HOME LITERACY ENVIRONMENT AS A PREDICTOR FOR LETTER IDENTIFICATION SKILLS FOR PRESCHOOL-AGED CHILDREN

by

Jillian Leah Kennen

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

Meredith J. Park, Ed.D., Committee Chair

Elizabeth Hillman, Ed.D, Committee Member

Laurie Emery, Ed.D, Committee Member

ABSTRACT

Research clearly states that quality home literacy environments and overall literacy development are related; however, there is limited research exploring the effect on home literacy environments as a predictor for letter identification scores for preschool-aged children. Understanding this relationship will help care givers and early educators create quality literacy environments for young children. The purpose of this study was to examine if the home literacy environment for preschool-aged children is a predictor for letter identification scores. The current research examined parent/care giver responses to the Get Ready to Read Home Literacy Environment checklist and students' scores on the curriculum-based measure for letter identification. This investigation examined parent/care giver responses to the Get Ready to Read Home Literacy Environment checklist and student scores on the curriculum-based letter identification measure. The participants included 83 preschool-aged children in an urban Southern Arizona school district. The students attended an inclusive school district preschool program; therefore, both students with and without disabilities were included in the sample. The findings of the study suggested a significant relationship between home literacy environment and letter identification scores for preschool-aged children.

Keywords: Home Literacy, Home Literacy Environment, Letter Identification, Young Children, Preschool-Aged Children

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"For nothing is impossible with God" Luke 1:37 ESV

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Table of Contents

List of Tables

List of Figures

CHAPTER ONE: INTRODUCTION

As Hayashi, Schmidt, and Saunders (2013) stated, "Prereaders' ability to name letters at school entry is the strongest single predictor of their first grade reading achievement" (p. 838). Children begin to learn about letters from an early age in their home literacy environment. Home literacy environments provide young children with access to literacy materials including books, pictures, and letters. Research has indicated that home literacy environments play a key role in the development of early literacy skills for young children (Brown, Byrnes, Watson, & Raban, 2013). In an investigation conducted by Hood, Colon, and Andrews (2008) there was a direct correlation (r =.24 with p = .01) between parental teaching in the home environment and emergent literacy skills in preschool-aged children. The relationship between home literacy environments and letter identification skills has not yet been explored. Demonstrating a connection between home literacy and letter identification is important because it could provide families and caregivers additional resources to create an environment in which pre-literacy skill development and, specifically, the ability to name letters, is encouraged and will support later reading success. In addition to background information, this chapter will outline the significance of the study, research questions, and hypotheses and identify the key variables used in the study.

Background

In 1647, the General Court of Massachusetts ruled that all colonies with more than 50 houses must provide instruction and methods to teach children to read (Monaghan & Barry, 1999). It was then that the process of teaching children to read began, and it continues to be an important educational issue. Teaching children to read started with using the alphabet method, which had children learn the letter names and the sounds that the letters make. Children then

learned to put sounds together to make nonsense letter combinations (Schreiner & Tanner, 1976). Hornbooks, a single sheet of stiff cardboard that included upper and lowercase letters, a shortened syllabary, and the Lord's Prayer, were used with the alphabet method to introduce children to reading (Monaghan & Barry, 1999). This method is often seen in schools today through letter sound association and word families.

Reading instruction then shifted to include the whole word method. In this method, students were required to identify words by sight through reading the same passage over and over until each word was accurately identified (Schreiner & Tanner, 1976). As a part of the whole word method, battledores were also used. Battledores were used in conjunction with hornbooks; they were made of cardboard and folded into three sections. The battledore was the beginning of the shift from reading religious materials to reading more secular materials. Battledores evolved into primers, which were beginning reading books that contained a comprehensive text (Monaghan & Barry, 1999). The whole word method is used in schools currently as children learn to identify sight words within classrooms. Furthermore, techniques to teach reading fluency such as choral reading and reader's theatre evolved from the whole word method. These methods of teaching reading focus on reading fluency.

Next, the sentence method of teaching children to read emerged. Children would learn to read specific sentences, and then those sentences would be made into a story that they memorized and then read to the teacher. This method of reading instruction led to the need of comprehension instruction to ensure children understood the meaning of what they were reading. The word and sentence methods of reading instruction were then combined to include a comprehension piece to ensure that students comprehended what they were reading. Teachers provided students with questions at the end of the text to answer in order to prove that they

understood what they read. The concept of silent reading was also introduced at this time as a way to shift the focus from oral reading fluency to comprehension of text. Oral reading fluency and reading comprehension are both key components of reading instruction (Schreiner & Tanner, 1976, Armbruster, Lehr, & Osborn, 2000).

The early learning theories of Piaget, Vygotsky, Bruner, Dewey, and Montessori influenced the way educators view learning by young children. These theorists affected how early childhood educators viewed the home environment and how parents developed the home environment. Piaget taught that children build knowledge through developing an understanding of their personal reality based on their experiences (Tzuo, 2007). Piaget's developmental theory relates directly to home literacy environments and letter identification, as the home environment to which children are exposed helps them develop their understanding of language and literacy.

Vygotsky taught that a child's interactions with other children and adults challenge them to want to learn more from their environment (Tzuo, 2007). Vygotsky's theory applies directly to home literacy environments and letter identification, as children learn from people and the environment they are exposed to from an early age. Vygotsky stated that there should be a balance between teacher- and parent-directed activities and child-directed activities to achieve maximum development (Tzuo, 2007). This balance relates directly to developing an environment in which young children have potential to learn pre-literacy skills; it is important to ensure that there is a balance between adult-directed learning activities and child-directed learning activities.

Bruner's (1983) stated that children learn best through scaffolding. Scaffolding is when children are presented with material that is just above their current learning level to encourage learning and development of new skills (Bruner, 1983). This theory reinforces the importance of

home literacy environments and letter identification; it reiterates the importance of a positive, literacy-rich learning environment for young children in which they are continuously challenged to learn more.

A major theorist in early education was Dewey. Dewey's theory emphasized the importance of social intelligence and the role that the community plays in educating young children (Gutek, 2011). Home literacy activities, including letter identification skill building, encourage children to interact with the people in their environment to provide them with literacy information such as letter names or letter sounds. Montessori believed that children learned from the environment and materials that were presented to them (Gutek, 2011). Montessori's theories play an important role in the development of letter identification skills in the home literacy environment because materials that support letter identification enrich the home literacy environment.

Understanding the theories and history behind learning to read and home literacy provides the background knowledge to explore home literacy environments more thoroughly. Children begin learning pre-literacy skills that lead to learning to read from an early age. These pre-literacy skills begin developing within the home environment through interactions with adults and the environment in which they are exposed. Children develop knowledge about print through learning to identify letters and associating them with sounds (Duranovic, Huseinbasic, & Tinjak, 2012).

Early literacy skill development has been linked to later school success. Children who begin school with delayed language skills often have a difficult time developing literacy skills and therefore, are at risk for later academic difficulties (Nelson, Welsh, Vance Trup, & Greeburg, 2010). Research conducted by Duranovic et al. (2012) indicated a positive correlation

between letter knowledge and phonological skills prior to formal reading instruction. The home literacy environment plays a key role in this early development of letter identification and phonological skills for young children (Brown et al., 2013). Parent-child book reading and parental reading and writing instruction are other key aspects of the home literacy environment (Baroody & Diamond, 2010).

Home literacy environments vary depending on many factors within the family structure, such as family demographics and socio-economic status. The number of books in a home and the amount of time spent in shared reading experiences are associated positively with literacy skill development (Froiland, Powell, Diamond, & Son, 2013). Home literacy environments have a significant effect on a child's overall literacy development. A key aspect of the home literacy environment is the amount of time that children spend being read to. Several studies have stated there is a relationship between reading frequency and early literacy skills (Otaiba et al., 2010; Sawyer et al., 2014, Spira, Bracken & Fishel, 2005). The home environment of a child has an effect on the literacy skills he or she develops. Children who learn to read at an earlier age have more literacy opportunities than those who learn to read at an older age (Breit-Smith, Cabell, & Justice, 2010). Thus, the focus of this study was the relationship between home literacy environments and letter identification skills for preschool-aged children.

