPVT Adapted, Woodcock-Johnson III Letter Identification, Woodcock-Johnson III Spelling, Color Identification, Letter naming, and the Woodcock-Johnson Pre-Academic Skills. The outcomes from the study showed that children in the Head Start group outperformed the control group in six areas of the language and literacy measurement. There was also a significant difference in the scores for the Head Start children after one year of enrollment compared to the control group.

The children in the treatment group had low social and emotional scores. Further, children in the control group also scored low in the social-emotional area. According to the study, the control group's performance might suggest there is a universal issue across preschool programs nationwide. The study concluded by stating that helping children meet their social-emotional outcomes was a struggling task for Head Start programs.

With the amount of research and evidence that suggests teachers are crucial to developing social and emotional learning in children, the study did not investigate teacher practices or

qualities. Teachers are vital to the success of preschool programs and the outcomes for children. Patty Smith Hill and other early childhood stressed the importance of quality teachers in early childhood education. However, there is no evidence in the literature that the Head Start Study placed importance on that aspect of evaluating the effectiveness of the program. Consequently, preschool-age children's social and emotional development did not improve from the program, and teacher practices could be one of the reasons for the negative results. Gilliam's recent study showing that preschool-aged children are suspended and expelled at higher rates than other children indicates the problem with ignoring teacher practices. The literature also demonstrates the lack of attention to behavior challenges in many early childhood approaches. Although it is important to understand how children learn to read, write, and calculate, it is equally important to understand how they learn social behaviors and how teachers can help students who exhibit challenging behaviors. Preparing early childhood teachers in addressing social and emotional concerns, particularly pro-social behavior, is a must for child development.

### **Preschool to Prison Pipeline**

In the 1980s, under Zero-Tolerance policies, the school-to-prison pipeline was first introduced. These policies stipulated that students would automatically be expelled from school if they committed certain crimes. Gilliam (2005) found that the school-to-prison pipeline actually began in preschool because of his research on expulsion rates, particularly for African-American students. According to Gilliam and the U.S. Department of Education, there is a need for more teacher training to address the issue of expulsion and suspension. The development of teacher training programs that include behavior management and trainings related to communication between students and teachers.

According to Gass and Laughlin (2015), improving student-teacher interactions had a positive effect on interrupting the preschool to prison pipeline. These findings were drawn from a qualitative study involving student experiences. Additionally, Gonsoulin (2012) found staff development to be an important disrupter of the preschool-to-prison pipeline. Training and development of teachers in areas such as challenging behavior and alternative disciplinary practices has been proven effective in decreasing the number of students heading to prison.

#### Teacher Education Programs

Researchers have found mixed results in the effectiveness of teacher education programs (Tinkler et al., 2019). Teachers' preparation programs are expected to give the teacher candidate a solid foundation in academics as well as social/emotional behavior for K-12 students. Despite these programs' inclusion practices related to social/emotional behavior, new teachers report feeling inadequate in addressing challenging classroom behavior (Mitchell & Arnold, 2014). Teachers not prepared for challenging behavior have worse student learning outcomes than teachers who are prepared to manage challenging behavior (Oliver & Reschly, 2010). Essentially, teachers who are not appropriately trained tend to use ineffective strategies to manage the behavior. One study by Flower et al. (2017) illustrates the relationship between teacher preparation and classroom management.

Flower et al. (2017) investigated teacher preparation programs' content on evidence-based behavior management practices. This study was in the context of all teacher preparation programs, inclusive of both traditional university programs and alternative certification programs. After contacting 215 approved teacher education programs, 74 teacher education programs participated in the survey. This included 31 alternative certification general education programs, 18 alternative certification special education programs, 16 traditional general



education certification programs, and nine traditional college/university special education programs. The response rates from each group were: 77.5% for the alternative certification general education programs, 47.4% for the alternative certification special education programs, 20.5% for the traditional general education programs, and 15.3% for the traditional special education programs.

In this study, the researchers inquired about which programs offered courses and learning opportunities in the areas of universal methods, increasing appropriate behavior in students, decreasing inappropriate behavior in students, and behavior assessments. According to the study, 87% of the responding teacher preparation programs addressed universal methods. Traditional programs at Colleges/Universities did not offer as much content on universal methods as the other paths. In addressing appropriate behavior, only 57.59% of the teacher certification programs offered instruction connected to methods to increase appropriate behavior for children.

Reductive strategies were strategies that reduced problem behavior. Less than 52% of teacher preparation programs reported offering content on reductive strategies. In general education, alternative teacher preparation programs reported including reductive strategies in only 39% of their programs. Over half (54%) of teacher preparation programs reported their programs included content on behavior assessment. Almost all (79%) of traditional teacher preparation at college/university special education programs reported including behavior assessments in their curricula for their students. The study concluded that teacher preparation programs could sometimes fail to equip teachers to manage challenging behavior (Flower et al., 2017). Therefore, schools and teacher education programs must identify which teachers struggle and provide appropriate PD.

### **Effective Professional Development**

According to Darling-Hammond et al. 2017, effective PD focuses on the content, utilizes active learning, consists of collaboration, provides support from an expert, incorporates feedback, and is ongoing. It emphasizes content knowledge and active teacher participation. It also aligns with the teachers' goals and offers opportunities for the teachers to reflect on the knowledge acquired. The findings from Joyce and Showers (1987) support many of the concepts Knowles' described in his Adult Learning Theory. Specifically, they concluded that adults need to be active in their learning, and their readiness to learn is based on their goals. Lecture-style PD was ineffective because it did not allow teachers to practice what they had learned and transfer it to their classroom (Joyce & Showers, 1987).

### ***Expert Coaching***

An increasing body of literature suggests coaching as a promising practice for professional development (Reinke et al., 2014). Coaching is the practice in which education professionals help each other bridge the gap between acquiring education strategies and implementing them effectively and skilfully (Showers, 1985). The process is ongoing and is connected to the teacher's practice. Sailors and Price (2010) explored if classroom-based coaching was a more effective professional development model than a traditional model of professional development. They particularly examined the impact of the two models on instructional comprehension practices among elementary and middle school teachers. The researchers also investigated the impact the models had on students' achievement in reading.

Participants were selected from three school districts that served low-income communities in central and southern Texas. The researchers recruited 44 teachers to participate in the study. The students of these 44 teacher participants also participated in the study and were

representative of each school's demographics. In total, 527 students made up the collective sample used in the study.

For the intervention, the teachers were divided into two groups. The first group of teachers was in the partial intervention group. The teachers in the partial intervention group attended a two-day workshop designed by university researchers only. The teachers in the second group, the full intervention group, also participated in the two-day workshop. The teachers in the second group continued to receive additional individualized support through coaching following the two-day workshop.

Both teachers in the partial and full intervention groups received professional development in the two-day workshop. During the two-day workshop, the teachers were taught how to teach cognitive reading strategies to the students. The training explicitly taught the teachers how to give intentional comprehension instruction to the students. For the full intervention group only, the researchers assigned instructional coaches to provide classroom-based coaching support to all the teachers. The classroom-based coaching included demonstrations and models of the reading strategy for the teachers. The coaches co-taught with the teachers and provided reflective feedback during each coaching session. The coaches also guided conversations about other cognitive reading strategies with the teachers. Teachers chose which strategies they wanted to implement in the following session.

