#### University of Texas at El Paso

## ScholarWorks@UTEP

Open Access Theses & Dissertations

2024-05-01

# Nationwide Practices And Perspectives On Early Literacy Activities In Daycare

Analaura Amador University of Texas at El Paso

Follow this and additional works at: https://scholarworks.utep.edu/open\_etd

Part of the Medicine and Health Sciences Commons, Other Languages, Societies, and Cultures Commons, and the Pre-Elementary, Early Childhood, Kindergarten Teacher Education Commons

#### **Recommended Citation**

Amador, Analaura, "Nationwide Practices And Perspectives On Early Literacy Activities In Daycare" (2024). *Open Access Theses & Dissertations.* 4063.

https://scholarworks.utep.edu/open\_etd/4063

This is brought to you for free and open access by ScholarWorks@UTEP. It has been accepted for inclusion in Open Access Theses & Dissertations by an authorized administrator of ScholarWorks@UTEP. For more information, please contact <a href="mailto:lweber@utep.edu">lweber@utep.edu</a>.

# WHAT PERSPECTIVES AND PRACTICES DO DAYCARES/LEARNING CENTERS HAVE REGARDING LITERACY ACTIVITIES AND INSTRUCTIONS

#### FOR CHILDREN AGES 0-5 NATIONALLY?

#### ANALAURA AMADOR

Master of Science in Speech-Language Pathology

APPROVED:
Vanessa Mueller, Ph.D., CCC-SLP Chair
Kendra Rosales, M.S., CCC-SLP.
Keith Polette, Ph.D.

Stephen L. Crites, Jr., Ph.D.

Dean of the Graduate School



#### **Dedication**

This master's thesis is dedicated to an amazing professor Dr. Mueller who guided me throughout Grad school and believed in me. She is truly the kindest soul you will ever meet. I also want to dedicate this thesis to my wonderful husband and beautiful children that were my rock in moments of weakness. To my loving parents and siblings that were always there for me. Last but not least I want to dedicate this thesis to my friends and cohort who encouraged me with shared tears, laughs, and hugs as we triumphed together.

# NATIONWIDE PRACTICES AND PERSPECTIVES ON EARLY LITERACY ACTIVITIES IN DAYCARE

by

#### ANALAURA AMADOR, B.A.

#### THESIS

Presented to the Faculty of the Graduate School of

The University of Texas at El Paso

in Partial Fulfillment

of the Requirements

for the Degree of

#### MASTER OF SCIENCE

Department of Speech-Language and Hearing Sciences
THE UNIVERSITY OF TEXAS AT EL PASO
May 2024

#### Acknowledgements

I would like to express my most sincere gratitude to my incredible thesis committee Dr. Mueller, Dr. Polette and Kendra Rosales for their unwavering support. I am deeply grateful for your guidance and involvement in this journey. Thank you for believing in me and making this experience an enjoyable one. I truly learned more than I expected. I can't wait to change the world.

### **Table of Contents:**

Acknowledgments	.V
Table of Contents	vi
. Literature Review	.1
1.1. Roles of Daycares	.2
1.2. Language developent	.2
1.3. Social development	7
1.4. Behavior	.8
1.5 Cognitive development	. 1
1.6 Literacy1	4
1.7 Academic attainment1	8
1.8 The learning gap in reading1	9
1.9 Role of the SLP in daycares	9
. Methods2	22
2.1 Study Context	21
2.2. Participants and setting	22
2.3 Materials and Equipment2	22
2.4Procedures	22
2.5 Data Collection	23
. Discussion	34

4. References	41
5. Appendix	44
6.Vita	45

#### **Chapter 1: Literature Review**

#### 1.1

In the United States approximately 6 million children (about twice the population of Arkansas) between the ages of birth and five attend some kind of daycare outside the home. Daycare is a spectrum that comes in the form of home centers to child learning centers that provide an educational setting typically equipped with materials and resources tailored to support various aspects of child development such as language, social, behavior, cognitive and literacy. Children between the ages of birth and five spend about eight to ten hours per day in daycare, five to six days a week. The daycare environment impacts a child's language due to the development that occurs when a child's environmental setting is absorbed, imitated, and learned from.

#### **Roles of Daycare**

Daycare centers play a critical role in the development of the children they care for.

Children learn language and skills in the areas of social, emotional, play, cognitive, and much more while in daycare. There is a correlation between child development and quality of daycare such that the literacy environment, teacher education attainment, training, certification, and experience, and the teacher-to-child ratio all impact outcomes (Harms & Clifford, 1980).

Because many young children are enrolled in daycare, it is important to consider literacy-related events and the quality of the literacy environment to support literacy development in children. If this exposure is presented at a young age, it may cultivate an interest in reading by associating reading with a positive experience. (Baker, Scher, & Mackler, 1997; Scarborough & Dobrich, 1994; Snow, 1994). For example, activities such as shared reading contribute to

improving oral language development and reading motivation. Reading to very young preschoolers has been found to be more effective than at a later age (DeBaryshe, 1993).

Moreover, studies have shown that daycare environments should provide cognitive stimulating material and activities. Such activities include rhymes, locating objects that begin with a certain letter, and much more. These activities need to ensure that they are fostering phonological awareness. The teacher should also allow for open-ended questions that allow for thinking and decontextualizing. Such questions (for example: What would happen if ....? Why did this happen? What do you think about ...? Have you seen this elsewhere?) are to be facilitated in early childhood development. Overall, daycare providers can provide a high frequency of one-on-one interactions, which seem to be a successful way for the teacher to adapt to the child's individual development, needs and interests (Beller, 2008).

#### Language

Language development in humans is relatable to that of physical aspects of growth and cognition. According to Noam Chomsky, (1957, 1965, 1968, 1975) there is a physical organ in the human brain where language acquisition grows and develops, maturing into age 12. After that, it starts to diminish. This time period was coined the "critical period of language development". According to behaviorist psychology, language is a behavior. The empirical method of John Lock, 1960 viewed the mind as a blank slate at birth that impacted impressions from experiencing the external world. Therefore, an individual is conditioned by his or her environment. Cultures and geographics are also determiners in which a child learns to imitate his or her surroundings. However, the child will also produce linguistic sounds in the environment they live in. Research has shown that children are creative with language. According to Bochner and Jones (2003), children adopt the sound patterns spoken in their community to form

expressions of certain novel concepts. Linguistic sounds are used to produce an unlimited number of sentences. Then the child produces unfamiliar sentences that they have never heard of before. The idea that there must be something beyond environmental influence.

On the other hand, Chomsky (Salwa Saeed et al., 2019) did not negate the role of human's innate capability and their culture. These two terms interchangeably help with a human's linguistic capabilities. According to Yule (Salwa Saeed et al., 2019), Chomsky claimed that the brain contains a linguistic organ that grows stronger the more it is trained. This so-called organ was referred to as a "language acquisition device". In addition, further research by the behaviorist, Skinner (Salwa Saeed et al., 2019) posits that children learn language through reinforcement and association, whereas Chomsky (Salwa Saeed et al., 2019) believes that children have an inborn capacity for language understanding and use. There is an inherent universal structure known as the "universal grammar" in which culture plays a big role in a child's language and vocabulary in which language is passed on from generation to generation.

A child's development of their first language begins at birth and continues into puberty. According to Spada, Lightbown, DeKeyser, and Larson-Hall (2019) they noted that it is during the first three years of life that a child gets the exposure of language in his or her environment. This means that children are immersed in hearing, speaking, and interacting in a particular language as they communicate. A child's use of infinite utterances which consist of a limited number of sounds in their language is used to communicate in the world around them. Children create novel utterances that they have never heard before. According to Snow and Hoefnagel-Hohle (Salwa Saeed et al., 2019), by the time a child starts school he or she have developed a language that is considered sophisticated as well as the muscles that are responsible for articulation have been trained to function in a culturally specific way. Around this time, the

Chomskian acquisition device starts to decrease the older they get. Once they turn 12 years old, the child cannot acquire another language. They can only learn a second or foreign language.

Moreover, language starts in the womb from listening to their outside environments. Research shows that babies in the womb are active listeners. According to Berger (1994), "language skills begin to develop as babies communicate with noises and gestures and then practice babbling" (p. 169). The ability to speak is acquired in childhood, which happens without teaching. Language babble is the start of children's communication before they can even utter words.