Problem Statement

The current research regarding the connections between home literacy environments and overall literacy skills for children is significant. However, no specific research exploring home literacy environments and letter identification has been published. Similar research to this topic includes Sawyer et al. (2014) who explored the relationship between print knowledge and home literacy environments for children with language impairments. They found that children with

language impairments might not have the requisite skills necessary to respond to home literacy environments in the same manner that children without language impairments respond in terms of print knowledge skills. Duranovic et al. (2012) made a connection between phonological awareness and letter knowledge, indicating that the phonemes that children are exposed to from an early age can be influenced by home literacy environments.

Home literacy environments have an impact on children's print knowledge development. McGinty and Justice (2009) found that the quality of home literacy was one of the significant predictors of print knowledge when accounting for other factors such as educational levels of the parents and socioeconomic status. Although these studies provided valuable information about print knowledge, home literacy environments, and children with speech language impairments, they did not explore home literacy environments as a predictor for letter identification for preschool-aged children. Thus, to this date, no research studying home literacy environments as a predictor for letter identification scores for preschool-aged children had been published.

Purpose Statement

The purpose of this correlational study was to examine home literacy environments as a predictor for letter identification scores for preschool-aged children. The home literacy environment is defined as the "experiences, attitudes, and materials pertaining to literacy that a child encounters and interacts with at home" (Roberts, Jurgens, & Burchinal, 2005, p. 346), and letter identification is defined as the number of letters correctly identified within a specific time period. The study will include 81 preschool-aged children in the state of Arizona. Participants' families filled out the Get Ready to Read: Home Literacy Checklist, which is used to assess home literacy environments. The children's letter identification skills were assessed using their in-classroom, curriculum-based measure of letter identification scores. The predictor variable

was the total score on the Get Ready to Read Home Literacy Environment Checklist and the criterion variable was the total score on the curriculum-based measure used to measure letter identification skills.

Significance of the Study

The current study is important to help in the preparation of preschool-aged children for kindergarten and for supporting school success. A review of the literature indicated a need for more knowledge about home literacy environments as a predictor for letter identification scores for preschool-aged children. This research could be useful throughout the country for preschool teachers, students, and families because it will provide them with knowledge about the importance of home literacy environments and the effect on letter identification scores. The present investigation aimed to provide knowledge about the connection between home literacy environments and letter identification skills, which will make parent and family training on home literacy practices a vital part of the preschool experience.

The literacy practices that take place in preschool have long-term effects on children's future literacy skills and on their early literacy abilities (Sandvik, van Daal, & Ader, 2014). Exploring home literacy environments as a predictor for letter identification success may further specify the effects from preschool literacy practices. Receptive vocabulary, letter knowledge, and children being read to at home are key indicators of later reading success (Taylor, Christensen, Lawrence, Mitrou, & Zubrick, 2013). Exposure and interaction with literacy materials are also important elements of early reading success; children who have more opportunities to interact with and who are exposed to print expand their literacy knowledge and skills (Breit-Smith et al., 2010). Pre-literacy skill development is a key component of later reading success. As Read On Arizona (2014) stated:

> Children, whose parents read to them, tell them stories, talk and sing songs with them- develop larger vocabularies, become better readers, and do better in school. Children develop important language skills from birth- and early language abilities are directly related to later reading abilities. (p. 2)

Research Questions

RQ1: How accurately can students' letter identification scores be predicted from the total score on the Get Ready to Read: Home Literacy Environment Checklist for preschool-aged children?

RQ2: How accurately can students' letter identification scores be predicted by the subscale "What My Child Has" on the Get Ready to Read: Home Literacy Environment Checklist for preschool-aged children?

Definitions

To clarify the terms used within the study, the following definitions were taken from the literature.

1. *Home literacy environment* - The home literacy environment is "the experiences, attitudes and materials pertaining to literacy that a child encounters and interacts with at home" (Roberts et al., 2005, p. 346).
2. *Preschool-aged child* - Preschool-aged children are children who are four or five years old and eligible for kindergarten the following school year (Kaminski, Abbott, Aguayo, Latimer, & Good, 2014).
3. *Letter identification* - Letter identification is a direct measure of a child's ability to fluently name letters in the alphabet (Kaminski et al., 2014).

4. *Reading fluency* - Reading fluency is reading as fast as one can when reading a passage (Cooke, Lo, & Starling, 2011).
5. *Phonemic awareness* - Phonemic awareness is the ability to discriminate, think about, and manipulate the individual sounds in words (Armbruster et al., 2000).
6. *Vocabulary development* - Vocabulary development is words that are known and used to communicate meaning in an oral or written manner (Armbruster et al., 2000).
7. *Pre-literacy skills* - Pre-literacy skills are print knowledge including book organization, print understanding, letter understanding, and words (Dynia, Justice, Pentimonti, Piasta, & Kaderavek, 2011).
8. *Letter knowledge* - Letter knowledge is the ability to discriminate one letter from another and name the letter verbally (Hayashi et al., 2013).

Summary

Chapter One provided explanations of the background, problem statement, and the research questions that this study sought to answer. This study explored home literacy environments as a predictor for children's letter identification skills in preschool-aged children. Pre-literacy skills, including letter identification, are a key predictor of the development of later reading skills. The home literacy environment, along with parents and families, provides children with their first experiences with literacy. The relationship between the home literacy environment and letter identification skills will provide families and caregivers with information to create more educationally beneficial environments for young children. This study sought to answer the research question: are home literacy environments a predictor for letter identification skills for preschool aged children? In Chapter Two, current literature on the legislature behind literacy, literacy skill development, and the home literacy environment will be examined.

Chapter Two will also explore the educational theories behind home literacy and letter identification.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The development of pre-literacy skills is a key component of preschool programs. Children who have strong pre-literacy skills develop strong reading skills by the third grade (Brassard & Boehm, 2007; Dynia et al., 2013; Hood et al., 2008). Across the country, preschools are striving to provide young children with the pre-literacy skills necessary to be successful learners in school (Guo, Justice, Kaderavek, & McGinty, 2012). The home environment serves as the child's first teacher of pre-literacy skills. It is important to evaluate a child's home literacy environment when considering the development of pre-literacy skills. The relationship between home literacy environment and a young child's ability to identify letters of the alphabet has not been examined, and specifically, the home literacy environment as a predictor for letter identification skills has not been explored.

Literacy and language skills begin at an early age in the home environment. The family plays a large role in the development of these skills. Some of the important ways that parents contribute to early literacy skills are by reading books with young children, encouraging the child to interact daily with other people, and exposing young children to activities that make printed materials meaningful and useful (Roberts et al., 2005). Shared storybook reading is another key element of a quality home literacy environment (Schuele & Van Kleeck, 2010). Thus, the home literacy environment plays a key role in a child's development of early language and literacy skills.

One important pre-literacy skill is vocabulary development, which have been identified as an important factor in early language and literacy development. A significant amount of research has gone into studying the early development of language and literacy skills in typical,

developing children. For example, the research conducted by Bingham & Patton-Terry (2013) indicated that children who begin school with a limited vocabulary continue to have a limited vocabulary as they progress through school; children's early literacy skills in preschool are a predictor of their later school success. Exploration by Lee (2011) revealed that vocabulary development during the preschool years predicts vocabulary development up to third grade.

There is evidence that early literacy experiences and pre-literacy knowledge predict later reading outcomes and success (Zhao, Zhao, Weng, & Li, 2014), but the definition of early literacy experiences and pre-literacy knowledge varies across the research. One element that remains consistent is shared storybook reading between an adult and child (Zhao et al., 2014). Various definitions of home literacy environments are found in the research literature; Breit-Smith et al. (2010) used the following definition of home literacy environment: the number of minutes that someone read to the child, the number of times that families participated in activities such as telling a story or teaching letters or words, and the number of times that someone living in the household visited the library in the last month. Sonnenschein and Munsterman (2002) defined home literacy environments as the amount of time that children spent engaging in reading activities at home. Another definition found in the research is the home activities in which children exposed to that encourage language and literacy development (Ricci, 2011). According to Froiland, Powell, and Diamond (2013), home literacy is defined as the frequency of shared book reading, the age that shared book reading started, and the number of books available in the home. An additional definition of home literacy environment is the frequency of storybook reading and the literacy teaching that takes place during storybook reading (Sawyer et al., 2014). For this study, home literacy environments will be defined as "the experiences, attitudes, and materials pertaining to literacy that a child encounters and interacts

with at home" (Roberts et al., 2005, p. 346). Chapter Two will include the theoretical framework, review of literature, national, state and local initiatives, letter identification, literacy development, and summary.