The researchers used three standardized tools to collect data during their study. First, they collected data using the Group Reading Assessment and Diagnostic Evaluation (GRADE). This measurement tool was a group-administered, norm-referenced, and standardized reading achievement assessment tool (American Guidance Services [AGS], 2001). The researchers selected this measurement to measure reading comprehension, including listening, sentence, and

passage comprehension. Second, researchers used the Standardized Growth Scale Values (GSVs) on the GRADE to measure change concerning students' reading comprehension levels. The researchers used GSVs because the composite scores measured a student's reading success in the whole range of achievement across all grade levels. The researchers used graduate students to administer the GRADE. Third, the researchers collected data using the Comprehension Instruction Observation Protocol System (CIOPS). The researchers used this electronic observation instrument to measure the implementation of professional development content.

The results indicated that for opportunities to engage in cognitive reading strategies, there was a statistically significant difference in favor of the full intervention group. Teachers in the full intervention group offered approximately 1.65 more opportunities to engage in intentional comprehension during instructional time in the classroom than in the partial intervention group. Similarly, the full intervention teaching group offered 3.35 more opportunities to engage in cognitive reading strategies during instructional time compared to the partial intervention teachers.

Regarding student achievement, the students in the full intervention group scored approximately 11.27 points higher than the students in the partial intervention group on the post-test. Regarding instructional comprehension practices, students' GRADE scores improved as teachers increased opportunities for students to engage. The results of this study were consistent with research stating that coaching helps teachers implement strategies in the classroom (Fallon et al., 2019). The results also showed promising signs that coaching positively affected student achievement.

A study conducted by Brock and Beamon-Diglia (2018) examined the effects of coaching on teachers implementing evidence-based strategies in the classroom. Their approach to

coaching included modeling and performance feedback. The researchers used a single case multiple baseline design to examine the effects of coaching, modeling, and performance feedback. The participants included two preschool teachers who needed help with managing challenging behavior. The researchers focused on coaching the teachers on three evidence-based strategies: a visual representation of expectations, systematic monitoring, positive reinforcement, and self-management. The classroom team was the unit of analysis for the study. The researchers met with the teaching teams to discuss the observable definitions of the students' challenging behavior before data collection.

During the intervention phase, the researchers met with the teachers for 30 minutes on the first day of the intervention. The researchers provided the teachers' materials to implement the strategy and model implementation for the teachers through role play. The role play consisted of the researchers pretending they were the teacher, and the teachers pretending they were the students with challenging behavior. The researchers did not provide any coaching or other forms of guidance during the baseline phase.

The researchers collected data for six weeks and coached the teachers three to four times per week. The results indicated that coaching improved teachers' implementation of evidence-based practices in their classrooms. Although the children's behavior was not part of the experimental design, descriptive results showed that the students' challenging behavior decreased after the coaching intervention with the teachers.

Reinke et al., 2013 investigated coaching by implementing a classroom management intervention. The researchers trained 52 teachers on a universal classroom management intervention and provided teachers with ongoing coaching. The evidence-based management intervention program, the Incredible Years Teacher Classroom Management (IY TCM) program,

used a preventative approach for children with conduct problems through early intervention. The program provided teachers with full one-day sessions each month for five to six months. The skills taught in the sessions included the use of collaborative and experiential learning, individual goal-setting, and self-monitoring. Teachers identified strategies by observing videos, discussions, and role-playing. The sessions also focused on increasing the teachers' self-efficacy.

Two certified IY TCM leaders trained teachers on the program. The teachers attended six 6-hour workshops throughout the school year. The schedule's purpose was to ensure teachers had time to apply what they had learned with their IY TCM coach. In addition to the session, coaches met with the teachers once per week for one hour. After coaching, the teachers' implementation of the classroom management intervention significantly increased. The results indicated that the more teachers interacted with their coaches, the more implementation continued to increase.

Bethune (2017) explored the effects of coaching on implementing School-Wide Positive Behavioral Interventions and Supports (SWPBIS). Similar to the previous study, Bethune sought to study the effects of coaching on teachers' accuracy in implementing a SWPBIS plan. The study was conducted in a small-town elementary school as a single subject with multiple baselines across participants' designs.

Researchers invited all teachers with a certification to participate who taught at least one group instructional lesson per day. Four teachers agreed to participate. The researchers selected the Instructional Coach of the school as the coach for the study, who had six years of teaching experience, but during the time of the study, was in her first year as an instructional coach.

Bethune imposed side-by-side coaching. Side-by-side coaching consisted of the coach and the teacher implementing real-time activities. Before collecting baseline data, the researcher trained the instructional coach on the coaching procedures. The researcher provided the coach

with the SWPBIS manual, a written explanation of the side-by-side coaching protocol, and the teacher fidelity datasheet. The coach recorded the teachers' accuracy during ten-minute observation sessions. The coach checked for the fidelity of implementation by the teachers. Coaching sessions were held during different times of the day and were separate from the observations that took place. Each of the four teachers received two coaching sessions.

The coaching sessions consisted of three parts. The first part was the pre-coaching meeting. During the pre-coaching meeting, the coach provided specific feedback to the teacher, discussing the strengths and areas of improvement observed on the day of observation. In addition to that, the coach and the teacher planned the lesson for the side-by-side coaching that would take place. The coach later visited the classroom to conduct side-by-side coaching. The coach discussed the specified skills from the focus during the pre-meeting. During the side-by-side coaching, the coach modeled how to reinforce students' behavior and modeled how the teacher should provide consequences for students who violated the rules. After modeling, the coach instructed the teachers to practice the same skill. Most of the side-by-side sessions lasted half an hour. The coach instructed the teacher to continue using the skills that they had just practiced. The third component of the coaching was the follow-up and feedback meeting. During this meeting, the coach talked about the observations, answered the teachers' questions, and clarified errors by giving corrections.

All four teachers demonstrated low to mid-performance during baseline. Once researchers put the interventions in place, all four teachers showed an immediate change in performance level. Teachers demonstrated consistency during the maintenance phase, and their performance was consistent with the intervention phase. Overall, the results demonstrated a functional relationship between coaching and an increase in the accuracy of the SWPBIS

procedures (Bethune, 2017). The researcher collected fidelity data on the coach across 37.5% of coaching sessions. The data resulted in 100% accuracy. The researcher followed up by asking open-ended questions of the teachers relating to the effect of the strategies, including whether they would use the strategy in the future. Teachers responded positively to the question.

### ***Virtual Coaching / E-coaching***

With the recent COVID-19 pandemic, many preschool programs and K-12 schools closed physically. Many districts adapted to this unexpected challenge by using video technology such as Microsoft teams, Google Meet, and Zoom. Advances in technology to support virtual learning environments also extend to alternative professional development delivery beyond in-person interactions. Further, online education programs have increased in recent years, suggesting that more adults use technology for education (Gentry & Colleagues 2008). Two studies, one by Carmouche et al. (2018) and another by Coogle (2018), illustrate how virtual coaching, or e-coaching, has benefited professional development for teachers.