#### Stages of language development

The first stage of language is vocalization in which children babble and coo according to Tomasello and Bates (2001). Children exercise and experiment with their articulators in a playful manner. Exposure is crucial for language development. During this stage the child is actively listening and absorbing everything they see and hear. According to Piaget's (Salwa Saeed et al., 2019) beliefs, cognitive development comes before linguistic production. A child's sensory experience paints the picture of the child's first words being used. The child is making connections with his or her explorations of their environment.

According to Lieven and Tomasello (Bates 2001), the second stage in a child's language development is when the child starts to babble in speech patterns like adult speech. This stage begins at six to nine months in which nasals are produced then voiced stops /b/, /d/, and /g/. The first vowel mastered is the /a/ which is the sound babies use when crying then followed by nasal stops since they are easily perceived by babies.

As for the third stage of language development, children are around age one and begin to form concrete words. This stage is considered the one-word stage, where children communicate using one-word utterances such as "car" and "eat", in which a child might say "eat" when implying that they are hungry. Some examples are obeying simple commands such as responding to the word "no". The child begins to recognize family members, names object and imitate familiar noises such as transportation vehicles, animal sounds, and so much more. Babies in this stage can greet with "hi" and "bye" when reminded to. They can express themselves with "ohoh" and ask for wants/needs by either pointing to object or using one word to communicate. At this stage they can also point to picture books, distinguish or identify common objects and name them.

Furthermore, between the ages of two-to-two and a half 2-2 ½ years the child uses concrete terms and are producing about 50 words but can understand many more words. The child is also able to form two-to three-word sentences such as "I go play". The child can imitate simple songs, rhymes, and/or finger play. Some can point to their body parts such as their eyes, nose and mouth. Once the child is two, he or she can produce most of the consonants in their native language. A child begins to use exclusive phonological processes that come into play when a child is imitating the adult's sound system. Voicing occurs in which a voiceless sound is replaced by a voiced sound. Word-final devoicing in which a voiced consonant in final word position is replaced with a voiceless consonant. As for final consonant deletion the final consonant sound is excluded. Velar fronting also occurs at this stage such as replacing a /k/ for a /t/ in which the child says "tootie" for "cookie". Palatal fronting of making the fricative consonants /sh/ sound instead of the /s/ sound such as /sous/ for /shoues/. Children in this stage also produce gliding liquids in which the child replaces /l/ and /r/ for /w/ or /y/. For instance, they

may say "wun" for "run" and "yion" for "lion". Finally, are stopping in which the child produces stops for consonants that are fricatives (i.e. f, v, s, z, 'sh', 'zh', 'th', or /h/) and affricates (i.e. p, b, t, d, k, or g). The child produces "jump" for "dump". This information helps depict what a child can say as far as their articulatory development in typical normal developing children.

These phonological processes also help Speech-Language Pathologist's determine what and if a child has a speech developmental delay. To conclude, when one acquires a language, it is a natural way of speaking, in which the child's language grows organically.

Verbal communication involves combinations of sounds or marks used to express what the speaker or writer is trying to convey. The field of linguistics delineate 45 phonemes and 26 letters in the English alphabet. One or more morphemes make up a word, like cats, with two and four morphemes. These phonemes can be made into variations involving units of sounds that could fall into any given dialect of that language. Examination of sounds and letters that lead us to examine sequences between both that occur in English. Robinson (2006) states that no estimates have been made of the number of the 100,000 or so morphemes of English in which the average adult can use or understand. One or multiple morphemes may be used to create a word. The English language it is made up of 1,000,000 words and about half of them are technical terms.

It is crucial to note that poverty levels predict the complexity of children's developing language with consistency (Fernald, Marchman, & Weisleder, 2013; Hart & Risley, 1995).

Children learn language from their social interactions with others (e.g., Bruner, 1981; Snow, 1999; Vygotsky, 1978).

Children with uncertain mother-child attachments may also experience difficulty with expressing their needs to caregivers compared to children with strong mother-child attachments

(Beller 2007). Further studies have shown the correlation between positive social interactions in group care where children that have a good relationship with other children in the group and that participate in group activities are more advanced in their language development (Beller, 2007). Numerous studies have also found positive relations between pre-school experience and language development and academic high-quality daycare (NICHD ECCRN and Duncan 2003; Magnuson et al. 2006).

#### **Social Development**

The way social development is nurtured in a child influences their later development as community member in society. Social skill development is enhanced when a child's needs are addressed within their environment. in which needs are addressed in the home is important for the development of social skills (Sawada & Katayama et al, 2022). According to The National Institute of Child Health and Human Development (NICHD) Early Childcare Research Network reflects the importance of childrearing environment that influences later development. Social development is generally defined as the ability to behave in accordance with the lifestyle, value norms, and standards of behavior dictated by the society to which one belongs, and these aspects are easily culturally influenced (Sawada & Katayama et al, 2022).

Researchers have shown that in the childrearing environment, it is important for caregivers to play with the child, read books to the child, sing with the child, include reading to children, work together with their partner in raising the child, eating meals together as a family and talking with their partner about their child (Anme et al., 2008). According to Sawanda and Katayama, et al. (2022), the higher the frequency of parent-child interactions, the higher the developmental age.

The theory of social learning has evolved to explain an individual's social development in which focuses on learned behaviors. A child does most of their learning from actively watching and observing their environment where they imitate those around them, according to learning theorists (Thomas et al., 1996). Such imitation stems from that connection they are making with their world and those in it. This social interaction includes imitative acts that are concise when measuring peer interplay. The two counterparts related to imitation of peers are when one child imitates their peers' behavior which is being one-sided, and reciprocal imitation is where both children are mimicking each other.

Some studies have shown that children learn social skills at a faster rate and even better amongst their peers than with other adults (Rubenstein & Howes, 1983). With this saying that toddlers find it easier to imitate other toddlers and have more behaviors and mannerisms that are similar than those from adults. Therefore, imitation is easier to understand with peer-to-peer interaction. During infant and peer interactions, toys and other objects of play are regarded as social facilitators. Some research has also shown that toddlers' interaction is increased when there is non-portable toy present, or no toys present at all. However, other researchers show that toys help children socialize and draw children together. This social interaction can also be devised through parallel play in which two children sit next to each other but instead are focused on playing with their own toy. Although they are not speaking to each other they are still learning essential social skills through parallel play. Social games can also be part of building more on social skills such as turn-taking.

**Behavior** When one thinks of behavior it can come in many forms such as the temperament of an individual, or how one self-regulates, manages stresses, conflicts, disagreements, resulting in the way one makes the right or wrong decision. In a child's life there

are many factors that can contribute to their future success and whether their behavior can be characterized as appropriate or not.

Self-regulation, which begins to develop in infancy, is a result of various exposures and experiences, for instance, the way the child is raised, by whom and where they are brought up. Other contributing factors are culture, gender, education level of their parents, morals and values shared amongst family members and their community. Self-regulation is defined as being complex and a multicomponent construct in which operates across several levels of function (Blair & Raver, 2012; McClelland, Cameron Ponitz, Messersmith, & Tominey, 2010; Schunk & Zimmerman, 1997; Vohs & Baumeister, 2011). Such levels of function include motor, physiological, social-emotional, cognitive, behavioral and motivational which are placed on a broad sense that helps modulate one's behavior (Barkley, 2011; Gross & Thompson, 2007). Overall, self-regulation depends on the coordination across levels of function in which children can integrate and manage over developmental time. (McClelland & Cameron, 2012; McClelland et al., 2014). Self-regulation develops in different stages of development such as preceding emotional development. Examples shown in recent studies have concluded that when it comes to delaying a response, it is often associated with the developing of inhibitory control in which develops earlier than other executive skills (Lengua et al., 2015).