Theoretical Framework

Piaget, Vygotsky, Bruner, Dewey, and Montessori (2011) have all have had an impact on the development of theories about how young children learn, the ways in which families need to be involved in learning, and the most effective ways to teach. These individuals and their theories have guided educators to aid in the development and understanding of strong home literacy environments. The following information will describe the theoretical framework in which this current study is based.

Constructivist Theory

Piaget is known for developing the cognitive constructivist theory. This theory states that children build knowledge through constructing their personal reality through their past experiences. Piaget's theory, which first became popular in the 1960s, helped shape the way that educators view how children learn literacy and language skills beginning at an early age (Tzuo, 2007). Piaget's theory states that environments need to be set up in a rich manner that encourages children to explore and engage in the environment independently (Tzuo, 2007). This theory directly applies to the home literacy environment, suggesting that children who are provided with a print-rich environment that includes a variety of reading materials will develop stronger pre-literacy and language skills. Therefore, these children will show school readiness at an early age.

Piaget believed that children developed following a developmental sequence; children are developmentally ready for the skill and then learn the skill (Tzuo, 2007). In regards to home

literacy environments, this would mean that children develop an awareness of reading materials and then engage with reading materials to learn from them. For example, children become aware of books from their print-rich environment. Children then engage in frequent shared book reading with an adult to gain skills in literacy and language, such as alphabet knowledge and vocabulary development. How children learn from their environment, as Piaget explained, relates to Vygotsky's social constructivist theory, which states that the social context plays a key role in the knowledge that individuals construct (Tzuo, 2007).

Vygotsky's Zone of Proximal Development

Vygotsky's stated that children's learning leads to cognitive development, and it is important for children to interact with each other and adults to challenge them to learn more (Tzuo, 2007). This is known as the zone of proximal development, which is the level right above what the child knows and therefore, encourages learning (Tzuo, 2007). Vygotsky's theory guides educators to help form an understanding of the zone in which a child is currently learning, which can have a direct impact on the learning of language and literacy skills. Vygotsky's theory is important to understand in regards to home literacy environments because it provides a framework for engaging children in learning to encourage development (Gutek, 2011).

Vygotsky believed that children learn from experiences and then develop through that learning (Tzuo, 2007). Applied to the home literacy environment, children learn through interacting and engaging in literacy and language materials and activities they are exposed to at home. Through this learning, they develop school readiness skills. For example, a child plays with and turns the pages of a book as a toddler and then an adult sits down and reads that same book with the child. The child then associates reading with an enjoyable experience and is motivated to acquire literacy and language skills, which promotes school readiness skill

development. Bruner (1983) is an American cultural psychologist who developed a theory of learning using Vygotsky's zone of proximal development. Bruner stated that children learn best through a process called scaffolding, where children are presented with information that is progressively more complex to learn from. Bruner found that a child's age does not determine the information that he or she is able to learn, but a child is able to learn at any level when presented with the appropriate environment and learning opportunities (Bruner, 1983). The concept of scaffolding provides educators with a framework in which learning new skills can be customized for individual students.

Bruner (1983) stated that children learn many necessary skills prior to starting school. These skills include language learning and social interactions with others. The learning of these skills prior to school entry reinforces the importance of home literacy environments, which confirms the need for positive, rich home environments. Positive literacy environments can provide young children with the skills needed for school readiness, which then develops into life-long literacy skills. For example, the interactions between a parent and a child provide a basis for social interactions throughout life. Children who have a strong literacy and language environment from an early age will gain skills in all areas of development and show school readiness.

Progressive Educator John Dewey

Dewey's philosophy on education helped to shape education into what it looks like today. Dewey placed an emphasis on social intelligence and the role that community plays in development of social intelligence. Dewey transformed educational thought from an emphasis on students memorizing facts with teachers transmitting information to students discovering learning through use of the scientific method and problem solving. Dewey also stressed focusing

on students' interests and needs in their learning (Gutek, 2011). Dewey's way of thinking provided educators with a new way of teaching that incorporates much of the pedagogy that is seen in schools today.

Dewey stated that children need to be given freedom of intelligence, which is the opportunity to learn guided by their interests. Through this learning, children will develop a need for intelligence (Gutek, 2011). When children engage in learning experiences, they develop a desire to learn more which increases their knowledge (Tzuo, 2007). This point of view directly relates to home literacy environments because the home environment is the first environment in which a child has the opportunity to engage in learning. In a print-rich, home literacy environment, children are provided with a variety of opportunities to engage with literacy and language materials. According to Dewey, it is vital that the interests of the child are addressed within these language and literacy materials (Tzuo, 2007).

Montessori and Dewey had similar beliefs about the ways that children learn. They both believed that children learn from their interests and the environment in which they are engaged (Gutek, 2011; Tzuo, 2007). Montessori contributed a great deal to the development of early childhood educational theory and the understanding of how children learn. Montessori strived to maintain the structure and order of the school day while encouraging joy in spontaneous learning (Gutek, 2011). Montessori encouraged learning led by children's interests and for educators to create inviting environments that spark the interest of the young children in the classroom (Gutek, 2011).

Montessori believed that children would develop literacy skills when they were ready if appropriate tools were made available to them. Montessori stated that children needed to have sandpaper letters, boxes of colored cardboard letters and numbers, and counting rods (Gutek,

2011). The exposure to these manipulatives would encourage young children to want to learn about letters and numbers. This relates to the home literacy environment and preschoolers' exposure to letters because it recognizes a literacy rich environment that encourages children to want to learn about letters. For example, children who have access to magnetic letters in their home literacy environment will develop an interest in learning letter names when they are developmentally ready because they were exposed to letters, which sparked their interest.

There are many early childhood learning theories that contribute to the importance of home literacy environments. The theories of Piaget, Vygotsky, Bruner, Dewey, and Montessori all add key reasons to support the importance of developing and encouraging print-rich, home literacy environments. The early development of literacy and language skills is a key component of school readiness and later reading success. It is important that educators and parents have an understanding of these theories to ensure that children's needs are met and the best home literacy environments are created for children.

Review of Literature

A review of the literature was conducted to identify current trends pertaining to all aspects of the research. Home literacy environments, home literacy environments and preschool-aged children, letter identification, literacy development, Put Reading First, No Child Left Behind (2002), and Move on When Reading are all topics discussed in relation to the proposed research. Also included were national, state, and local initiatives related to education, especially literacy education. The literature review focused on the specific factors explored through this study. The review of literature examined the history of the specific aspects of the research while ensuring that the need for further research is current.

National Initiatives

Many national initiatives have been implemented throughout history in regards to education. As education began in the frontier days it was locally controlled (Schreiner & Tanner, 1976). Throughout history, the control has shifted from local to federal control. This shift has resulted in standardized tests, research based curriculum, and Common Core State Standards (U.S. Department of Education, 2014b).

Put Reading First. In 2000, the National Institute for Literacy (2006) developed five building blocks for reading. These five aspects of reading instruction are methods that help young children become better readers. The five building blocks for reading instruction are phonemic awareness instruction, phonics instruction, fluency instruction, vocabulary instruction, and text comprehension instruction (Armbruster et al., 2000). These building blocks are suggested for children from kindergarten through third grade. However, many of these building blocks begin in the preschool age group and are directly related to letter identification or the home literacy environment.

Phonemic awareness refers to the ability to understand that words are made up of different sounds; it is the ability to manipulate and notice the individual sounds that make up spoken words (Armbruster et al., 2000). Understanding phonemes enables children to understand that words can change meaning by changing one sound within a specific word. Phonemic awareness instruction includes teaching sounds along with the letters in the alphabet to aid children's understanding of the alphabet and the sounds that letters make. Phonemic awareness improves a child's ability to read words, comprehend what they are reading, and develop an ability to spell (Armbruster et al., 2000). Recognizing that phonemic awareness is

connected to letter identification underscores the importance of ensuring that young children are provided with opportunities to improve letter identification knowledge.

The second building block to reading instruction is phonics instruction. Phonics instruction is defined as building a relationship between the letters of written language and the sounds of spoken language (Armbruster et al., 2000). This type of instruction applies to young children and letter identification. When children begin to learn different letters, they begin to learn that those letters represent sounds. It is also important to teach students the letter names and the shapes that make letters (Armbruster et al., 2000). Instruction in phonics provides children with an understanding of the alphabetic principle, which is the "systematic and predictable relationships between written letters and spoken sounds" (Armbruster et al., 2000, p.17) and improves a young child's ability to recognize words, spell, and comprehend what they are reading (Armbruster et al., 2000). Furthermore, phonics instruction relates to letter identification in preschool-aged children because being able to identify letters provides them with the letter name to associate with a letter sound, which is a starting point to developing important reading skills.