Carmouche et al. (2018) investigated the effectiveness of a virtual teacher coaching intervention. The researchers' purpose was to explore the effects of virtual coaching with videoconferencing on special education teachers' use of evidence-based practices and Opportunities to Respond (OTR) to students with emotional behavior disorders. The researchers conducted the study in three self-contained classrooms at a middle school. The participants consisted of three teachers and six students identified as having emotional behavior disorder.

The teachers received training on OTR in a 90-minute session. During the session, the teachers practiced the strategies. After every other session, teachers received coaching. The coaching sessions were via Skype or Facetime video conferencing. The results demonstrated



there was a functional relation between virtual conferencing and the number of times teachers provided students with opportunities to respond.

Virtual coaching can also include other forms of real-time coaching. Coogle (2018) conducted a multiple probe across participants to investigate the effects of bug-in-ear (BIE) coaching on teachers' use of communication strategies. Four new teachers who taught in inclusion classrooms that consisted of 16 typically developing students and four students with developmental delays or autism participated in the study. The coaching sessions took place from a distance using BIE coaching. Each teacher received eight coaching sessions during the length of the study. Teachers continued to receive coaching until the teacher reached the criterion for the probe study. Teachers used the communication strategies more regularly than baseline in at least six successive sessions to reach the criterion.

The intervention consisted of two components. The first component included 15 minutes of instruction and communication strategies. The second component consisted of the coach prompting the teacher to use the communication strategies. The coach used an iPad with the Skype program installed on it to facilitate this virtual coaching effectively. The coach conducted the coaching while the teachers were in a small group. The teachers set up the iPad and called the coach through Skype before the small group instruction started. The coach participated in the Skype using the audio-only feature to ensure the students were not distracted by seeing her face. The study revealed that bug in-ear coaching helped teachers implement communication strategies. The previous studies provide evidence that virtual coaching could be helpful for special education teachers, and general education teachers. Still, it does not necessarily translate the strategy that would be effective for Head Start teachers' unique needs.

## **Head Start and Coaching**

Head Start preschool programs have unique challenges that other teachers do not face. First, all Head Start teachers are not required to have a state teaching certificate in education. Second, Head Start teachers do not have to have a four-year degree in order to teach children. Grants fund head Start programs, and the funds are limited. The coaching studies above do not consider the limitations of the Head Start preschool programs and how professional development can be effective in the setting. The subsequent studies are focused on Head Start programs and using coaching to help teachers.

Hindman and Wasik (2012) conducted a two-year study investigating the effects of coaching Head Start teachers on literacy teaching practices. The researchers examined if coaching improved the quality of a classroom environment and instructional activities using a quasi-randomized controlled trial. Researchers randomly assigned Head Start (HS) centers to each condition through this process. Seven centers volunteered to participate in the study, and the researchers randomly selected one center among them to be the focus site.

In the summer, the researchers trained the teachers in a two-day workshop, followed by weekly coaching for the intervention group. Each coaching session was three hours for each teacher. The coaching sessions included going over the rationale for the literacy topic, then discussing the different literacy strategies with each teacher. The teachers practiced the strategies in the classroom. The coach observed the teacher and provided feedback. The teacher continued implementing the strategy, and the coach returned to conduct another observation.

Researchers did not provide coaching to the teachers in the control group, though these teachers did attend the same two-day workshop training as the teachers in the intervention group. The study resulted in a significantly higher quality of classroom and instructional practices for

teachers in the intervention group compared to those in the control group. The study supported that coaching helped the teachers to implement the practices and also helped to improve teachers' Classroom Assessment Scoring System (CLASS) scores. However, the study did not discuss the financial implications of doing the coaching session onsite. As stated earlier, funding is an issue for many Head Start programs.

As stated earlier, the preschool to prison pipeline is the phenomenon of when preschool students, particularly preschool students of color are expelled and suspended from school. The expulsions and suspensions may have a negative impact in children's lives. The number one cause of suspension and expulsion are challenging behaviors. Therefore, if teachers were provided with additional training around challenging behavior, this could be a piece of the puzzle to the solution of the problem.

### **Summary**

This literature review provided the background and history of early childhood education. It provided information on the pioneers of education and how early childhood learning began. The history of childhood education denoted two common themes. First, the founders felt it was necessary to educate the poor and less fortunate. Teachers helped their families and community by educating children affected by poverty. Second, there is value in ensuring the right to quality education for all children, regardless of gender or socio-economic standing.

The studies presented in this paper demonstrated that coaching could be an effective alternative to help teachers with their practices. In assisting teachers with their practices, many children would continue to stay in the setting without being removed. However, these studies were not directly focused on Head Start teachers, particularly on improving behavior management strategies and using technology to alleviate the financial stressors of implementing

an effective coaching practice. Head Start programs are not for profit and do not have the funds to incorporate things like Bug in Ear technology. Therefore, the current study focused on Head Start teachers learning a behavior management strategy through virtual coaching using a free service like Zoom.

### **Chapter 3. Methodology**

Chapter 3 presents the research design and methodology for this study on The Effects of Virtual Coaching on Head start Teacher Practices. This chapter begins with a description of the participants, setting, materials and procedures, and rationale for the research design. It also describes the processes to ensure validity and reliability, closing with the data analysis process. The multiple probes, single-subject experimental design collected information to address the study's research questions: 1) What were the effects of virtual coaching on Head Start teachers' use of Behavior-Specific Praise? and 2) What were the effects of teacher's use of behavior-specific praise on challenging behavior?

#### **Participants**

After obtaining Auburn University's Institutional Review Board (IRB) approval, the researcher recruited participants from the Head Start Center. To be included in the study, teachers had to meet the following criteria: (a) Head Start Teacher; (b) have access to the internet; (c) no prior coaching on Behavior-specific praise as an evidenced-based strategy; (d) recommended by the Head Start Center Director as a teacher that would benefit from coaching or volunteered; (e) at the time of baseline the teacher must demonstrate no more than three descriptive/behavior-specific praise within 15 minutes; (f) and signed teacher/student consent. The recruitment resulted in four Head Start teachers volunteering to participate. However, due to the COVID-19 Pandemic and teacher turnover, two teachers completed the study, Mrs. Raven and Ms. Lafaye. The researcher emailed and provided the education manager with the teacher's consent and parent consent forms. The teachers gave all the parents a consent form in their class for permission to have the students recorded as a class.

Mrs. Raven had ten years of teaching experience, and Ms. Lafaye had nine years of teaching experience. Mrs. Raven identified as Hispanic, and Ms. Lafaye identified as African American. Both teachers had bachelor's degrees in early childhood education. Both teachers stated they did not receive training or coaching on behavior strategies for challenging behavior prior to the study. The teachers were in their thirties. The researcher did not study the children individually but as a class unit. Mrs. Raven had eight students in her class, and Ms. Lafaye had ten students in her class. Both teachers reported their classrooms contained challenging behavior. Both teachers had one student in their class with an Individualized Family Service Plan (IFSP).