On the other hand, researchers have also demonstrated that children younger than 3 years have difficulty utilizing multiple executive function skills when it comes to creating a behavioral response in which requires motor or verbal action (Carlson, Moses, & Breton, 20023; Zelazo et al., 2003). However, there is a shift in regulatory abilities that occurs in a child that is over the age of three. Multiple processes linked with the ability to self-regulate relate to executive function, attention, working memory, and inhibition which develop rapidly between the ages of

three to seven. These skills become more coordinated and are later decelerated in terms of growth. (e.g., Cameron Ponitz et al., 2008; Chang et al., 2014; Wiebe et al., 2012).

Equally important, girls have a greater capacity for self-regulation than boys. Boys tend to self-regulate less around the age of 2, whereas girls can self-regulate at a steady pace, resulting in gender differences between the ages of 2 and 3. Theoretically, language is thought to give children "mental tools" to help them organize and modify their thoughts and behaviors (Vygotsky, 1934/1986). This suggests that children with higher expressive language skills can communicate better, faster and self-regulate compared to their peers who present with lower levels of expressive language skills.

In addition, a child's environment can impact their development of behavioral self-regulation. One aspect is the mother's education which correlates to having appropriate resources for the child. Socioeconomic resources for low maternal education levels tend to lead to higher stress levels which can affect the child's developing neuroendocrine processes which include interactions between the nervous system and the endocrine system. Together, they regulate various physiological processes in the body. These processes involve a hormonal release by the glands in response to signals coming from the nervous system. This influences functions such as metabolism, growth, reproduction, and stress response. These processes have been theorized to directly shape developing self-regulatory response patterns (Blair & Raver, 2015). Maternal educational levels are also correlated to the way mothers' parent their children such as when responding with either warmth and care along with rich language inputs and ability to maintain their child's attention. Children's environment affects the development of behavioral self-regulation (Blair, 2010; Grolnick & Farkas, 2002; Landry, Smith, & Swank, 2006).

#### **Cognitive**

The stages of cognitive development have been studied based on the theory of Jean Piaget; a Swiss psychologist known for his pioneering work in child development. He proposed a theory of cognitive development that described how children's understanding of the world develops through a series of stages. Piaget's theory emphasizes the role of maturation and interaction with the environment in children's intellectual growth.

The *first* stage: the sensorimotor stage begins from birth to around the age of two years (Wood, 2001). During this stage the baby is developing a form of understanding the world around them. In doing so, they are coordinating sensory experiences in seeing, hearing with physical, and motoric actions. In the beginning of this stage, newborns tend to only show reflex behavior patterns. Nearing the end of this stage, the two-year-old has the ability to produce complex sensorimotor patterns and use primitive symbols (Marocco & Belpaerme, 2010).

The *second* stage: the preoperational stages that range from ages two to seven in which the child is developing language and symbolic thinking skills but struggles with logic and understanding of abstract concepts. Children in this stage tend to be egocentric, in other words they have difficulty viewing things from other's perspectives. Children begin to represent their world with shadows, words and images. During this stage the children began using language incorporating their memory and imagination. Symbolic thoughts go past simple connections between sensory and physical (Simatwa, 2010). During this stage, the children develop symbolic play in which they pretend to see objects using their imagination, such as using a banana for phone. The children gain the ability to exhibit objects that are not seen mentally (Bashrin, 2015). This allows children to describe cars, people, homes, animals etc. In this case the children begin to practice primitive reasoning and are curious to find the answers to a variety of questions.

According to Piaget, during this stage the aspect of intuitive thinking is applied and often characterized by free, fantasy and unique associations that tend to make no sense (Simatwa, 2010).

The *third* stage: is the concrete operational stage between seven to twelve. During this stage the child is able to grasp concepts and think logically. This logical reasoning replaces intuitive reasoning so long as it is applied with specific and examples that are concrete (Moshman, 1998).

The *fourth* stage: the formal operational stage begins around age twelve. During this stage, the child develops the ability to think abstractly and logically. They can solve hypothetical problems, engage in deductive reasoning, and think about future possibilities. (McLeod, 2018). Piaget's cognitive theory applies to the readiness of early childhood at a certain age in their thinking abilities.

In another aspect, a factor in a child's cognitive development may be exposure to television and videos at a young age which may be a variable in the development of Attention-deficit/hyperactivity disorder (ADHD). Studies have shown links between exposing infants to TV and having delays in cognitive and language development. When children are left alone in front of a screen, it decreases time spent with parents or caretakers and minimizes play time. Children learn through play; they need to explore, and problem solve using their toys. They need to expand their imagination with pretend play. Studies have also been conducted that compare whether what is watched and how much is significant. Past research has also found that TV shows like Mr. Rodgers and Sesame Street may benefit children over the age of 3. Currently, many children are exposed to media and television from infancy. The benefit of screen exposure is suspect for children younger than the age of two. The visual development of a child

at this age is such that much of what they see is colors, rapid movement, and flashing lights but cognitively they may not be able to fully comprehend the concepts on the screen. Additionally, overstimulation is a possibility due to the fast-paced and rapidly changing nature of certain shows.

Socioeconomic status has also been shown to be a factor that impacts a child's academic performance. Children who grow up in these environments may become discouraged in educational settings. These children may then enter school with fewer academic skills than their more advantaged peers, causing a major gap in their cognitive development during the later school years (Stipek & Ryan, 1997). Due to difficulties faced among families that did not provide the necessary learning tools for development that is successful in the early years caused adverse learning conditions. During the years of the Presidency of Lyndon B. Johnson, a Head-Start program was implemented which allowed for compensatory education programs for disadvantaged preschool children.

Since the advent of Head Start Programs, there has been an explosion in the development of early education and care programs. Some early childhood centers are provided for full day or half days. Many of these centers have been designed to increase school readiness and academic achievements and strive for student success as they enter the school system. These programs have been designed to promote equal opportunities. A study conducted by Burger (2009) compared the outcomes of children who attended a care program to children who were cared for by a babysitter, nanny, family members, or others. The researcher found that children in an early childhood care setting outperformed children in other settings. There were a few discrepancies in the study variables such as the duration the child attended the care program, the effects of

diverse aspects of preschool experience, the quality of instruction as well as the pedagogical curricula as well as the age the child was enrolled and to what intensity.

#### Literacy

Literacy is broadly related to the ability to read and write. Phonological awareness skills are the "most potent predictor of reading acquisition" (p. 362). The critical role of phonological awareness and its key subcategory, phonemic awareness, in learning to read has been reinforced over the past 30 years in many large-scale literature reviews (National Early Literacy Panel, 2008; National Institute of Child Health and Human Development, 2000; Snow, Burns, & Griffin, 1998). This principle also goes together with phonological awareness in which children that can connect both large and small units of spoken language typically begin to read more easily than peers with less developed phonological awareness. Similarly, children strengthen their phonological awareness through the very act of reading (Allington & Woodside-Jiron, 1999; Stanovich, 1986).

Phonological awareness is defined as "one's sensitivity to, or explicit awareness of, the phonological structure of the words in one's language" (Torgesen, Wagner, & Rashotte, 1994, p. 276). Phonological skills are a better predictor than intelligence of the speed and efficiency with which children learn to read (Stanovich, 1994). According to Sulzby (1994) emergent literacy comprises the abilities, knowledge and skills considered to be necessary preliminaries for the acquisition of reading competence. This assumes literacy competence develops from birth (Snow et al. 1998). Early knowledge of the relationship between letters and sounds, awareness of the importance of literacy in society, and the ability to identify printed matter in the environment plays a critical role in a child's overall development. Children can typically begin to acquire this competence in early childhood. In a study of the acquisition of reading skills taken from

analyzing children from 34 countries, Mullis et al. (2003) found that successful readers had gained experience with literacy activities in the years before starting school. Rhymes, poetry and wordplay also direct the children's attention to formal aspects of the language (Sylva et al. 2001; Warren-Leubecker and Carter 1988) and playful, exploratory activities with the letters of the alphabet help children to realize that the spoken language consists of individual phonemes (Andresen 2005; Wehr 2001).