The third building block for reading instruction is fluency instruction. Reading fluency is a student's ability to read a text in an accurate and quick manner (Armbruster et al., 2000). Reading fluency is important because it allows students to understand what they are reading. Without concentrating on sounding the words out, students are able to read a sentence and comprehend the meaning of the sentence (Armbruster et al., 2000). Although reading fluency is not directly applicable to preschool-aged children, it begins at an early age. One of the ways to improve reading fluency is to model fluent reading, which is done through reading aloud to a child. This practice can be done both at school and at home.

The fourth reading instruction building block is vocabulary instruction. This refers to the words that are known and used to communicate. Vocabulary includes both oral vocabulary, which are the words that are understood and used to communicate though speaking, and reading vocabulary, which are the words that are understood and recognized in print. Vocabulary is an important factor in learning how to read (Armbruster et al., 2000). Vocabulary development is an important part of reading instruction because it provides meaning to the words that children are reading. In order to understand what is being read, a young child must know what the words mean, and young children use the words they understand and know to make sense of what is read (Armbruster et al., 2000). Vocabulary development begins at an early age; one of the ways to encourage vocabulary development in young children is to read stories to them aloud that have new concepts or vocabulary. This can take place both in the home environment and the school environment. Another way to encourage vocabulary development both at home and at school is by engaging young children in conversations with adults.

The fifth building block for reading instruction is text comprehension instruction. Text comprehension instruction refers to child's ability to understand what they are reading; it is the purpose of reading (Armbruster et al., 2000). Text comprehension provides young children with the meaning of the material that is being read and can be improved through learning comprehension strategies. Although comprehending the text that a young child reads is not expected for preschool-aged children, it is appropriate to teach them comprehension strategies while reading aloud, including asking questions about the page that was just read or making predictions about what will happen next in a story (Armbruster et al., 2000). These comprehension strategies can take place both at home and at school.

The five building blocks of reading instruction provide useful information about the significance of letter identification skills and home literacy environments. It is important to begin to implement the building blocks of reading from an early age. A child's letter identification skills relate to phonemic awareness and phonics instruction. Home literacy environments play a role in the building blocks of reading instruction through encouraging reading fluency, vocabulary development, and text comprehension.

No Child Left Behind. President George W. Bush implemented No Child Left Behind (2002) across the United States; this is an initiative to ensure that all children have access to quality instruction especially in the area of literacy. No Child Left Behind included two main literacy initiatives, Early Reading First and Reading First (U.S. Department of Education, 2014b). This federal legislation provided focus for early childhood education programs when it was passed and later implemented. It is currently under debate in Congress but continues to emphasize and guide reading instruction across the country.

An important aspect of No Child Left Behind (2002) is the Even Start Family Literacy Program. This program provides support to local family literacy programs that integrate early childhood education, adult literacy, parenting education, and interactive parent and child literacy activities for low-income families. The intention of this program is to break the cycle of poverty and low literacy rates by focusing on the key aspects of family literacy. These aspects include early childhood education, adult literacy, parenting education, and interactive literacy activities between parents and children (U.S. Department of Education, 2014a). The Even Start program is important because it recognizes the vital role that home literacy environments play in a child's ability to be become a proficient reader.

There are three goals of the Even Start Family Literacy Program. The first goal is to help parents improve their literacy and overall education. The second goal is to help parents become partners in their child's education, and the third goal is to assist children in achieving their full potential as a learner (U.S. Department of Education, 2014a). All of these goals are vital parts of a child's literacy environment. It is important to know and understand these goals and this program when exploring home literacy and its relation to pre-literacy skill development.

Move On When Reading. The state of Arizona passed the Move On When Reading legislation (Move On When Reading, 2014) for implementation in the 2013-2014 school year**.** Move On When Reading stated that kindergarten through third grade students have the right to become proficient readers. Students who are deemed as non-proficient readers by the Arizona State Standardized Assessment will be retained in third grade until they become proficient readers. The Move On When Reading statute also stated that school districts and charter schools are required to provide the essential elements of reading instruction. These elements include phonemic awareness, phonics, vocabulary development, reading fluency, and reading comprehension. The methods used to provide these elements of instruction must be research-based and provide data to demonstrate that reading instruction is effective (Move on When Reading, 2014).

The state of Arizona has provided parents with several resources to support their young children in becoming proficient readers. The Arizona Department of Education stated,

> The best reading support you can give your child is to read daily, nightly, and always to your child. As suggested 20 minutes per day is great, more is even better, and research has shown that reading to your child in their home language is just as beneficial as the

> second language they are trying learn! So READ, READ, and READ some more with your child! (Arizona Department of Education, 2015 Paragraph 12).

The state of Arizona focused on the importance of students becoming proficient readers. A brochure for parents about the Move On When Reading legislation stated that young children should read at least 20 minutes a day and that parents should encourage young children to find books about things they are interested in. In addition, the creation of a home library will encourage children to read more at home (Read On, 2014b). The impact of Move On When Reading has yet to be seen. However, its implementation provides a legislative reason to begin focusing on pre-literacy skills from an early age.

Read On Arizona is a group of state lawmakers, educators, and community members who came together to develop guidelines for educators and families about reading and the importance of reading instruction. The group's goal is to support the Move On When Reading legislation. Read On Arizona (2014a) suggested that there are five key components to early literacy strategies for preschool-aged children. These strategies include providing children with interactive and conversational read aloud opportunities, exploring the separate sounds that are within spoken words to develop phonological awareness, teaching the letters of the alphabet and the sounds that they make, encouraging young children to experiment with writing, and encouraging young children to have an understanding of print concepts. A child's understanding of the alphabet and the sounds that letters make can be observed through a child's ability to discriminate between letters and other shapes and symbols, identify similarities and differences in letters, and recognize many letters in the alphabet, especially those in their first name. Letter identification is an important part of pre-literacy skills and developing a child's ability to become a fluent reader.

Move On When Reading literature recommended that parents guide preschool-age children through frequent reading activities at home. It also recommended that parents ask their preschool-aged children questions about stories as they are reading. The literature also suggested that parents talk about the words and sounds that are in the story that they read and the new words in the story to encourage vocabulary development (National Institute for Literacy, 2006).

The Arizona Department of Education emphasized literacy as a focus for both schools and families. Letter identification for preschool-aged children is identified as an important pre-literacy skill and is important in the early development of literacy skills for young children. The home literacy environment, including a child's ability to identify letters, is important, especially when children can be retained in school due to lack of proficient literacy skills.

Arizona early learning standards. A focus was placed on literacy skill development through the adoption of the Common Core standards in the state of Arizona. This has an effect on preschool-aged students in the state. A greater emphasis has been placed on literacy and literacy education beginning at a young age. The third edition of the Arizona Early Learning Standards (Arizona Department of Education, 2013) was released in 2013. The early learning standards are divided into several subdomains. The subdomain that applies to this research is the language and literacy subdomain. Language and literacy is broken up into three strands: language, emergent literacy, and emergent writing. Concept four within the emergent literacy section is alphabet knowledge. This standard is stated as, "recognizes as many as 10 letters, especially those in name, family and friends" (Arizona Department of Education, 2013, p. 70). This standard directly relates to the importance of letter identification skills for preschool-aged children.

Home Literacy Environments

Home literacy environments are described as "the experiences, attitudes and materials pertaining to literacy that a child encounters and interacts with at home" (Roberts et al., 2005, p. 346). Within the home literacy environment, children are exposed to reading materials, other readers, the alphabet, conversations including different kinds of vocabulary, and interactions among different people. Reading to a child is one of the most important activities that a parent can do to promote later success in school; reading to a young child provides the skills necessary in acquiring language, learning to read, and academic success in areas such as math and science (Hood et al., 2008). The reading habits of parents are also an aspect of the home literacy environment; parental reading habits influence the reading habits of children. Brown et al. (2013) found a significant relationship between the amounts of time that parents read for pleasure and the amount of time they spent reading with their children. Parents serve as their children's first models for many things including appreciation of the value of literacy.