### **Setting**

This study took place in a Head Start Center in the Southeastern region of the United States. The researcher implemented the virtual coaching sessions individually. This study focused on virtual coaching; therefore, all sessions were virtual via Zoom. The coaching sessions took place during the teachers planning time. Coaching sessions occurred two days per week for six weeks. The teachers taught in person for the probe sessions. Both teachers taught some Head Start classes virtually due to being quarantined, but the researcher only collected data for their in-person teaching.

### **Research Design**

The experimental methodology for this study used single-case multiple probe across individuals design to assess the effectiveness of the coaching on teachers' use of behavior-specific praise. The researcher chose this design because multiple probes offer alternative methods. Data is collected intermittently across the phases, and the dependent variable was a behavior that could not be reversed (Horner & Baer, 1978). When participants in a study experience an extended baseline period, this design is helpful. The independent variable was the

virtual coaching sessions. The dependent variable was the number of behavior-specific praise statements. Five stable probes were first observed before the intervention started. Once a teacher showed stability in baseline, the intervention began. The study defined stability as no greater than 20% variation of data points from the mean of the data path. The criterion for phase change was five or more descriptive praise statements for five consecutive sessions. Both teachers began baseline, and Mrs. Raven began intervention after showing five data points that varied not more than 20% from the baseline mean. When Mrs. Raven used five or more behavior-specific praise statements for five sessions, Ms. Lafaye began intervention if she had a stable baseline. For the generalization phase, the teachers recorded a similarly large group activity time to determine if teachers could apply the evidence-based strategy to other settings. The researcher collected maintenance data one week after the intervention ended. The researcher also collected data regarding students' challenging behavior. The teachers defined challenging behavior as not seated or standing during circle time. Children who touch the floor with their feet or knees and their bottoms are not on the floor are engaging in challenging behaviors.

### **Intervention**

#### ***Researcher Expertise***

The researcher was a professional development specialist and certified in special education. The researcher was a professional development specialist for Head Start for three years and is currently a professional development specialist for an educational technology company that focuses on social and emotional learning. The researcher had over eight years of teaching experience and implemented all coaching sessions for the teachers.

### ***Teacher Training***

The researcher used the self-created PowerPoint to train the teachers. The researcher discussed classroom management in the broader context of training. The researcher then discussed descriptive/behavior-specific praise. The researcher provided examples and non-examples of behavior-specific praise. For example, descriptive praise is "Charlie, great job, I like how your hands are in your lap." The researcher explained a non-example as just saying "Good job" without telling the students the specifics of why they are being told they were doing a good job. The researcher then showed a video to the teacher that modeled another teacher using descriptive praise. In that same session, the researcher started the coaching protocol recommended by Artman-Meeker et al. (2015).

The research-based framework for coaching included five components. The five components of coaching include: a) partnership, establishing a relationship with the teacher by engaging in conversation not related to coaching; b) action plan for continuous improvement between sessions; c) action in the work setting through video modeling or role-play; d) observation, the teacher is allowed to practice the new skill for the coach to observe; and e) reflection and feedback, the teacher is allowed to reflect on their performance in the observation, and the coach will provide performance feedback.

### **Follow Up Coaching Sessions**

The follow-up coaching session followed the same format, except the researcher did not go through the PowerPoint training over behavior-specific praise statements again. The researcher first asked the teacher how she was doing and how her day was to build a relationship. Next, the researcher played the observation video uploaded by the teacher. The researcher then asked the teacher how her interaction went with the students and how many behavior-specific



praise statements she thought she provided to the children. The researcher then provided feedback to the teacher. After the researcher provided input, The researcher discussed the action plan regarding the next steps. The researcher concluded the coaching sessions once teachers used descriptive praise five times or more consistently for five days.

### **Coaching**

The researcher conducted coaching sessions twice per week with each teacher. The coaching sessions lasted approximately thirty minutes. Coaching was based on the researcher's observations in the teacher's classrooms. The researcher observed teachers with students during their large group circle time in their classrooms. Circle time was 15 minutes each day, five days a week.

### **Intervention Materials**

Intervention materials included a PowerPoint created by the researcher on classroom management and descriptive praise/behavior-specific praise. Lane et al. (2015) detailed the components of behavior-specific praise and the steps to implement the strategy. The researcher used their content to create the PowerPoint. The first slide included the agenda items to discuss. The second slide provided the definition of classroom management and its importance. The third slide addressed the meaning of behavior-specific praise. The fourth slide provided the rationale behind behavior-specific praise. The fifth slide provided some examples of behavior-specific praise. The sixth slide provided some non-examples of behavior-specific praise. The seventh slide included a link to a YouTube video, but the video was also on the IRIS center website modeling a teacher using behavior-specific praise and showing non-examples. The last slide was titled "Questions and Comments" for the teacher to ask the researcher questions. The researcher

defined descriptive/behavior-specific praise as a statement that mentions the specific behavior for which a student is praised (Lane et al., 2015).

Teachers used an iPad to record their large group sessions. The teachers recorded their entire large group circle time. The researcher used an event recording datasheet to measure the number of times teachers used behavior-specific praise. The researcher also used an event recording sheet to measure the challenging behaviors of the class. The researcher defined challenging behavior as behavior that interferes with a child's learning (Williford et al., 2017).

### **Intervention Procedures**

***Pre-Baseline.*** Prior to baseline, the researcher met with the teachers to discuss their classroom's targeted challenging behaviors. The teachers wanted to focus on circle time. The teachers discussed how certain students did not remain seated on the carpet to pay attention to the lesson. The researcher discussed a definition of the student's behavior that researchers and teachers can observe. At circle time, not seated or standing meant touching the ground either with your feet or your knees, with your bottom not in contact with the ground, particularly carpet (Brock et al., 2018). The child was considered sitting if the child's full bottom touched the floor or carpet.

***Baseline.*** The teachers recorded at least five videos on five separate days of their circle time for the baseline. In some cases, the teacher could upload the recordings to a password-protected source (BOX). When there were internet issues, the researcher went to the school to transfer the videos to a password-protected IPAD. During baseline, teachers did not receive training or coaching on descriptive praise. As the coach in this study, the researcher used the event recording document for each instance of the teacher's descriptive/behavior-specific praise. For the baseline, the teachers handled the students' behavior as usual. The researcher observed

the children's behavior during the video as well. The researcher observed the children and used the recording sheet to measure the number of times children were not seated or standing. Prior to the study, both teachers addressed challenging behaviors by telling the students to stop what they were doing.

## **Data Collection**

### *Assessment Instruments*

The researcher used an event recording sheet to measure the use of descriptive/behavior-specific praise. The event recording form provides directions at the top to tally the number of times the observer sees the targeted behavior. In this case, the targeted behavior is the teacher providing descriptive/behavior-specific praise. The observer used a separate event recording form for each teacher. The researcher asked the teachers to record their entire circle time. The researcher also used an event recording sheet to measure the number of instances children were not seated or standing.

### *Assessment Procedures*

The researcher watched the videos and tallied the number of times the teacher provided descriptive/behavior-specific praise. The researcher watched the video also to count the number of challenging behaviors exhibited by the students. The researcher counted the total instances of the teachers' behavior and the total instances of the students' behavior.