Furthermore, educators who are not appropriately trained in phonological awareness can do a disservice to our children and students. Training is provided for educators that enhance literacy learning for children. One is the C3 Coaching Grant that allows opportunities for retreats for teachers in the county of Houston, Texas. This study looked at early childhood educators' initial background knowledge of language. The study focused on what and how much was understood in the areas of syllabication, morpheme knowledge, and the presence of sounds in words. The above areas play a significant role in developing language and literacy in young children (Crim et al., 2008). The data collected in this study revealed that teachers did not possess sufficient knowledge identifying morphemes. Teachers in the study experienced difficulty in syllable counting, and phoneme knowledge. Syllabication skills allow for a stronger foundation in building literacy skills. Furthermore, it is important for early childhood educators and those working with children that they need to be aware of the variations in pronunciation due to the linguistic diversity in the classroom. The alphabet in the English language contains 26 letters and 44 phonemes (Moats, 1995). There are approximately 98 different phonemegrapheme associations that are needed to learn how to read and write in English.

In addition, it is crucial for early childhood educators to have the knowledge of letter sounds which solidifies the foundation for early reading success. Based on this last study, it

showed a lack of appropriate training and knowledge regarding emergent literacy skills. Other factors such as limited English proficiency and physical and developmental disabilities are more likely to experience failure by second and third grade (Zill & West, 2001). Unfortunately, as indicated by this study, there are early childhood teachers who, based on their existing knowledge, may not be successful in building an adequate foundation for early literacy in their classrooms. (Crim et al., 2008) Bos et al. (2004) reported results from an international study where positive effects of pre-school experiences on reading skills were found in fourth-grade children. Moreover, researchers have reported that children and adolescents are reading between 6th grade and 8th grade levels. Most national education organizations recommend that printed documents should not exceed an 8th-grade reading level (National Work Group on Literacy and Health, 1998; University of Virginia Health System, 2002).

Writing is also a part of literacy, but there is less research in this area than in reading. Foundational skills including language, visual perception, and memory are exercised in a reciprocal manner when a young child engages in the task of writing messages (Chapman, 2003; Vernon & Ferreiro, 1999). The analysis of sounds, letter features, letter, and words that are mandatory of beginning writers serves to sharpen their attention on the details of print (Clay, 2001; Kamii & Manning, 2002). This is where the influence of invented spelling is developed incorporating children's phonemic awareness and phonics development (Clarke, 1988; Winsor & Pearson, 1992). Much attention has been given to the importance of child-directed speech in promoting children's language and cognitive skills through parent-child communication and interactional styles (e.g., Burchinal & Forestieri, 2011; Fernald & Weisleder, 2013; Hart & Risley, 1995). Research has shown that the quality of parental language input provided to very young children was correlated with vocabulary acquisition and language processing speed, with

consequential distinctions among socioeconomic status (SES) groups seen as early as eighteen months. Overall, findings from studies of child language acquisition and early writing support their stance that the ability to read fluently goes hand in hand with a broader context of language development. (Frankel et al., 2016). Early and regular experience with books that are read with parents or read aloud to children has proven to be an important factor in the successful acquisition of written language (Wade and Moore 2000).

In addition, studies have also shown that all motivational factors that lead to increased engagement tend to decline as students transition from elementary to middle school. (Guthrie, 2015). Reading is then viewed as too difficult and not beneficial, becoming predictors of reading achievement as students attend middle school. Having these beliefs leads to decreased engagement towards reading. Moreover, intrinsic motivation becomes contextually dependent and may differ depending on the type of text and context (e.g., literary texts in English versus informational texts in history or science) (Guthrie, 2015). It's not only about being engaged with reading, but also how often the child or student was exposed to reading.

Moreover, there is a relationship between literacy practices and motivations socially, culturally and historically. Students report positive outcomes regarding reading (e.g., talk about books, knowledge about books) and outcomes related to their social, cultural, and emotional lives had transformative effects (Ivey & Johnston, 2013). Studies have shown that even if one has mastered the foundational skills of phonological awareness, phonics and fluency in early development, one still needs to learn to read all over again when narrower and discipline (e.g., moving from science to biology to micro-biology) as we encounter new text structures (Alexander, 2005). For the past decade, studies that have documented the validity of framing literacy skills and strategies for gained knowledge across the span of schooling (Halvorsen et al.,

2012; Pearson et al., 2010), from the earliest stages (Cervetti & Hiebert, 2015; Pearson & Billman, 2016; Romance & Vitale, 2012) to the pre-school years (Neuman, Kaefer, & Pinkham, 2016; Neuman & Roskos, 2012). To conclude, one is always reading to learn, and learning to read.

#### **Academic Attainment**

Families that come from low socioeconomic (SES) backgrounds tend to perform poorer across both domains of emergent literacy skills than children from middle-class homes (Bowey 1995, Justice et al., 2006, and Whitehurst, 1997). U.S. schools have had increased interest on improving literacy skills for preschool children who are at risk for perceived academic difficulties. Socioeconomic status is a predictor of risk for later reading difficulty. Children from low SES backgrounds may display difficulty related to school readiness such as alphabet knowledge, phonological awareness, print concepts, and oral language based on assessments such as the CELF Preschool-2 Word Structure subtest which measures children's expressive grammar, morphology and pronouns (Wiig et al., 2004).

Furthermore, various studies have shown a correlation between the SES of parents and literacy skill and the onset of reading (National Assessment of Educational Progress 1991; Raz and Bryant 1990). Findings show that phonological awareness and the recognition of letters among five- to six-year-olds with low SES were significantly poorer than children of middle SES (Aram & Levin, 2001; Bus et al., 2000; Purcell-Gates,1998). The results are typically interpreted as indicating that children with a low SES have less literacy experience in the pre-school period than children with middle and high SES.

#### The Learning Gap on reading

Preschool attendance, classroom quality, teacher training, and emergent literacy interventions positively influence children's skills and potentially help to narrow the gap between those deemed at risk and not at risk (Abbott-Shim et al., 2003, Landry et al., 2006, Mashburn et al., 2008, NELP, 2008). There exists much variability related to children's emergent literacy development. The way interventions are implemented can influence outcomes. Individual variation can impact a child's response to certain interventions. It is also crucial that interventions are based on student assessment.

There is an emerging sense of urgency about improving reading instruction and literacy outcomes in our country. Thirty-seven percent of fourth-grade school children cannot read well enough to effectively accomplish grade-level work (National Center for Education Statistics, 2001). When these children go into adulthood and have low levels of literacy, this can affect their future careers and reading skills in the workplace.

#### Role of the SLP in Daycare

Early childhood educators that work with preschoolers have documented the importance of facilitating emergent literacy skills (Podhajski & Nathan, 2005; Whitehurst & Lonigan, 1998). In-service training to educators is crucial to influence their beliefs and attitudes about emergent literacy skills. Caretakers are not fully trained to facilitate these reading skills. The role of the SLP is crucial when working together with the educators in putting into practice these emergent literacy skills. Training can begin with information on the "zone of proximal development" which is a Vygotskian concept in which an adult scaffolds new learning through utilizing developmentally appropriate skills depending on the child's age. Scaffolding is an "I do" "we

do" "you do" method that involves the child to watch and learn then to do it alongside the adult/caretake and then do independently perform it on their own. Children's levels of understanding and learning are based on their development. One for instance, is the development of decontextualized language. These learning opportunities involve using abstract language and taking reading to the next level such as connecting to the story in a sense where making inferences is involved, looking at past events, analyzing the characters emotions and then making predictions before, during and after reading. As language and thinking skills develop for the child, then the next steppingstone of higher levels of abstraction can be incorporated.

#### **Purpose of the Study**

The purpose of the study is to investigate the perceptions of early literacy instruction and literacy instruction practices of daycare providers across the U.S. The literature above outlined areas of child development that are crucially impacted by their early experiences. Because young children spend a significant portion of their time in daycare, and because the development of literacy is arguably the most important occurrence of childhood, it is important to understand the perceptions and practices of daycare providers related to literacy.

**Research question:** What perspectives and practices do daycares/learning centers have/provide on literacy skills for children ages 0-5?

#### **Chapter 2: Methods**

#### Design

This study utilized a survey comprising 15 questions and conducted via phone calls to gather necessary information. The selection of cities, and daycare contacts followed a randomized process employing a number generator. The researcher aimed at completing four surveys per each state with two from urban and two from rural areas, totaling 200 surveys total. Daycares staff who declined participation were excluded, and the research assistants then called the next randomly selected daycare on the list. Daycare identities remained anonymous. Calls targeted daycare directors, providers, and administrative staff.