The frequency of being read to is one of the strongest predictors of literacy-related skills (Sonnenschein & Munsterman, 2002). This is an important reason to read with young children and provide them with a positive home literacy environment. The amount of time that children spend in shared reading activities with an adult is related to concepts such as the understanding that letters make words, the understanding that in order to have a word there needs to be a variety of letters, and the understanding that in order to have words there must be spaces between the groups of letters (Brown et al., 2013). Children from low socio-economic households who are read to frequently develop a stronger motivation to read and enjoy reading more than those who are not read to or are read to less often (Bracken & Fischel, 2008). These are important literacy skills that are developed through shared reading experiences. Shared reading is linked to

successful home literacy environments and later literacy success (Torppa, Eklund, van Bergen, & Lyytinen, 2011).

Reading aloud to children is one of the key elements of the home literacy environment. Children who are read aloud to have a distinct advantage over those who are not in regards to developing academic skills such as oral language skills, print knowledge, and phonological awareness (Lawson, 2012). Storybook reading is a routine aspect of the day for many young children. Reading stories aloud, especially those that are familiar to the child, improves the chances of the child developing word learning (Burstein & Roskos, 2011). Simply reading a story aloud to a child on a frequent basis has a positive effect on later literacy and language development.

When children are read aloud to, there are several techniques that parents can incorporate in their reading to encourage pre-literacy development. Print referencing is a technique that refers to an adult paying close attention to words, letters, and functions of words when reading in both a verbal and non-verbal manner (Dynia et al., 2013). Print referencing provides young children with opportunities to learn from the print within the stories that are read aloud to them. It also provides adults with the opportunity to give young children exposure to key aspects of print knowledge and pre-literacy skills through reading aloud.

An additional key aspect of the home literacy environment is maternal sensitivity while reading aloud to children. This refers to the way in which mothers respond and question while reading a book aloud with their child (Roberts et al., 2005). According to a study by Roberts et al. (2005), the sensitivity a mother shows when reading and interacting with her young child during reading has a positive correlation with early language and literacy skill development.

This study only examined the effects of mothers responding to children while reading; it did not look in the effects of fathers' responses while reading.

Although reading aloud is an important element of the home literacy environment, there is evidence to show that literacy teaching practices in the home environment may be even more beneficial for young children. This includes teaching letters and letter sounds and exploring different kinds of vocabulary (Hood et al., 2008). Both reading aloud and literacy teaching practices within the home environment can be combined to ensure that young children are provided with the skills needed for school entry. When reading aloud with a child, it is fitting to talk about letters and the sounds they make. Reading aloud also provides a great opportunity to discuss a new word and the meaning of the word within the context of the story. These skills can both be achieved through shared book reading with a young child. Research indicates that shared book reading with a young child is an effective way to ensure that young children are exposed to early literacy and language skills no matter the family dynamic or socio-economic status (Froiland et al., 2013). Another aspect of the home literacy environment that has been researched is the importance of creating an environment that is socially interactive. Parents and families play a key role in a child's language development through interactions with their children and their encouragement of language development (Rowe, Raudenbsh, & Golin-Meadow, 2012). It is important for children to experience interactions with their parents and family members as a part of language and literacy development.

Exposure to environmental print is also an important aspect of a young child's pre-literacy skill development. Creating a print-rich environment for children is part of creating a rich, home literacy environment. This can be done through alphabet magnets on the refrigerator, alphabet blocks, or picture cards with words on them. Another aspect of creating a print-rich

environment is using environmental print. Environmental prints are product labels that children know (Zhao et al., 2014). Placing these labels throughout the child's environment provides them with more pre-literacy opportunities. Zhao et al. (2014) found that children ages three to five are more likely to be able to identify familiar environmental signs when the words were included with the sign. This research provides important information when considering pre-literacy development because it acknowledges the importance of letters and words in the process of learning to read from an early age.

Home literacy environments also include a child's literacy interest. Children's requests to be read aloud to and how often they read a book on their own have a positive correlation with literacy outcomes (Sawyer et al., 2014). Literacy interest refers to a child's enjoyment of reading and their motivation about reading experiences. A child's interest in reading and books can be fostered from an early age when the child is provided with a print-rich home literacy environment. Children who have a higher level of literacy interest are more likely to be able to identify letters and letter sounds (Baroody & Diamond, 2010). This supports the theory that children who are exposed to literacy opportunities gain more pre-literacy skills and therefore, show school readiness. Providing children with a print-rich home literacy environment is an important aspect of ensuring that children are given the optimal environment in which to learn essential school readiness skills from an early age.

There are several key indicators of quality, home literacy environments. These include the frequency in which shared book reading takes place with children, the age that parent-child shared reading begins, the number of children's books in the home, and the parents' interest in reading (Froiland et al., 2013). Most home literacy environment assessment tools look at these factors individually or in combination to determine the home literacy environment. A presence

of these factors is associated with positive receptive vocabulary skills in young children enrolled in Head Start programs (Froiland et al., 2013).

Home literacy environments that include reading aloud, maternal sensitivity, teaching practices in the home, and a socially interactive environment help to provide young children with the start they need to develop the necessary skills to be successful in school. They deliver valuable experiences from a young age that give children the ability to learn and develop literacy skills for later reading success. Having a strong literacy environment at home provides young children with the opportunity to gain skills that will aid in their development of vocabulary, language, and literacy skills in school and therefore, have a positive impact later in life.

Home Literacy Environments and Preschool-Aged Children

The overall connection between home literacy environments and literacy skills has been extensively researched; however, there is a lack of research addressing specific techniques or home literacy environments aside from shared storybook reading. Letter identification has been identified as an important aspect of home literacy but letter identification skills in relation to the home literacy environment have not been researched. Ricci (2011) explored the literacy interests of children with Down syndrome. Ricci's findings indicated that parental beliefs and expectations shape home literacy environments. The results of this study indicated that parents of children with Down syndrome may have different expectations for their children about learning to read. Varied expectations may also apply to other groups of students within the preschool setting. Time spent engaging in shared reading is a predictor of first grade vocabulary for both children with mild disabilities and typically developing children (Carlson, Bitterman & Jenkins, 2010). These two studies provided information about home literacy environments regarding

children with disabilities but did not specifically address their literacy development in relation to letter identification skills.

Children who are exposed to drugs often show delays in development. Ullery, Dinehart, and Katz (2014) examined children who were exposed to cocaine prenatally and their responses to book sharing experiences. They found that the frequency in which parents spoke to their children was a key aspect and the largest predictor of vocabulary development especially for drug exposed children.

Various environmental factors that occur in the home setting have an influence on a child's reading abilities. These factors include reading literacy activities that take place in the home such as shared book reading, attitudes towards reading in the home, and natural interactions between parent and child that occur during day-to-day activities (Netton, Droop & Verhoeven, 2010). The home environment is made up of many factors that contribute to the development of early literacy skills. Research has indicated that shared book reading as a part of the home literacy environment is an effective tool to encourage pre-literacy skill development for preschool-aged children (Froiland et al., 2013). Shared book reading is an effective tool for all types of families to increase pre-literacy skills for preschool-aged children; it provides children with access and exposure to the alphabet, words, and vocabulary. Children from low socio-economic status homes have fewer books available to them, and the amount of time-spent reading is often less than for children from high socio-economic status homes (Froiland et al., 2013). This is valuable information because these researchers have began to look at how home literacy environments may vary according to socio-economic status. Another possible predictor of literacy readiness is letter identification.

Letter Identification

Letter identification is a skill that is often used to assess children's readiness for kindergarten. Children who are able to accurately identify letters in the alphabet in both upper and lowercase at the beginning of kindergarten demonstrate substantially more literacy skills at the end of kindergarten (Molfese et al., 2010). Children who are also able to recognize beginning and ending word sounds at kindergarten entry show stronger literacy skills at the end of kindergarten and the beginning of first grade. These strengths are shown in phonological processing and word reading when compared to those children who are not proficient in letter naming and sound recognition (Molfese et al., 2010).

Letter identification is a tool used by preschool teachers to assess children's readiness for kindergarten. Letter identification scores provide teachers with information about an individual student's literacy development. This information then guides instruction and intervention. The student's success at letter naming provides information that correlates with his or her readiness for school entry (Piasta, Purpura, & Wagner, 2009). School readiness is important for preschool administration and parents since parents seek preschools that get their children ready for kindergarten. Due to this demand for school readiness, it is important to know the specific skills that predict reading success in school. According to Simmons et al. (2014), measures of letter knowledge, phonological awareness, and naming speed are reliable predictors of reading performance in the primary grades. These three skills have consistently been found to be key predictors of a child's reading success in early elementary school.