## **Generalization**

The researcher investigated the teachers' use of descriptive praise using the same procedures in the baseline. The next day after the first teacher completed the intervention, the researcher collected generalization data. The second teacher started three days after intervention

due to being out. Teachers recorded their large group activity time (not circle time) for the generalization phase.

### **Maintenance**

The researcher collected maintenance data on both teachers. The researcher recorded the frequency of the descriptive/behavior-specific praise from the teacher. The teachers recorded their circle time session one week after the intervention.

### **Reliability and Validity**

Reliability and validity measures were conducted using treatment fidelity and inter-observer agreements. Both treatment integrity and the Inter-observer agreement ensure the reliability of the researcher's observations and recordings. Social validity refers to determining if the treatment was acceptable, relevant, and valuable to the teachers in the study.

### **Treatment Fidelity**

The researcher measured the fidelity of the virtual coaching sessions by allowing a graduate student to observe 100% of the coaching sessions. The researcher trained a graduate student familiar with the study on the coaching protocol. The researcher went through each step with the graduate student and discussed what each component entailed. It was important to measure the fidelity to ensure the researcher implemented the procedures consistently (Ledford & Gast, 2018). A graduate student in the special education department collected the information. The coaching checklist included: 1) partnership; 2) Action Plan; 3) Action in setting; 4) observation; and 5) Reflection and Feedback. The researcher evaluated the degree of agreement between the observers' checklists and the researcher's checklist. The researcher assessed inter-observer agreement (IOA) using trial-by-trial recording. The researcher took the number of event agreements, divided them by the total events, and multiplied by 100.

### **Inter-rater Reliability**

Horner et al., 2005 reported that measurement for the dependent variable should be measured repeatedly overtime. The study assessed inter-rater reliability by the researcher and special education graduate students, independently observing the teacher videos of behavior-specific praise. The researcher evaluated inter-rater reliability on at least 80% of the videos of each teacher. In order to calculate inter-rater reliability, the researcher used trial by trial recording dividing the smaller number by larger number. The researcher calculated the numbers and multiplied them by 100.

### **Social Validity**

Social validity is a key component of single-case research and is crucial in determining an intervention's impact (Baer et al., 1968). Social validity was collected using a survey developed with Qualtrics. The survey asked the teacher: a) If e-coaching was a feasible way to provide professional development; b) if they found e-coaching to be effective for increasing descriptive praise; c) do they prefer e-coaching over other forms of professional development; d) did they use behavior-specific praise prior to intervention; e) did they increase their use of behavior-specific praise; f) did providing behavior-specific praise decrease challenging behaviors in their class, and g) would they continue using behavior-specific praise in the future?

## **CHAPTER 4: THE EFFECTS OF VIRTUAL COACHING HEAD START**

### **Results**

In the current study, the researcher used a multiple probe across participants design to investigate the effects of virtual coaching on Head Start teachers' use of Behavior-specific praise. The researcher used visual analysis methods to interpret the findings of the study. The researcher reports the percent of overlap data, the level, the trend, the percentage of non-overlapping data points, and if there is an immediacy of change in the data.

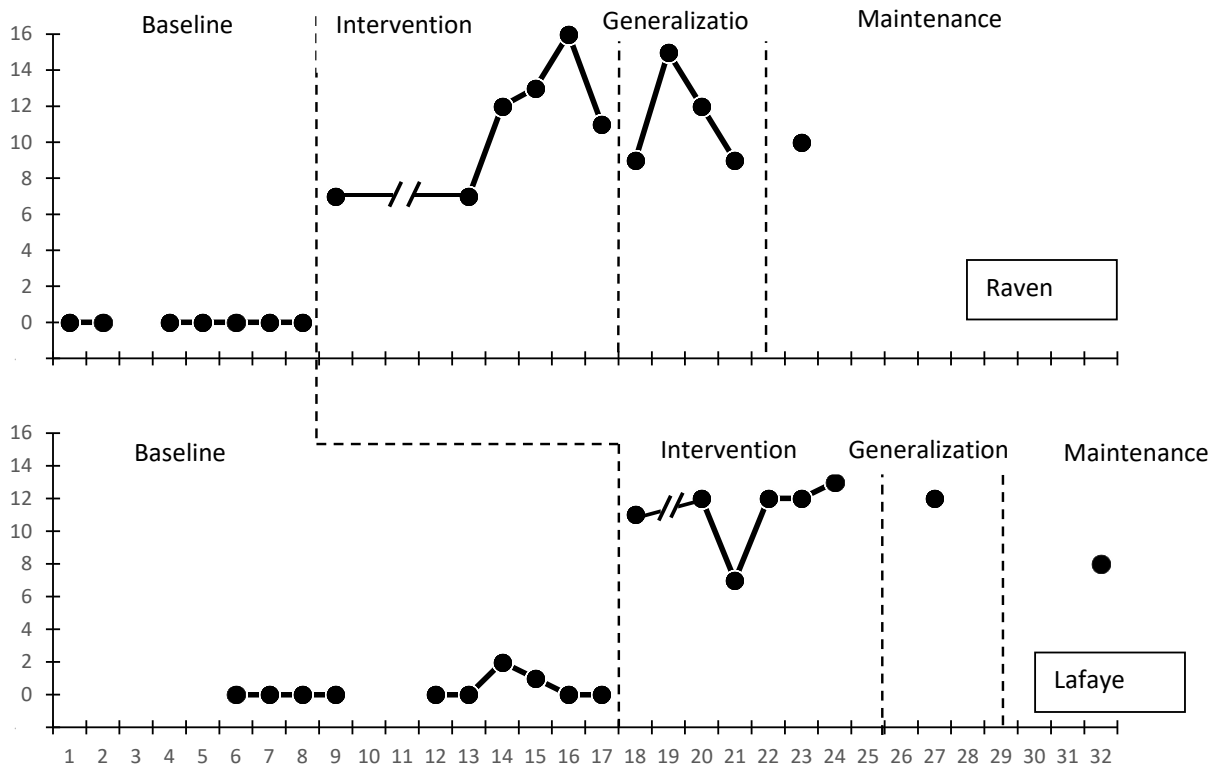
#### **Baseline Data**

Prior to starting the study, the researcher collected data on both teachers. The researcher collected five stable data points on each teacher for baseline. The researcher defined stability as being no more than 20% variability from the mean. The teachers provided no behavior-specific praise statements on the first five probes. Baseline data showed zero celerating trends and levels of zero for both teachers. For Ms. Raven, after the researcher collected the baseline data, the researcher began the coaching intervention. When Ms. Raven reached the criterion, and Ms. Lafaye had a stable baseline, Ms. Lafaye began intervention.

**Figure 3**

Figure 2

Results for Raven and Lafaye



**Performance after Coaching**

**Raven:** The first teacher Raven, reached the criterion after five probes by providing five or more behavior-specific praise statements during circle time. The data shows a steep accelerating trend once the intervention was implemented, showing an immediacy in a change in the data pattern. The data went from 0 behavior praise statements to 7 behavior-specific praise statements from baseline to the start of the intervention. The level was 12 for the intervention phase. The range was from 7 to 16. There were no overlapping points in the data from baseline to the intervention. Therefore from baseline to coaching, the percentage of non-overlapping data

(PND) was 100%. Raven's classroom behaviors showed no immediacy of change in data. The level for baseline data was five challenging behaviors, and the level for intervention was 3. Therefore, there was not much change in level after intervention for student behavior.