#### **Materials**

The technology employed included the University of Texas at El Paso Question Pro software, internet access, a computer, a cell phone, and writing tools. The computer facilitated data tracking, research, and documentation, while the cell phone facilitated calls across the United States. An Excel spreadsheet organized all 50 states alphabetically, with rural and urban cities listed for each state. A number generator determined which state and city would be contacted. If a city had multiple daycares, the generator randomized phone numbers to select a daycare to contact. Surveys, featuring a scripted introduction and 15 questions, were conducted via phone calls. UTEP Question Pro software collated survey responses, necessitating manual input. Other resources included the UTEP library, online databases, RefWorks, and access to journal articles. See appendix for the survey questions.

#### **Participants**

Participants encompassed daycare owners, directors, managers, and providers with diverse backgrounds, including varying education levels and years of experience. The type of daycare ranged from family-owned and operated to large childcare centers. Enthusiasm for literacy seemed to vary among participants, with some eager to extend their knowledge while others displayed disinterest. The anonymity of the participants was emphasized to encourage participation.

#### **Procedures**

The study obtained Institutional Review Board approval before initiation. A survey focusing on baby sign and emergent literacy skills was collaboratively created and distributed nationwide via 5–10-minute phone calls. Survey questions underwent revisions based on feedback from practice calls and input from UTEP professors. Local practice surveys helped refine questions. States and cities were categorized as rural or urban based on population and census data. Google was used to create a list of urban and rural cities in each state. Two rural and two urban cities were chosen randomly using a random number generator. Google was again used to create a list of all daycare facilities in the chosen cities. The daycare facilities were called in a random order based on the random number generator. If the daycare staff indicated that they could not complete the survey, another daycare from the list would be randomly chosen and called. Notes were taken when daycare staff asked to be called back at a more convenient time. The call back was conducted to the best of the researcher's ability.

Surveys took approximately 10 minutes to complete. Completed surveys were saved, and responses were entered into UTEP Question Pro software for analysis.

#### Results

87 surveys were completed. 33 states were represented. There were 37 surveys completed in rural cities and 50 in urban cities. The surveys were uploaded onto the UTEP software Question Pro. Each question was inputted along with the recipients' responses.

What is your role at your center?

Role	Rural and Urban combined
Directors	58.6%
Teacher/employee	27.59%
Other	13.79%

Role	Rural
Directors	56.75%
Teacher/employee	27.02%
Other	16.21%

Role	Urban
Directors	60%
Teacher/employee	28%
Other	12%

Are you familiar with the activities the children participate in? For this question, all recipients that answered no would then refer the caller to someone familiar with the activities the children participated in. All 87 surveys answered yes.

How many children does your center care for?

Number of children	Rural and Urban combined daycares
5-10	7.0%
10-20	4.7%
20-50	36.0%
50-100	37.2%
100+	15.1%

Number of children	Rural daycares
5-10	8.1%
10-20	5.4%
20-50	35.1%
50-100	40.5%
100+	10.8%

Number of children	Urban daycares
5-10	6.1%
10-20	4.1%
20-50	36.7%
50-100	34.7%
100+	18.4%

## Of those how many are birth to 5 years old?

Number of children	Rural and Urban combined
5-10	9.3%
10-20	11.6%
20-50	45.3%
50-100	24.4%
100+	9.3%

Number of children	Rural daycares
5-10	10.8%
10-20	16.2%
20-50	45.9%
50-100	26.5%
100+	12.2%

Number of children	Urban daycares
5-10	8.2%
10-20	8.2%
20-50	44.9%
50-100	26.5%
100+	12.2%

What is your child to caretaker ratio?

Infants (0-12months)	Rural and Urban combined
[Infants] 1 to 3	11.7%
[Infants] 1 to 4	36.0%
[Infants] 1 to 5	11.6%
[Infants] 1 to 6	11.6%
[Infants] 1 to 7	1.2%
[Infants] 1 to 8	1.2%

Infants (0-12months)	Rural
[Infants] 1 to 3	11.1%
[Infants] 1 to 4	59.3%
[Infants] 1 to 5	14.8%
[Infants] 1 to 6	18.5%
[Infants] 1 to 7	0.0%
[Infants] 1 to 8	0.0%

Infants (0-12months)	Urban
[Infants] 1 to 3	12.1%
[Infants] 1 to 4	45.5%
[Infants] 1 to 5	18.2%
[Infants] 1 to 6	15.2%
[Infants] 1 to 7	3.0%
[Infants] 1 to 8	3.0%

Toddlers (1-3 years old)	Rural and Urban combined
[toddlers] 1 to 3	0.0%
[Toddlers] 1 to 4	34.9%
[Toddlers] 1 to 5	11.6%
[Toddlers] 1 to 6	11.6%
[Toddlers] 1 to 7	7.0%
[Toddlers] 1 to 8	1.2%

|--|

Toddlers (1-3 years old)	Rural
[toddlers] 1 to 3	0.0%
[Toddlers ] 1 to 4	0.0%
[Toddlers ] 1 to 5	23.1%
[Toddlers] 1 to 6	23.1%
[Toddlers ] 1 to 7	7.7%
[Toddlers ] 1 to 8	15.4%
[Toddlers ] 1 to 9	3.8%

Toddlers (1-3 years old)	Urban
[toddlers] 1 to 3	2.99
[Toddlers ] 1 to 4	20.09
[Toddlers ] 1 to 5	17.19
[Toddlers ] 1 to 6	22.99
[Toddlers ] 1 to 7	8.69
[Toddlers ] 1 to 8	14.39
[Toddlers ] 1 to 9	0.09

Preschool (3-5 years old)	Rural and Urban combined
[Preschool] 1 to 5	6.7%
[Preschool] 1 to 6	4.4%
[Preschool] 1 to 7	4.4%
[Preschool] 1 to 8	8.9%
[Preschool] 1 to 10	28.9%
[Preschool] 1 to 12	33.3%
[Preschool] 1 to 14	4.4%
[Preschool] 1 to 15	2.2%
[Preschool] 1 to 16	4.4%
[Preschool] 1 to 19	2.2%

Preschool (3-5 years old)	Rural
[Preschool] 1 to 5	0.0%
[Preschool] 1 to 6	0.0%
[Preschool] 1 to 7	10.0%
[Preschool] 1 to 8	10.0%
[Preschool] 1 to 10	25.0%

[Preschool] 1 to 12	40.0%
[Preschool] 1 to 14	10.0%
[Preschool] 1 to 15	5.0%
[Preschool] 1 to 16	0.0%
[Preschool] 1 to 19	0.0%

Preschool (3-5 years old)	Urban	
[Preschool] 1 to 5	12.09	%
[Preschool] 1 to 6	8.09	%
[Preschool] 1 to 7	0.09	%
[Preschool] 1 to 8	8.09	%
[Preschool] 1 to 10	32.09	%
[Preschool] 1 to 12	28.09	%
[Preschool] 1 to 14	0.09	%
[Preschool] 1 to 15	0.09	%
[Preschool] 1 to 16	8.09	%
[Preschool] 1 to 19	4.09	%

School Age (5-10 years old)	Rural and Urban combined
[School Age ] 1 to 4	1.9%
[School Age ] 1 to 5	1.9%
[School Age ] 1 to 6	3.8%
[School Age ] 1 to 7	1.9%
[School Age ] 1 to 8	7.5%
[School Age ] 1 to 10	18.9%
[School Age ] 1 to 12	15.1%
[School Age ] 1 to 13	9.4%
[School Age ] 1 to 14	3.8%
[School Age ] 1 to 15	9.4%
[School Age ] 1 to 16	1.9%
[School Age ] 1 to 17	1.9%
[School Age ] 1 to 18	3.8%
[School Age ] 1 to 20	13.2%
[School Age ] 1 to 24	3.8%
[School Age ] 1 to 25	1.9%

School Age (5-10 years old)	Rural
[School Age ] 1 to 4	0.0%
[School Age ] 1 to 5	0.0%
[School Age ] 1 to 6	0.0%