An assessment of pre-literacy skills is an important component of being able to identify children who may have later reading difficulties. It is important to specifically look at letter identification because it is a key indicator of later reading performance in young children.

Knowing the letters in the alphabet is the best indicator of a child's reading achievement (Brassanrd & Boehm, 2007). Children who are able to identify letters have greater success at being able to learn the sounds that the letters make (Brassanrd & Boehm, 2007). A child's ability to identify letters provides teachers and families with essential information about future reading abilities; therefore, it is important to examine the relationship between letter identification and home literacy environments.

Alphabet knowledge is another key predictor of future literacy success (Hall, Toland, Grisham-Brown, & Graham, 2014, Dynia, et al., 2011). Letter identification is an important skill for young children to learn and master because it has been connected to reading comprehension, decoding, and spelling success, which are all key aspects of reading and an important part of both academic success and overall success in life (Hall et al., 2014). Otaiba et al. (2010) found a connection between letter identification and spelling success; they found that children who had strong letter identification skills also had strong spelling abilities. Letter identification is taught in many ways in the classroom, including through interactive writing lessons. Within these lessons, the teacher and students decide on a class writing topic; discuss letters, sounds, and words while dictating and writing the text; read and reread the sentences as the text is constructed; and decide on where the text should be placed to ensure that it is accessible to be read and reread throughout the day (Hall et al., 2014). This method provides students with access to letters and the opportunity to practice using them in the appropriate manner. Letter identification can also be taught through repeated exposure in a structured manner on the computer. Hayashi et al. (2013) found success in teaching letter naming through a structured activity in which young children listened to the letter name and then touched a box on the computer to move on to the next letter. Young children were then assessed on which letters they

were able to name after completing the letter naming activity on the computer. The result was success for some children in letter naming. Another way to teach and practice letter identification is through the composition of the classroom literacy environment which includes access to literacy materials, classroom layout, and a variety of literacy resources (Guo et al., 2012). Information and methods are useful for preschool teachers as they set up literacy environments in their classrooms.

Letter sounds often are learned with letter names. Research conducted by Piasta et al. (2010) suggested that young children use their knowledge of letter names to then learn about letter sound knowledge. Learning letter names and letter sounds are skills that often go together for many children. In one study, children who learned letter names and letter sounds together learned two more letter sounds than those who were just learning letters (Piasta et al., 2010). The importance of letter identification skills in pre-literacy development is seen throughout research. A reliable predictor of later reading performance is alphabet knowledge and letter naming (Simmons et al., 2014, Piasta et al., 2009, Heath et al., 2014). In a study looking at the importance of letter and numeral identification, Neumann, Hood, Ford, and Neumann (2013) found that young children who had exposure to letter and number instruction in preschool had an advantage in learning reading and math skills. Thus, phonological awareness is a key aspect of learning how to read for young children. As Callaghan and Madelaine (2012) stated,

> Teaching some letter-sound correspondences or letter names would enable students to more readily transfer phonological awareness skills to decoding text which when formal reading instruction begins, given that there is a strong interaction effect between phonological awareness skills and letter-sound knowledge in predicting later decoding skills. (p. 17)

Another aspect of letter learning that has been explored is learning letter names through writing, especially name writing. In a study conducted by Molfese et al. (2010), it was found that teaching young children to focus on learning to write their first names might not benefit their letter-naming skills. However, it might be more appropriate to research how young children's knowledge of letter writing, alphabet knowledge, and letter sound knowledge relates to letter-naming skills. This provides important information when discussing young children and their preschool pre-literacy environments.

Letter identification and vocabulary development are linked to reading success. The development of vocabulary connects to a child's development of letter identification through the learning of letter knowledge, print concepts, and phonemic awareness (McGinty & Justice, 2009). The development of vocabulary has many variables for each child. Some of those variables include socio-economic status, home environment, and time spent with parents. Those children who come from a low socio-economic status typically have a smaller vocabulary than those who come from middle to high socio-economic status (Taylor et al., 2013). The environment in which children are raised can have a significant impact on the vocabulary, literacy, and language development of a child.

There is a direct correlation between letter-naming skills and writing skills throughout the research. Molfese et al. (2010) indicated in their research that children who have strong letter-naming skills are more likely to be able to write their name and, therefore, have strong writing skills. Letter-naming instruction is important for preschool teachers and parents to expose children to letters, especially those in their names. The connection between letter naming and writing is important when examining the effects of early environments and the development of letter-naming skills for preschool-aged children.

An important aspect of letter identification development is the composition of a children's book. For example, teacher read aloud activities in the classroom or parent read aloud activities at home may include a conversation about the make-up of a book such as pointing out print within the book and discussing it with the child. Activities during a read aloud also include pointing out letters and words and discussing them with the child (Cetin & Bay, 2015). An adult engaging with children in the act of reading by asking questions and provoking thought about the story and the different aspects of print on the page is an important feature of literacy development. One way to incorporate this skill when reading with a young child is by encouraging the child to look at and comment on the pictures and text in the book. Understanding how letter knowledge is developed for young children is important especially when exploring home literacy environments as a predictor of letter identification since a child's emergent literacy development begins before entering school and has a direct effect on the development of letter-naming success (Solari et al., 2013).

Literacy Development

There is substantial research that supports the link between home literacy environments and literacy and language development (Bracken & Fischel, 2008; Brown et al., 2013; Heath et al., 2014, Hood et al., 2008) and suggests a strong relationship between the quality of the home literacy environment and the positive development of literacy and language skills. Since there is limited research concerning home literacy environments and letter identification skills in young children, further research is needed. Emergent literacy skills have been identified as important skills that need to be developed in young children as they begin to learn how to read. Emergent literacy skills are identified as phonological awareness, oral language skills, letter knowledge, and print concepts (Spira et al., 2005). The development of emergent literacy skills begins at an

early age. Preschool children with attention issues often struggle to develop emergent literacy skills at the same rate as their peers (Spira et al., 2005). Research exploring home literacy environments as a predictor for letter identification for preschool-aged children will contribute to the current research findings by identifying specific elements in the home literacy environment that contribute to letter identification skills.

The importance of shared story book reading to literacy development was replicated in a study of children with speech language impairment conducted by Sawyer et al. (2014). This study indicated that children with speech language impairments who frequently shared story book reading experiences in their home literacy environment showed more print knowledge than those who did not engage in shared story book reading (Sawyer et al., 2014). The link between home literacy environments and print knowledge for children with speech language impairments was also seen in the research conducted by McGinty and Justice (2009). McGinty and Justice found that children with speech language impairments who had a quality home literacy environment showed more knowledge of print concepts did than children who did not have high quality home literacy environments. These results reiterated the importance of the home literacy environment for preschool-aged children and helped justify the value of examining home literacy environments as a predictor for letter identification scores.

Reading fluency is linked to later reading success. Reading fluency is a strong predictor of reading comprehension, which is the ultimate goal of learning to read (Cooke et al., 2011). Letter identification is a skill that is first understood before letter sound knowledge and reading fluency. The National Reading Panel identified reading fluency as one of the five critical reading skill components (Cooke et al., 2011). Reading fluency success helps children to become more successful readers in school. Children who have strong oral reading fluency scores

spend less time decoding while reading, and therefore, they have a stronger understanding of what they are reading (Kostewicz & Kubina, 2010). Letter identification and reading fluency are important literacy skills for letter identification development at an early age.

Providing young children exposure to basic academic skills is an important part of developing strong readers. A study conducted by Claessens, Engel, and Curran (2014) found that kindergarten students who had exposure to advanced math and reading skills were more successful than those who were exposed to basic math and reading skills. This provides valuable information about preschool education. Exposing preschool-aged children to higher level reading and math skills is just as important as exposing kindergarteners to higher level math and reading skills. The exposure to higher level skills encourages the development of both reading and math skills in young children; thus, it is imperative that teachers include basic skills in their teaching of the advanced skills in both math and reading (Claessens et al., 2014). Therefore, parents and teachers must attend to the types of content children are being exposed to and taught, ensuring that basic skills are taught within the exposure of advanced skills so that young children develop all skills.