*Lafaye:* Lafaye reached the criterion after five probes by providing five or more behavior-specific praise statements. The data shows a steep accelerating trend once the intervention began showing an immediacy in a change in the data pattern. The baseline to intervention went from 0 behavior-specific praise statements to 13 behavior-specific statements once the intervention started. The level for the intervention phase was 11. The range was 7 to 13. There were no overlapping points from Lafaye's data. The PND was 100% for Lafaye. Lafaye's classroom's challenging behavior did not show an immediacy of change. The baseline level was four, and the level for intervention was four as well.

### **Generalization Performance**

Due to the COVID-19 Pandemic, generalization data for both teachers varied. The researcher collected generalization data a day after the intervention stopped for the first teacher (Raven). The researcher collected data for four sessions. The researcher instructed the teachers to record themselves doing another large group time outside circle time. The teacher continued to use behavior-specific statements five or more times during the activity. The researcher collected generalization data on the second teacher three days after the intervention ended and could only collect one data point. The teacher used five or more praise statements for that session.

### **Maintenance Performance**

Researchers collected data for maintenance one week after Ms. Raven's intervention ended. The teacher recorded her classroom during large group instruction. The data indicate the teacher continued to provide five or more statements of praise during circle time. The researcher



collected data on Ms. Lafaye's maintenance two weeks after the intervention. Specifically, Ms. Lafaye's data indicates that she consistently met the criteria by providing five or more behavior-specific praise statements.

### **Treatment Fidelity and Inter-Observer Agreement**

In 100% of the coaching sessions, the researcher evaluated fidelity based on a checklist she developed from Artman-Meeker et al. (2015) coaching protocol steps. The researchers assessed IOA by assessing the percentage agreement on at least 80% of the videos of each teacher on a trial-by-trial basis. The researcher calculated inter-observer agreements by dividing the number of agreements by the number of agreements and disagreements. Once the researcher calculated the numbers, they were multiplied by 100. There was 100% agreement between the observers. The treatment fidelity for coaching was 100%.

The researcher assessed inter-rater reliability in at least 80 percent of the videos in which each teacher provided behavior-specific praise. The researcher calculated the inter-rater reliability by dividing the smaller number of events recorded by the larger number of events recorded. Following the calculation, the number was multiplied by 100. The inter-rater reliability was 100% for Ms. Raven for baseline, 90% for intervention, and 100% for generalization. The inter-rater reliability for Ms. Lafaye was 100% for Ms. Lafaye for all conditions.

### **Social Validity**

The researcher assessed the social validity of the study to determine the feasibility and effectiveness of the coaching intervention. The researcher emailed the Qualtrics survey to the participants once both teachers completed the study. The survey consisted of yes and no questions. Raven and Lafaye indicated that virtual coaching was a feasible way to provide professional development. Both teachers also indicated they preferred virtual coaching over

traditional forms of professional development. Both teachers also indicated they increased their use of behavior-specific praise, and they would continue using the strategy.

## **CHAPTER 5. CONCLUSIONS AND RECOMMENDATIONS**

### **Discussion**

The researcher conducted the current study to investigate the effects of coaching Head Start virtually on Behavior-specific praise. The researcher also investigated the effects of behavior-specific praise on challenging behavior. The researcher used a multiple probe across participants' design. Both teachers showed an immediacy of change, showing a steep accelerating trend from baseline to intervention. The teachers continued to provide behavior-specific praise during a different activities at high levels, demonstrating they could generalize the strategy. The teachers maintained high behavior-specific praise one to two weeks after intervention. The researcher did not show a functional relation between virtual coaching and behavior-specific praise because only two effects occurred at two different points in time. The researcher did not show a functional relation between virtual coaching and challenging behavior because only one effect occurred for one of the two teachers.

### **Impact of Virtual Coaching Head Start Teachers on Behavior-specific Praise**

The current study provides promising data that virtual coaching Head Start teachers could be an effective strategy for implementing evidence-based behavior strategies. Once coaching started, both teachers provided five or more behavior-specific praise statements during circle time. Both teachers continued giving high behavior-specific praise statements for the generalization and maintenance phase. Several studies also found that coaching was effective for teachers. The study conducted by Sailors and Price in 2010 examined two different professional development models. They examined the traditional workshop model of professional development as well as the coaching model. Researchers found that teachers who received coaching improved the strategies they used to teach and achieved a higher level of

implementation of evidence-based practices than those who gave teachers traditional professional development. The effects shown in this study are similar to those of Reinke et al (2013) who found that teachers who were given coaching increased their use of descriptive praise. They also found that teachers decreased the use of reprimands but the current study did not collect data on reprimands. Likewise, Bethune et al., 2017 found that coaching teachers leads to improved implementation of evidence-based practices. Coogle et al., 2017 found that virtual coaching was also effective in teachers' increase of evidence-based strategies. Carmouche et al. 2018 examined preschool teachers and found virtual coaching was effective in their use of evidence-based practices as well. The current study supports past studies showing that coaching could increase a teacher's use of evidence-based strategies. However, studies that focused only on Head Start teachers' virtual coaching were not apparent when the researcher began this literature review. This study suggests that virtual coaching can be effective for Head Start teachers in improving their practices and expanding the literature to include virtual coaching for Head Start teachers. Since preschool to prison pipeline studies suggest better student-teacher interactions can disrupt the pipeline, this study has shown that with proper support and development, these interactions can improve.

### **Impact of Behavior-specific Praise on Challenging Behaviors**

The current study does not suggest that virtual coaching effectively reduces challenging behaviors. The students' challenging behavior stayed consistent from baseline to intervention. However, it should also be noted that studies investigating the impact of virtual coaching on children's behavior also reported similar results. The results of Carmouche et al. 2018's study indicated that, even though virtual coaching impacted the teacher's behavior, it did not affect the children. However, several limitations and barriers could have impacted the data. The study was

conducted at a time when a pandemic was ongoing. Consequently, students and teachers were quarantined and missed school. Students in the classroom were analyzed as a group. Individual behavior, therefore, could have been improved.

### **Social Validity**

The teachers said they preferred virtual coaching over traditional professional development. The teachers in the current study reported that virtual coaching was a great way to provide professional development. The teachers stated they enjoyed the sessions, and it was the most help they have received in managing challenging behavior. The teachers also indicated they would continue using behavior-specific praise as a strategy for their students. Although the results from the visual analysis showed no impact on children's behaviors, both teachers indicated the strategy improved their classroom challenging behavior. Prior studies have also indicated positive responses to virtual coaching (Rock et al., 2009, and Carmouche et al., 2018.) Rock et al., 2009 reported that teachers viewed virtual coaching as a way for improving teaching. Carmouche et al. 2018 also reported that two teacher participants thought that coaching was effective.