[School Age ] 1 to 7	3.8%
[School Age ] 1 to 8	11.5%
[School Age ] 1 to 10	23.1%
[School Age ] 1 to 12	15.4%
[School Age ] 1 to 13	7.7%
[School Age ] 1 to 14	3.8%
[School Age ] 1 to 15	11.5%
[School Age ] 1 to 16	0.0%
[School Age ] 1 to 17	0.0%
[School Age ] 1 to 18	3.8%
[School Age ] 1 to 20	19.2%
[School Age ] 1 to 24	0.0%
[School Age ] 1 to 25	0.0%

School Age (5-10 years old)	Urban
[School Age ] 1 to 4	3.7%
[School Age ] 1 to 5	3.7%
[School Age ] 1 to 6	7.4%
[School Age ] 1 to 7	0.0%
[School Age ] 1 to 8	3.7%
[School Age ] 1 to 10	14.8%
[School Age ] 1 to 12	14.8%
[School Age ] 1 to 13	11.1%
[School Age ] 1 to 14	3.7%
[School Age ] 1 to 15	7.4%
[School Age ] 1 to 16	3.7%
[School Age ] 1 to 17	3.7%
[School Age ] 1 to 18	3.7%
[School Age ] 1 to 20	7.4%
[School Age ] 1 to 24	7.4%
[School Age ] 1 to 25	3.7%

# What curriculum, if any, do you follow?

	Rural	Urban	Combined
Follow	75.67%	66%	70.11%
Do not	21.62%	16%	18.39%
Other	2.70%	18%	11.49%

28

Curriculums mostly followed
Goddard Curriculum
Teaching Strategies Gold Curriculum
Montessori
The Creative Curriculum
Theme Based
Create their own

## At what age do you start reading to children?

	Rural	Urban	Combined
Birth-12 months	67.56%	74%	72.09%
Toddlers 1-3 yr. old	8.10%	20%	15.11%
Preschool 3-5 yr. old	24.32%	4%	12.79%

## How long do you read to them?

	Rural	Urban	Combined
10-15min.	56.75%	56%	56.32%
20-30 min.	37.84%	28%	32.18%
1 hr.		4%	2.30%
1 hr. or more		2%	1.15%
Option 6	5.41%	6%	5.75%
Do not read			
Blank		4%	2.30%

# How does your center teach reading?

Literacy practices	Rural and Urban combined
Follow Curriculum	40.7%
Reading books	59.3%
Letters and Sounds	43.0%
Talk	34.9%
Sing	19.8%
Play	16.3%

29

Literacy practices	Rural
Follow Curriculum	40.5%
Reading books	62.2%
Letters and Sounds	40.5%
Talk	27.0%
Sing	21.6%
Play	13.5%

Literacy practices	Urban
Follow Curriculum	40.8%
Reading books	57.1%
Letters and Sounds	44.9%
Talk	40.8%
Sing	18.4%
Play	18.4%

Do you have different activities depending on ages?

Yes	93.02%
No	6.98%

# Can you describe them to me?

Types of activities	Rural and Urban combined
Read aloud	65.1%
Nursery Rhymes	19.8%
Circle Time	39.5%
Theme Units	14.0%
Library (on their own)	29.1%
Sensory	29.1%
Phonics	37.2%
Sight Words	46.5%
Other	30.2%
None	1.2%

Types of activities	Rural
Read aloud	62.2%
Nursery Rhymes	21.6%
Circle Time	48.6%
Theme Units	16.2%
Library (on their own)	32.4%
Sensory	18.9%
Phonics	32.4%
Sight Words	54.1%
Other	27.0%
None	0.0%

Types of activities	Urban
Read aloud	67.3%
Nursery Rhymes	18.4%
Circle Time	32.7%
Theme Units	12.2%
Library (on their own)	26.5%
Sensory	36.7%
Phonics	40.8%
Sight Words	40.8%
Other	32.7%
None	2.0%

# How long are these activities?

Duration of activities	Rural and Urban combined
5-10 min	2.3%
10-15 min	25.6%
15-20 min	24.4%
20-30 min	26.7%
1hr or more	4.7%
Varies depending on age	15.1%
Blank	1.2%

Duration of activities	Rural
5-10 min	5.4%

10-15 min	21.6%
15-20 min	18.9%
20-30 min	37.8%
1hr or more	2.7%
Varies depending on age	13.5%
Blank	0.0%
Duration of activities	Urban
5-10 min	0.0%
10-15 min	28.6%
15-20 min	28.6%
20-30 min	18.4%
1hr or more	6.1%
Varies depending on age	16.3%
Blank	2.0%

# Is there training provided for Reading Skills?

Training skills	Rural and Urban Combined
Yes	65.7%
No	34.3%

Training skills	Rural
Yes	59.5%
No	40.5%
Training skills	Urban
Yes	70.4%
No	29.6%

#### Discussion

To remind the reader, the research questions asked were, "What perspectives and practices do daycare/learning centers have regarding literacy skills for children ages 0-5?". A variety of perspectives and practices were found during data collection. All daycare respondents reported reading at least 10-15 minutes to the children. No daycares reported not reading to children at all. Based on the survey's results, literacy exposure in daycares and learning centers derived from reading to the children and providing opportunities to engage with letters and sounds.

Daycares and learning centers that provided different literacy activities according to age groups focused on reading books aloud and exposing children to their library. Reading was also incorporated during circle time while teaching phonics and sight words (ex. recognized by sight such as /the/, /it/, and /can/) There are other types of sight words that are not spelled phonetically (ex. words that cannot be decoded such as /buy/, /talk/, or /come/). The duration of these reading activities varied between rural cities and urban cities. The literacy activities in the rural cities lasted between 20-30 minutes and for the urban cities the activities lasted between 10-20 minutes.

It was apparent from the results that daycare providers are aware of the importance of exposing children to early literacy experiences. Such practices implemented in daycares and learning centers included sharing books, reading to children, and teaching phonics. Different literacy activities were provided depending on age. For instance, daycares and learning centers ensured that they had a collection of their own library that gave access to the children. Books were reported to be age appropriate, which can help with early childhood development. The importance of ensuring language development opportunities in the child's environment can also

be correlated with reading success. It is important for daycare providers to be informed that children learn through their environment, through imitation, and through what they are exposed to. Most daycare and learning centers provided reading time for children from birth to five years of age. However, the duration of each activity ranged from only 10-15 minutes to 20-30 minutes. It is questionable whether this is an adequate amount of time as children are in daycare or learning centers most days of the week for 8-10 hours a day. What directors, teachers and employees of these daycare/learning centers shared were that it also depended on the child's attention span. For example, children under the age of two had a hard time sitting through a book. The child would either be engaged for a few minutes or walk away in the middle of reading time. It is unknown whether or to what extent redirection was occurring.

Exposure in daycare environments that provide cognitive stimulating material and literacy activities help ensure that children develop phonological awareness. Activities such as rhymes need to be incorporated. The data collected suggests that few daycares are exposing children to nursery rhymes or song and play.

Further data collected reported that there was a slight majority of daycare and learning centers for rural cities that were provided with some form of training involving reading skills compared with urban cities that had a pronounced majority of being provided with training.

Based on previous research (Moats & Foorman, 2003) it is understood that increasing a teacher's knowledge of the role of phonological awareness in literacy instruction can enhance student performance. Therefore, it is recommended that these teachers receive systematic and ongoing professional development to increase their understanding of phonological awareness and its crucial role in early literacy development.

The results also showed higher percentages following a variety of curriculums. A curriculum is a structured plan outlining what students will learn during a particular course, program, or educational experience. It includes objectives, content, instructional methods, assessment strategies, and resources. The curriculums and resources that were most used at these daycare/learning centers are discussed here.

The Goddard School curriculum was utilized to focus on children's literature which focused on social-emotional development. Included is the Life Lesson Library which is filled with award-winning best sellers, classics, and a variety of recently released children's books. The list of books was meticulously handpicked by early childhood education experts and Goddard educators. The features included in these books feature relatable characters and stories used to allow for teachable moments and build connections with children.

Life Lesson Library books help young children learn five educational themes: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The themes feature twelve age-appropriate books geared towards infant listeners to preschool readers. Unique lesson plans are provided with every book which focus on core social-emotional skills. Parents are provided with at-home activities that are incorporated such as the books used to help reinforce at home learning at the Goddard School, the leading premium childcare provider in the U.S.