Teaching young children about letters and print is a critical way to assist young children in developing early literacy skills such as letter knowledge and phonological awareness (Bracken & Fischel, 2007). This is a vital piece of knowledge for both parents and teachers as they set up home literacy environments and encourage the development of emergent literacy skills for young children. There was not a significant difference in print knowledge between children from low socio-economic status and those from middle socio-economic status (McGinty & Justice, 2009). This indicates the need for further examination of a link between socio-economic status and print knowledge. The development of literacy and language skills for preschool-aged children has

been discussed without specifically addressing technique; thus, the need for more extensive research looking at specific elements of the home literacy environment as a predictor for letter identification in preschool-aged children is necessary.

Summary

Chapter Two reviewed the literature related to home literacy environments and letter identification skills for young children. The connection between home literacy environments and the development of early literacy and language skills has been researched on the surface. The home literacy environment for a child has a significant impact on their school readiness, which is seen in their letter identification skills (Hood et al., 2008). Print-rich home literacy environments provide young children with exposure to the act of reading and reading materials on a consistent basis (Heath et al., 2014) in addition to providing children with a variety of books. Children living in a positive home literacy environment develop an interest in reading and in literacy activities. The engagement of the adult reader during read aloud time has an effect on the child's ability to develop language and literacy skills. During this engagement, the adult is listening and actively engaged for the shared book experience with the young child. Home literacy environments encourage young children to explore reading on their own and are enhanced by frequent adult engagement in literacy activities. The home literacy environment provides young children with skills for school readiness and later school success.

Letter identification is affected by a child's exposure to books and opportunities to engage in shared book reading with an adult (Roberts et al., 2005). The frequency in which these interactions take place has a large impact on the literacy and language development of a young child. It is important to encourage the development of alphabet knowledge for a young child through book reading. This can happen by discussing print features in a story. Pointing out

letters and letter sounds in a book as it is read aloud is another way to encourage alphabet knowledge. The rate at which a young child develops vocabulary and alphabet knowledge is a predictor of later school success and therefore, could be a predictor of letter identification skills.

Federal and state governments as well as legislation have recognized the importance of pre-literacy skill development for young children and the role that the home literacy environment plays in that development. The National Institute for Literacy (2006) developed recommendations such as the Put Reading First program to provide parents and teachers with valuable information concerning teaching literacy skills so children become proficient readers. The Put Reading First initiative suggested that there are five building blocks to ensure the development of a proficient reader. These include phonemic awareness, phonics, fluency, and vocabulary and text comprehension. The implementation of reading programs in these five areas of instruction was intended to produce fluent readers by third grade (Armbruster et al., 2000). No Child Left Behind (2002) was a key legislation in education. It was passed in 2001 to ensure that all children are provided with research-based instructional techniques to fulfill their potential as learners. One key aspect of this legislation was the Even Start Family Literacy program. The three goals of the Even Start Family Literacy program are to help parent improve their literacy and education, to assist parents in becoming partners in their child education, and to help children to reach their full potential as learners (U.S. Department of Education, 2014a). This legislation acknowledged the importance of the home literacy environment and the role that the parent and family play in a child's literacy development. The Move On when Reading legislation was passed in Arizona for the 2013-2014 school year. This legislation stated that children who do not pass the state assessment in reading in third grade would be retained to ensure all students are proficient readers when they enter fourth grade (Move on When Reading,

2014). This legislation emphasized the importance of literacy skills. Move on When Reading required school districts and charter schools to provide reading instruction that includes phonemic awareness, phonics, vocabulary development, reading fluency, and reading comprehension. It also required that the instruction that is provided is research based (Move on When Reading, 2014). Federal and state government officials have provided schools with guidance on the implementation of quality literacy instruction. One of those aspects of quality literacy instruction is alphabet knowledge, which includes the ability to identify letters in the alphabet.

There are many studies about preschool-aged children and the development of literacy and language skills in general. There has not been significant research into specific areas of home literacy environments and letter identification skills for preschool-aged children to determine if the quality of the home literacy environments is a predictor of the level of letter identification skills. Research indicated the importance of the home environment and the preschool-aged child in regards to the development of language and literacy skills. That connection has not been demonstrated for preschool-aged children when letter identification skills are examined. The need for this research is especially significant because there is evidence that supports that preschool-aged children with less exposure to literacy materials show higher risks for reading disabilities (Carlson et al., 2010). Chapter Three will discuss the research design, research hypotheses, participants, setting researcher's role, instrumentation, procedures, data analysis, and ethical considerations.

CHAPTER THREE: METHODS

This study examined the predictive relationship between home literacy environments and letter identification for preschool-aged children. The research compared the number of letters that children were able to accurately identify in relation to the result of the Get Ready to Read: Home Literacy Environment survey as completed by family members. The results explored if there is a relationship between a preschool-aged child's ability to identify letters and their home literacy environment, and may provide parents with guidance in creating a literacy-rich home literacy environment. The following chapter describes the research design including the participants and setting, data collection methods, instruments used for data collection, and the data analysis.

Design

This correlational study examined the home literacy environment as a predictor for letter identification skill of preschool students. The predictor variable was home literacy environment which was measured by the total score of the Get Ready to Read: Home Literacy Environment Checklist, and the criterion variable was letter identification which was measured by the letter identification score on the preschool, curriculum-based measure. Home literacy environments were evaluated using sections (what my child has, what I or another adult do, what my child sees me or another adult doing, what I am, adult encouragement) from the Get Ready to Read: Home Literacy Checklist (National Center for Learning Disabilities, 2016). A bivariate regression analysis was the most appropriate to use for this study because it is a powerful statistical procedure in which the criterion variables are studied through the prediction variable to determine if there is a relationship between the two. A bivariate regression analysis can also

determine if the relationship between the predictor variable and the criterion variable is causal (Gall, Gall, & Borg, 2010).

Research Questions

RQ1: How accurately can students' letter identification scores be predicted from the Get Ready to Read: Home Literacy Environment checklist for preschool-aged children?

RQ2: How accurately can students' letter identification scores be predicted by the subscale "What My Child Has" on the Get Ready to Read: Home Literacy Environment Checklist for preschool-aged children?

Null Hypotheses

$H_0$1: There will be no significant predictive relationship between the predictor variable from the Get Ready to Read: Home Literacy Environment Checklist (total score of the Get Ready to Read: Home Literacy Environment Checklist) and the criterion variable (students' letter identification scores on the Letter Identification Test) for preschool-aged children.

$H_0$2: There will be no significant predictive relationship between the subscale ("What My Child Has) from the predictor variable the Get Ready to Read: Home Literacy Environment Checklist (total sub-score of the "What My Child Has" subscale) and the criterion variable (students' letter identification scores on the Letter Identification Test) for preschool-aged children.

Participants

The participants for this study were drawn from a convenience sample of preschool students from one school district. The school district was an urban district located in southern Arizona. The district serves approximately 12,000 students in 16 schools. The majority of the

population of the school district is Caucasian. There is one district-sponsored preschool program that serves both typically developing children and children who qualify for special education services; this is referred to as the inclusive preschool. The majority of the students speak English as the only language in the home. The sample consisted of 43 males and 40 females for a total of 83 participants. According to Gall, Gall, and Borg (2007), this number exceeded the required minimum for a medium effect size with statistical power of .7 at the .05 alpha level. All if the participants attend the inclusive preschool. The marital statuses of the families of the participants include five single-parent homes, four divorced-parent homes, and 74 married-parent homes. The number of children in each of the homes of the participants included nine one-child families, 40 two-children families, 18 three-children families, 10 four-children families, five five-children families, and one six-children family. Fifty children received special education services and 33 did not receive special education services.

Setting

The setting for this study was an urban school district in southern Arizona. The majority of the population of the school district is Caucasian. Within the school district, there is one district-sponsored preschool program that served both typically developing children and children who qualify for special education services; this is referred to as the inclusive preschool. The school district also housed nine community program preschools that served typically developing preschool-age students. The majority of the students spoke English as the only language in their home. Each preschool classroom has between 15 and 20 students per classroom. The make-up of each classroom was between 25% typically-developing students and 75 % students who qualified for special education services.

Instrumentation

The instrument chosen for this study was the Get Ready to Read: Home Literacy Environment checklist. This is one of a few instruments used throughout the nation to measure home literacy environments including the Stony Brook Family Reading Survey. The Get Ready to Read Home Literacy Environment checklist was chosen by the researcher due to its endorsement by the National Center for Learning Disabilities.