### **Limitations and Suggestions for Future Research**

The current study presented many limitations. A multiple probe across participants design must contain at least three participants to show a functional relation. The current study consisted of two teachers. Since the study does not meet the requirements to establish a functional relation between virtual coaching and increased behavior-specific praise, the results can not be generalized to a similar setting. Future suggestions would be to increase the number of participants and for researchers to account for the world still being a pandemic. Both teachers taught at the same Head Start Center. Ideally, future researchers should have teachers from

different Head Start centers. The teachers also reported issues with uploading videos to an encrypted drive. Future researchers need to ensure the quality of the internet at the Head Start locations or provide a wifi device for teachers.

The current design did not compare virtual coaching to traditional face-to-face coaching. Future research should compare different coaching models. Currently, there are only studies comparing traditional professional development to coaching. The researcher also suggests collecting data on individual children. The review board for this study did not approve for students to be observed individually; therefore, results were shown as a class unit. This type of data collection could have addressed the issue of the challenging behavior data showing no change. The researcher also noticed that the teachers' reprimands decreased throughout the study. However, the researcher did not collect any data on this observation.

### **Implications and Conclusions**

Head Start programs should consider virtual coaching options even though schools are going back to face-to-face. Virtual coaching is a cost-effective way to support teachers. Teachers have reported they need support in managing classroom behavior. Programs need to provide the necessary support for teachers. Pioneers created early childhood education programs to help small children. The pioneers of early childhood believed all children deserved an education. Unfortunately, if children are expelled and suspended, they will lose the opportunity to gain the necessary skills for a productive life. The students deserve a chance, but the teachers need support. We must train early childhood teachers on evidence-based practices. As the literature suggests, evidence-based strategies could improve challenging behavior. This study, in particular, did not show a functional relation between virtual coaching and student behavior.

However, both teachers reported they saw a difference in student behavior after the coaching sessions.

The researcher will continue to research the impact of virtual coaching and other technology to improve teaching practices. The researcher is also interested in exploring individual child data instead of the classroom. The change in the unit of analysis could indicate a functional relation.

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<https://doi.org/10.1007/s10864-007-9040-3>

Appendix 1 Institutional Review Board Approved Teacher Consent Form



**NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT**

**INFORMED CONSENT FORM FOR TEACHERS**

**Title of Project: Virtual Coaching Head Start Teachers on Descriptive/Behavior- Specific Praise**

**Researcher(s):** Ms. Ja'Lia Taylor, Doctoral Student, and Dr. Margaret Flores, Professor, Auburn University, Department of Special Education, Rehabilitation and Counseling

**You have been invited to participate in a research study** to examine the effects of coaching teachers on the use of descriptive/ behavior-specific praise. The study is being conducted by Ms. Ja'Lia Taylor, Doctoral Student, and Dr. Margaret Flores, Professor in the Auburn University Department of Special Education, Rehabilitation, and Counseling. You were selected as a possible participant because you are Head Start teacher with at least one year of experience and may currently have challenging behaviors in your classroom.

**What will be involved if you participate?** If you decide to participate in this research study, you will be asked to participate in 8 to 10 virtual coaching sessions. In addition to participating in the coaching sessions you will be asked to record your interactions with your students during circle time. If you choose to participate, I am also asking you to give me access to your CLASS scores by scanning the CLASS document to me.

1. I will first ask you to record your classroom interactions for three days. I will provide you with an I-Pad for recording.
2. You will upload the videos to a secured location called the "Box." I will provide you training on how to record and upload.
3. You will record your classroom interactions with your students 2 to 3 days a week depending on your availability.
4. We will then decide what days are good for you to receiving coaching. The first coaching session will last approximately one hour and a half. The following coaching sessions will last between 20 to 30 minutes.
5. The total time commitment will be approximately 6 weeks. Coaching sessions will also occur 2 to 3 times per week. The coaching sessions will take place from 2pm to 3pm when the students are not in the classroom.

Participant Initials \_\_\_\_\_

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Your total extra time commitment will be 21 hours. The coaching sessions are during your working hours and will not extend past working hours. Each day you get an hour to prepare for the next day. On the days you receive coaching you will have less time to prepare for the next day.

**The risks** associated with participating in this study are minimal risk or discomfort. The researcher will not come into physical contact with you for the coaching sessions. All observations are through video.

**Will you receive benefits from participating in the study?** If you participate in this study, you can expect to form better relationships with your students. The research also suggests challenging behaviors could reduce and appropriate behaviors could increase for your students which would allow more growth for the child. We cannot promise you or the student will receive any or all benefits described. You will not receive any compensation for participation. If you decide to participate, there will not be a cost to you or the student. The service is free.

**If you change your mind about your participation**, you can be withdrawn from the study at any time. Your participation is completely voluntary. If you choose to withdraw, your identifiable data can be withdrawn. Your decision to participate, or to stop participating in the study, will not jeopardize your future relations with Auburn University or the Head Start program.

**Your privacy will be protected.** Any information obtained in connection with this study will remain confidential. The data collected will be protected by Ms. Ja'Lia Taylor and Dr. Margaret Flores. Findings from this study may be published in an educational journal or presented at a conference. **If you have any questions about the details of the study**, please contact Ja'Lia Taylor at 229-389-9063 or email at [jjt0018@auburn.edu](mailto:jjt0018@auburn.edu) **If you have questions about your rights as a research participant**, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334-844-5966) or email at [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

\_\_\_\_\_  
Teacher Name

\_\_\_\_\_  
Investigator Printed Name

\_\_\_\_\_  
Teacher Signature

\_\_\_\_\_  
Investigator obtaining consent Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Participant's Initial

Version date : May 3, 2020



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Appendix 2 Institutional Review Board Approved Parent Consent Form



**NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT**

**PARENTAL PERMISSION/CONSENT FORM**

**Title of Project: Virtual Coaching Head Start Teachers on Descriptive/Behavior- Specific Praise**

**Researcher(s):** Ms. Ja'Lia Taylor, Doctoral Student, Ms. Shikia Carter, Doctoral Student and Dr. Margaret Flores, Professor, Auburn University, Department of Special Education, Rehabilitation and Counseling

**Your child is invited to participate in a research study** to examine the effects of coaching teachers on the use of descriptive/ behavior-specific praise. More specifically, teachers at your child's Head Start program are participating in an Auburn University research project to learn more about classroom behavior management. The study is being conducted by Ms. Ja'Lia Taylor, Doctoral Student, Shikia Carter, Doctoral Student, and Dr. Margaret Flores, Professor in the Auburn University Department of Special Education, Rehabilitation, and Counseling. Your child was selected as a possible participant because he or she is enrolled in a Head Start classroom. Since your child is age 18 or younger we must have your permission to include her/him in the study.

**What will be involved for your child?** Your child will not be asked to do anything outside of their typical classroom experience. The data we are collecting includes classroom videos of the teacher interactions with the classroom. The teacher is recording the entire classroom and your child may be included in the recording. All children's faces are blurred, while the teacher is recording classroom instruction. We are asking permission to use the evidence from the video involving your child in research studies. We are investigating your child teacher's interaction with the entire class. If you decide to NOT ALLOW your child to participate in the study I will not use any of your child's comments or behaviors in response to the teacher's interaction. The teacher will upload the videos to a secured location called "Box." The only people that will have access to this video is Ja'Lia Taylor, Shikia Carter and Dr. Margaret Flores of Auburn University. Confidential videos of your child are for research purposes only.