The Gold Curriculum is based off on the child's needs based on developmentally appropriate milestones. The assessment model used follows expectations for children from birth through the third grade which enables a whole-child approach to assessment. To ensure the GOLD program meets all requirements, it is aligned to the learning guidelines in each state and the Head Start Early Learning Outcomes Framework.

Montessori is an educational approach developed by Dr. Maria Montessori that emphasizes child-centered learning which involves individualized instruction and hands-on, experiential learning. This method focuses on fostering independence, self-discipline, and a love for learning in children by providing enriching experiences that stimulate their natural curiosity and exploration. Educators practicing this method help guide children and aim to develop not only academic skills but also social, emotional, and practical life skills. For academic outcomes, Hedges' g effect size, where positive values favor Montessori, ranged from 0.26 for general academic ability (with high quality evidence) to 0.06 for social studies. The quality of evidence for language (g=0.17) and mathematics (g=0.22) was also high. The effect size for a composite of all academic outcomes was 0.24. Science was the only academic outcome deemed to have low quality of evidence according to the GRADE approach.

However, effect sizes for nonacademic outcomes ranged from 0.41 for students' inner school experience to 0.23 for social skills. Both outcomes presented low quality evidence. Both the executive function (g =0.36) and creativity (g=0.26) had moderate quality of evidence. The effect size for a composite of all nonacademic outcomes was 0.33. Moderator analyses of both the composite academic and nonacademic outcomes displayed Montessori education to result in a larger effect size for randomized studies in comparison to nonrandomized studies geared towards preschool and elementary settings a well as middle school or high school. Moreover, the same was for private Montessori compared to public Montessori. Treatment duration from intervention to follow-up data collection was inconclusive. Due to the lack of small sample-size studies there were possibilities of bias publication favor of traditional education. However, a sensitivity analysis indicated that Montessori education resulted with reliable achievement.

Montessori education has a significant and positive impact on child outcomes in academic and nonacademic, compared to outcomes with traditional methods. (Montessori, 2013)

The Creative Curriculum for Preschool is based on a whole-child, comprehensive curriculum that emphasizes rich, engaging, play-based learning experiences; hands-on investigation of interesting materials; nurturing environments; and responsive relationships between teachers and children and their families. This curriculum believes that building trusting relationships with children is equally important. Through the partnership with families, children's safety and health are ensured to take priority and provide responsive, individualized care. The environment is created to support and encourage exploration.

In addition, theme-based and creating a center's own curriculum were also listed as being used by the daycares. Creating their own curriculum has benefits and drawbacks. For instance, themed units can address events and activities that are particular to the center such as local holidays, celebrations, and birthdays that may be ultimately more meaningful and relevant to the children. However, these created curriculums are less likely to have been reviewed by experts in the field or peer reviewed. The curricula also may not be evidence-based.

Data collected on the caretaker to child ratio that was the most common was 1:4 per infants and toddlers and for the preschool and school age children the ratio increased to 1:10 and 1:12. This could be due to policies for daycares and learning centers and shortages of daycares.

Since President Lyndon B. Johnson implemented Head-Start programs there has been many daycare and learning centers growing and striving for student success before entering the school system. These centers were designed to increase school readiness and academic achievements. In some ways, early childhood centers provide benefits, but in others it is about

using the right strategies and having proper training in literacy practices. Studies showed that there are educators that are uncertain of the way syllables work, more so the morphology of language. In addition, the knowledge on teaching the accurate form of phonemic awareness and the way phonics is exposed to children is also another factor that needs to be considered when helping to develop children's social-language, cognition, literacy and behavior.

### Limitations

Once the data was collected it was apparent that the survey questions could have been more precise in a way that would allow for extensive information to be gathered. Such questions required elaboration for instance the type of training the daycare and learning centers were receiving. As for the literacy practices that followed a curriculum, or a form of objectives could have also been included in the survey versus just knowing the name of the curriculum they used. The recipients on the phone shared what they used as far as literacy practices but due to time restraints it seemed more of a rushed phone call for some cases. There are shortages of daycares and staff, so it did not allow enough time to extend the phone call due to having to tend to the children.

In addition, time zones were another challenge faced when phone calls needed to be made. For instance, certain daycares asked for a specific available time frame in which they would have a chance to participate in the survey but often it posed as a conflict on schedules for both the caller and recipient. The survey could have also asked about the exposure of screen time. Previous research showed the implications of overly use of screens in early childhood and the effects in children's development overall.

#### **Future Directions**

It is important for those working in early childhood development to ensure there is continuous training that allows caretakers to be more aware of the importance of language development for literacy. This will possibly benefit the child once they enter a school system and are set up for success. Regarding further understanding of the development of children's literacy, it is imperative that daycare and learning centers place this aspect in high priority. Whether it is funding or means of continued research, there must be advocacy for our younger generation. Reading books to our children provides many benefits that will impact their future. By doing so we are changing the world one page at a time. How are we going to do this? One way is allowing for SOS to decrease amongst families especially mothers of young children that are trying to further their education but cannot be due to having barriers of finding childcare. That is why I stand by these mothers these strong women who still have dreams to be somebody. One of my goals is to open a daycare/learning center at UTEP (University of Texas at El Paso) to ensure that mothers can continue their education and aspire to be more. Continued research on how to go upon that is asking mothers that are currently university students and finding out what is needed to finish a degree and mothers that are not attending a form of college and ask them to give insight as well.

### **Clinical Implications**

For those in the field of Speech-Language Pathology (SLP), the research shows how children develop their articulators as well as the stages of language development. These highly valued professionals are experts in language development and have furthered their education in what it takes to help meet the child's communication goals. If SLP students, licensed SLPs and SLP assistants advocate in their community of daycares and learning centers, this will be a

greater achievement for helping children birth to five years old develop their language and literacy. Proper training can be provided to the caretakers and families of these children to further expose them to literacy environments. Then maybe once the children start school at age 5 and up there is already a solid foundation of literacy skills, especially in phonological awareness as studies have shown. The majority of studies find that preschool experience gives children a more favorable start at school and there is evidence of persistent effects during the subsequent school years. In many instances, short-term effects exceed longer-term effects on cognitive development.

In addition, parents would be given readily resources available to them provided by the daycares/learning centers as well as in pediatric clinics. The resources can extend from a simple flyer or brochure to an easy-to-use app that families can download. If parents have concerns whether they are first time parents or are worried about a delay in language, then they can be directed to an SLP that can also be included on the forms sent home as well as a QR code on a simple app. For parents struggling to buy books and materials that help build their child's language and literacy then maybe we can even have a book drive where other members of the community donate children's books for mothers to build their little library at home.

#### References:

- Al-Harbi, S. S. (2020). Language development and acquisition in early childhood. *Journal of Education and Learning (EduLearn)*, 14(1), 69–73.
- Beller, S. (2008). Fostering Language Acquisition in Daycare Settings: What Does the Research Tell Us? Working Papers in Early Childhood Development, No. 49. Eric.ed.gov. <a href="https://eric.ed.gov/?id=ED522692">https://eric.ed.gov/?id=ED522692</a>
- Bornstein, M. H., Hahn, C.-S., & Haynes, O. M. (2010). Social competence, externalizing, and internalizing behavioral adjustment from early childhood through early adolescence: Developmental cascades. *Development and Psychopathology*, 22(4), 717–735. https://doi.org/10.1017/S0954579410000416
- Burger, K. (2010). How does early childhood care and education affect cognitive development? An international review of the effects of early interventions for children from different social backgrounds. *Early Childhood Research Quarterly*, 25(2), 140–165. https://doi.org/10.1016/j.ecresq.2009.11.001
- Christakis, D.A., 2009. The effects of infant media usage: what do we know and what should we learn? Acta Paediatr. 98, 8–16.
- Crim, C., Hawkins, J., Thornton, J., Rosof, H. B., Copley, J., & Thomas, E. (2008). Early Childhood Educators' Knowledge of Early Literacy Development 1. *Issues in Teacher Education*, 17(1), 17-.
- Dunn, W. E., & Lantolf, J. P. (n.d.). *Vygotsky's zone of proximal development and krashen's I+1* .... Retrieved March 15, 2023, from <a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/0023-8333.00048">https://onlinelibrary.wiley.com/doi/abs/10.1111/0023-8333.00048</a>
- Eisenhower, A. S., Baker, B. L., & Blacher, J. (2009). Children's delayed development and behavior problems: Impact on mothers perceived physical health across early childhood. *Social Science & Medicine* (1982), 68(1), 89–99. https://doi.org/10.1016/j.socscimed.2008.09.033
- FRANKEL, K. K., BECKER, B. L. C., ROWE, M. W., & PEARSON, P. D. (2016). From "What is Reading?" to What is Literacy? *Journal of Education (Boston, Mass.)*, *196*(3), 7–17. <a href="https://doi.org/10.1177/002205741619600303">https://doi.org/10.1177/002205741619600303</a>

- Girolametto, L., Weitzman, E., Lefebvre, P., & Greenberg, J. (2007). The Effects of In-Service Education to Promote Emergent Literacy in Childcare Centers: A Feasibility Study. Language, Speech & Hearing Services in Schools, 38(1), 72–83. https://doi.org/10.1044/0161-1461(2007/007)
- Kholiq, A. (2020). How is Piaget's Theory Used to Test The Cognitive Readiness of Early Childhood in School?. Indonesian Journal of Early Childhood Education Studies, 9(1), 24-28.
- Lysaker, J. (n.d.). *Young children's readings of wordless picture books*. Retrieved March 15, 2023, from <a href="https://journals.sagepub.com/doi/pdf/10.1177/1468798406062174">https://journals.sagepub.com/doi/pdf/10.1177/1468798406062174</a>
- Marcella, J., Howes, C., & Fuligni, A. S. (2013, November 30). *Exploring cumulative risk and family literacy practices in low-income Latino families*. Early Education and Development. Retrieved March 15, 2023, from <a href="https://eric.ed.gov/?id=EJ1026574">https://eric.ed.gov/?id=EJ1026574</a>
- McNamee, G. D., McLane, J. B., Cooper, P. M., & Kerwin, S. M. (n.d.). *Cognition and affect in early literacy development*. Taylor & Francis. Retrieved March 15, 2023, from <a href="https://www.tandfonline.com/doi/abs/10.1080/0300443850200402">https://www.tandfonline.com/doi/abs/10.1080/0300443850200402</a>
- Moats, L. C., & Foorman, B. R. (2003). Measuring teachers' content knowledge of language and reading. Annals of Dyslexia, 53, 23-45.
- Montessori, M. (2013). The Montessori method. Transaction publishers.
- Montroy, J. J., Bowles, R. P., Skibbe, L. E., McClelland, M. M., & Morrison, F. J. (2016). The Development of Self-Regulation Across Early Childhood. *Developmental Psychology*, 52(11), 1744–1762. <a href="https://doi.org/10.1037/dev0000159">https://doi.org/10.1037/dev0000159</a>
- Robin P. Goin (1998) A Review of Peer Social Development in Early Childhood, Early Child Development and Care, 142:1, 1-8, DOI: 10.1080/0300443981420101
- Robinson, W. P. (1982). Language development in early childhood. *Psychology for Speech Therapists*, 141–170. https://doi.org/10.1007/978-1-349-16746-3\_6
- Saracho, O. N., & Shirakawa, Y. (n.d.). *A comparison of the literacy development context of United States and Japanese families early childhood education journal*. SpringerLink. Retrieved March 15, 2023, from <a href="https://link.springer.com/article/10.1023/B:ECEJ.0000024117.13990.de">https://link.springer.com/article/10.1023/B:ECEJ.0000024117.13990.de</a>

- Sawada, Y.; Katayama, T. Characteristics of Child-Rearing Environments Related to Social Development in Early Childhood. *Children* **2022**, *9*, 877. https://doi.org/10.3390/children9060877
- Sharing books with babies: Evaluation of an early literacy intervention. Taylor & Francis. (n.d.). Retrieved March 15, 2023, from <a href="https://www.tandfonline.com/doi/abs/10.1080/00131919997461">https://www.tandfonline.com/doi/abs/10.1080/00131919997461</a>
- Sonia, E. childhood research quarterly, 2011, V. (1), p.1-14 Q., Laura, J. L. M. M., Konold, T. R., & McGinty, A. S. (2010, June 2). Profiles of emergent literacy skills among preschool children who are at risk for academic difficulties. Early Childhood Research Quarterly. Retrieved March 15, 2023, from <a href="https://www.sciencedirect.com/science/article/pii/S0885200610000487">https://www.sciencedirect.com/science/article/pii/S0885200610000487</a>
- Strasser, J., & Seplocha, H. (n.d.). *Using picture books to support young children's literacy*. Taylor & Francis. Retrieved March 15, 2023, from <a href="https://www.tandfonline.com/doi/abs/10.1080/00094056.2007.10522916">https://www.tandfonline.com/doi/abs/10.1080/00094056.2007.10522916</a>

### **UPDATED Script: Baby Sign & Reading Instruction in Daycare Facilities**

#### **Introduction:**

Hi, I have a few questions about your daycare center. Is now a good time?

- If yes: Great, I'm a student at the University of Texas at El Paso conducting an anonymous survey about Baby Sign use and Reading Instruction. Would you like to participate in our short survey, it should take less than 10 minutes?
- If not: When is a better time for me to call back?

(If directed to an administrator, repeat the intro when they answer.)

### **Survey Questions:**

- 1. What is your role at your center?
- 2. Are you familiar with the activities the children participate in?
  - a. If yes: Continue to question #3.
  - b. If not: Is there someone else, I may talk to now or later?
- 3. How many children does your center care for?
  - a. Of those how many are birth to 5 years old?
- 4. What is your child to caretaker ratio?
- 5. What curriculum, if any, do you follow?
- 6. Do your center use hand gestures to communicate, also known as Baby Sign?
  - a. If yes: What is the main reason for using Baby Sign?
  - b. If no: What is the main reason for not using Baby Sign?
- 7. How did you find out about Baby Sign?
- 8. What time of day do you use Baby Sign the most?
- 9. What signs do you use?
- 10. How many signs do you use?
- 11. At what age do you start reading to children?
  - a. How long do you read to them?
- 12. How does your center teach reading?
- 13. Do you have different reading activities depending on the age group?
  - a. Can you describe them to me?
  - b. When are they done and how long do, they last?
- 14. Is there training provided for Baby Sign and Reading skills?
- 15. Would you like additional information on Baby Sign and Reading skills?
  - If yes: Okay, can I have your name and email address, please. Thank you, and we will be sending the information to (confirm email) soon. Thank you very much for your participation in this survey. Have a nice day.
  - If not: Thank you very much for your participation in this survey. Have a nice day.

#### Vita

Analaura Amador was born in El Paso, Texas. She is a mother of two children and a wife. Her children are between the ages of two and five. Analaura graduated from The University of Texas at El Paso with a bachelor's degree in education where she then pursued teaching at the elementary level both here in Texas and in Hawaii. Analaura mainly taught 1st grade and 4th grade throughout her teaching career. Analaura's interests are early childhood development, emergent literacy, and language development. Being a mother herself, solidified her passion on the importance of child development. Due to these interests, she decided to further her education as well as conducting research that involved literacy skills/practices in daycares/learning centers across the nation focusing on ages birth to 5. Analaura will receive her master's degree in Speech-Language Pathology this coming May of 2024. Upon graduation, she will work in a pediatric setting at a clinic. Analaura dreams of opening up her own clinic one day as well as a learning center in order to advocate for children and their families. This advocacy includes awareness of the importance of literacy and language development as well as encouraging mothers and fathers to continue their education without having to worry about a high-quality childcare/learning center. This is important since statistics show that children spend 10 plus hours as well as five to seven days a week in these daycares/learning centers. Analaura also has hopes in decreasing the caseloads for clinicians as well as school based SLP's since most caseloads fall within 60 to 120 patients.

This research begun in the summer of 2023 under the guidance of Professor Vanessa Mueller and was completed in May 2024.

Analaura Amador can be contacted through e-mail: analaura.amador22@gmail.com