Participant Initials \_\_\_\_\_

Consent date: May 3, 2020



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**If you choose to withdraw your child, your child's identifiable data can be withdrawn. Your decision to allow or disallow your child to participate, or to stop participating in the study, will not jeopardize you or your child's future relations with Auburn University or the Head Start program.**

**Your child's privacy will be protected.** Any information obtained in connection with this study will remain confidential. The data collected will be protected by Ms. Ja'Lia Taylor and Dr. Margaret Flores. Findings from this study may be published in an educational journal or presented at a conference. Your child will not be identified personally. I will use made-up names for the Head Start center, community, teacher, and students in the class. **If you have any questions about the details of the study, please contact Ja'Lia Taylor at 229-389-9063 or email at [jjt0018@auburn.edu](mailto:jjt0018@auburn.edu). If you have questions about your child's rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334-844-5966) or email at [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).**

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER YOU WISH FOR YOUR CHILD TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO ALLOW YOUR CHILD TO PARTICIPATE.

\_\_\_\_\_  
Parent/ Guardian Print Name

\_\_\_\_\_  
Parent/Guardian Signature, Date

\_\_\_\_\_  
Investigator's Printed Name

\_\_\_\_\_  
Investigator's Signature, Date

\_\_\_\_\_  
Child's Printed Name

\_\_\_\_\_  
Child's Signature, Date

rsion date: May 3, 2020

The Auburn University Institutional  
Review Board has approved this  
document for use from  
04/20/2020 to \_\_\_\_\_  
Protocol # 20-015 IRB 2004

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Appendix 3 Institutional Review Board Approved Video Release



**NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT**

**VIDEO RELEASE- ADULT**

**Title of Project: E-Coaching Head Start Teachers on Descriptive/Behavior-Specific Praise**

During your participation in this research study, you will be videotaped. Your signature on the Informed Consent gives us permission to do so.

Your signature on this document gives me permission to use the videotapes for the additional purposes of publication in scholarly journals and presentations at conferences beyond the immediate needs of this study. These videotapes will not be destroyed at the end of this research but will be retained for three years on a secured electronic storage system called "Box." Video recording will only consist of recording the teachers and children's behavior.

In addition, the following persons will have access to the tapes: M s. Ja'Lia Taylor, Ms. Shikia Carter and Dr. Margaret Flores.

**Your Permission:**

**I give my permission for videotapes produced in the study, "The effects of E-Coaching Head Start Teachers use of descriptive/behavior-specific praise", to be used for the purposes listed above, and to also be retained for three years on a secured password protected electronic storage system .**

\_\_\_\_\_  
Participant' sPrinted Name

\_\_\_\_\_  
Participant' s Printed Name/Date

\_\_\_\_\_  
Investigator' s Printer Name

\_\_\_\_\_  
Investigator' s Signature/Date

Version date: May 3, 2020



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Appendix 4 Insitutional Review Board Approved Minor Video Release



**NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT**

**VIDEO RELEASE- MINOR**

**Title of Project: E-Coaching Head Start Teachers on Descriptive/Behavior-Specific Praise**

During your child's participation in this research study, your child will be videotaped. Your signature on the Informed Consent gives us permission to do so.

Your signature on this document gives me permission to use the videotapes for the additional purposes of publication in scholarly journals and presentations at conferences beyond the immediate needs of this study. These videotapes will not be destroyed at the end of this research but will be retained for three years on a secured electronic storage system called

"Box." Video recording will only consist of recording the teacher and your child's behavior.

In addition, the following persons will have access to the tapes: Ms. Ja'Lia Taylor, Ms. Shikia Carter and Dr. Margaret Flores.

**Your Permission:**

I give my permission for videotapes produced in the study, "The effects of E-Coaching Head Start Teachers use of descriptive/behavior-specific praise", which contains images of my child, and to be used for the purposes listed above, and to also be retained for three years on a secured password protected electronic storage system.

\_\_\_\_\_  
Participant's Printed Name

\_\_\_\_\_  
Participant' s Printed Name/Date

\_\_\_\_\_  
Minor's Printed Name

\_\_\_\_\_  
Minor' s Signature/Date

\_\_\_\_\_  
Investigator's Printer Name

\_\_\_\_\_  
Investigator' s Signature/Date

Version date: May 3, 2020



## Appendix 5 Social Validity Survey

Teacher Social Validity Survey

Date \_\_\_\_\_

	Yes, I agree	No, I do NOT agree
E-coaching is feasible way to provide professional development		
E-coaching is an effective way to provide professional development		
I would prefer E-coaching professional development over other forms of professional development		
Before the intervention, I used descriptive/behavior-specific feedback frequently		
During the intervention, I increased my use of descriptive/behavior-specific feedback		
The use of descriptive/behavior-specific feedback decreased the targeted student's challenging behaviors		
The use of descriptive/behavior feedback increased the targeted student's appropriate behavior		

## Appendix 6 Event Data Collection Form Praise Statements

Teacher \_\_\_\_\_

Observer \_\_\_\_\_

Phases: Circle one

Baseline    Intervention    Generalization    Maintenance

### Descriptive/Behavior-Specific Praise Collection Data Sheet

Session number	Number of Descriptive/Behavior Specific Praise Statements during the first 15 minutes of activity	Date	Class Activity	Notes	Feedback
Session 1					
Session 2					
Session 3					
Session 4					
Session 5					
Session 6					

Version date: May 3, 2020



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Appendix 7 Head Start Approval for Research Letter



**ALABAMA COUNCIL ON HUMAN RELATIONS, INC.**  
**Child Development Program**  
P.O. Box 3770 - 950 Shelton Mill Road  
AUBURN, AL 36831-3770 Phone (334) 821-8336

March 09, 2020

To whom this may concern;

Head Start teachers and interns employed with the Alabama Council on Human Relations Child Development Program's Head Start centers have received information about Ja'Lia Taylor's proposed 6-week study for individual classroom coaching and electronic coaching. We understand the coaching will involve 30 minute sessions 3 times a week. We are excited about the opportunity to have additional support and professional development and some have already worked with Ms. Taylor in previous years.

Center supervisors (Educators) are Debbie Chism at King Center in Auburn, Alabama, Stacey Motley-Winslett at Darden Center in Opelika, Alabama, and Tina Miles at Edelman Center in Hurtsboro, Alabama. Teachers report to the educator at their center as well as center office staff (i.e. mentor teacher, coach, other educators, educator assistant, center manager/assistant), who in turn share information with the above mentioned members of the education team to support them with their instruction. There are already teachers that would like to participate in the study. By signing this form, we are acknowledging that everyone that could be a possible participant in Ms. Taylor's study are fully aware of the study, and willing to participate in it.

*Tina Miles* 3/13/20

Signature of Educator / Date

The Auburn University Institutional Review Board has approved this Document for use from 04/30/2020 to -----  
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