Get Ready to Read Literacy Checklist

The predictor variable of home literacy environment was the score on the Get Ready to Read: Home Literacy Environment checklist (see Appendix E). This checklist was developed by the National Center for Learning Disabilities in conjunction with the Get Ready to Read Literacy Screener, which is a checklist used in preschools to assess a child's reading readiness (National Center for Learning Disabilities, 2016.). Dr. Grover Whitehurst is the main author of the Get Ready to Read screening tools; he is known for his research on home literacy environments for young children and the literacy development of young children (National Center for Learning Disabilities, 2016). Dr. Grover Whitehurst and Dr. Christopher Lonigan are "two of the nation's leading education researchers whose longitudinal studies on assessment, emergent literacy, and reading outcomes is among the most extensive ever conducted" (National Center for Learning Disabilities, 2016, p. 1). Children who are at risk for later reading problems are also at risk for emergent reading problems; children who are not at risk for emergent reading problems are also not at risk for later reading problems (Lonigan, Burgass, & Anthony, 2000; Lyer, Sawyer, Germany, Super, & Needleman, 2014; Storch & Whitehurst, 2002; Wilson & Lonigan, 2009).

The Get Ready to Read: Home Literacy Environment checklist for Home is a 37-question checklist given to parents to complete based on their home environment (see Appendix E). The

checklist has five sections with several statements in each section and requires a true or false response for each individual question. When the checklist was complete, the total number of true responses were counted and then scored using a Likert scale of zero to ten indicating that the home literacy environment needs improvement, 11 to 19 indicating the home literacy environment has some supportive elements, 20 to 29 indicating the home literacy environment has many support elements, and 30 to 37 indicating the home literacy environment has most of the necessary elements (National Center for Learning Disabilities, 2016). The total score provided information for parents and families about the home literacy environment, and the false responses to questions may provide information to improve the home literacy environment. The reliability information for the Get Ready to Read: Home Literacy Environment checklist is based upon the Get Ready to Ready Screening tool which is used within classroom environments. The predictive reliability for later school success as reported by the National Center for Learning Disabilities is moderate to strong at .78 (National Center for Learning Disabilities, 2016). The validity of the screening tool is also strong at .70 (National Center for Learning Disabilities, 2016). The strong reliability and validity for the screening tool indicates a strong reliability and validity for the home literacy checklist since it was developed by the same authors and administered to the same groups of children.

Letter Identification Test

Letter identification skills were measured through a school district developed, curriculum-based measure that is administered three times a year in August, January, and April. The January assessment scores were used for this study. The norms used for this curriculum-based measure were based on letter identification research conducted by the Dynamic Measurement Group of DIBELS for the development of the Preschool Early Literacy Indicators

(Dynamic Measurement Group, 2015). Expected alphabet identification scores are 13 in the beginning of the year, 15 in the middle of the year, and 17 at the end of the year (Dynamic Measurement Group, 2015). The internal consistency for the curriculum-based measure of letter identification was taken from the Preschool Early Literacy Indicators and was reported as .90 to .98 (Dynamic Measurement Group, 2015). The validity is .59 at the end of the year and .62 at the middle of the year (Dynamic Measurement Group, 2015).

The Letter Identification test is a standardized, individually administered assessment of accuracy of naming letters (Atkins & Cummings, 2011). For this assessment of letter identification, students in each classroom are tested within a weeklong testing period. The purpose of this instrument is to count the total number of letters (both upper and lowercase) that students are able to identify. The instrument was developed by the school district therefore letter size and font could not be manipulated for this study. Letters are presented on an 8.5 by 11 inch piece of paper in random order. The letters are typed using chalk board font in size 60 and arranged randomly in two columns on the paper. There are two letter identification assessments; one assessment examines uppercase letter identification and one assessment examines lowercase letter identification. Each Letter Identification Test includes all 26 letters in the alphabet. Students are asked to play a game with the test administrator within their preschool classroom and are told to do their best work. Students are provided with the instructions to name the letters, as the test administrators point to the letter that students are to identify. This assessment is not timed but students are generally given one to two minutes to complete the letter naming. Teachers, school psychologists, and school personnel, who all receive the same training to administer the assessment, read the instructions that are clearly written on the alphabet page. The test takes about five minutes to administer. Students are scored based on the number of

letters they accurately identify (Atkins & Cummings, 2011). One point is given for each letter accurately identified. The scores from the uppercase and lowercase letter-naming assessments are then added together to get the total score. The student achievement teacher scores the tests and then enters the score into a computer database. The total score ranges from 0 to 52. The results are available within two to three days after testing.

Procedures

The study was submitted for IRB approval after receiving approval from the dissertation chair, committee members, research consultant, and school district personnel. Once IRB approval was obtained from Liberty University, the leadership at the district was contacted to begin the study. Archival data of the student's letter identification skills was used. The researcher explained the purpose of the study to the staff at the preschool site and answered specific questions. Parents of preschool-aged students received an e-mail from their child's classroom teacher containing an explanation of the study (see Appendix B). The permission form for the study explained that children will not be contacted. Parents had a reasonable amount of time to review the study information and ask questions before the permission was due back to the teacher. Within the e-mail that was sent to parents, a link was provided to the survey. After clicking the link, a consent page appeared explaining the study and the survey (see Appendix C). When the parents agreed to participate in the survey, instructions for completing the survey immediately opened (see Appendix D). After reading the instructions, the parent clicked on the next button and the survey opened. The survey took about ten minutes for parents to complete and contained five sections of true or false questions (see Appendix D). Parents had the opportunity to take the survey at that time or at a later time. If parents chose to wait to take the survey, a friendly reminder email was sent on a weekly basis for six weeks until the survey

was completed to increase participation (Gall et al., 2007). Invitations were sent out to all students in the four and five year old preschool classrooms; 120 surveys were sent out.

Students participated in the curriculum-based measures three times a year within their classroom setting with familiar test administrators; scores from for this study were all from the second time (January) the test was administered. The Get Ready to Read: Home Literacy Environment checklist and Letter Identification test was administered within the second semester of the school year. The order in which the survey and Letter Identification Test took place did not have an effect on the study results.

Data Analysis

In this bivariate correlational study, the predictor variable was the home literacy environment as measured by the Get Ready to Read: Home Literacy Environment Checklist and the criterion variable was Letter Identification as measured by the score on the Letter Identification Test.

For this bivariate, correlational study, the product-moment correlation coefficient statistical analysis was used to measure the predictor variable and the criterion variable. The alpha level was .05. A bivariate, correlational, product-moment correlational coefficient analysis was the most appropriate because both variables were correlated and expressed in continuous scores (Gall et al., 2007). To assess the relationship between the subscale "What My Child Has" from the Get Ready to Read: Home Literacy Environment Checklist and the Letter Identification Test scores, the product-moment correlation coefficient was also used.

The following statistical assumption tests were run. The assumption of bivariate outliers were run, which provided a box and whisker plot for each variable; this test provided information about the extreme outliners. The *p* value, normality, and the statistical significance were also

reported. Scattergrams were produced; if a relationship between the two variables was nonlinear then the correlation ratio was completed to further provide a more accurate relationship between the two variables (Gall et al., 2007). The assumption of multicollinearity was also run statistically, which examined how closely related the two variables were to ensure that the results did not mask a relationship between the two variables (Leech, Barrett, & Morgan, 2011).

Ethical Considerations

Conducting a research study, especially with children, requires the researcher to consider ethical issues. For this study, maintaining the confidentiality of the young children and their families was especially important. In order to ensure the confidentiality was maintained for children and families, a number was given to each study participant; that number was linked to the student and family name on a securely-held master list available through a password protected file. The home literacy survey and student's letter identification scores were compared using the number instead of the student and family name. The numbers replaced the names on all materials in this study. When specific student comparisons were made, it was by number and not name. These steps were put into place to ensure the confidentiality of all participants in the study and the privacy of the study data. The researcher had a strong belief in the effect of the home literacy environment and its impact on pre-literacy development. The researcher avoided introducing bias by ensuring that this belief was not expressed throughout this study.

Summary

Chapter Three reviewed the data analysis procedures that were used to determine the relationship between the criterion variable of home literacy environments and the predictor variable of Letter Identification Test scores for preschool-aged children. The participants and

setting for the study were described. The instruments used to measure the criterion and predictor variables were also explained. The predictor variable was measured using the Get Ready to Read: Home Literacy Environment Checklist and the criterion variable was measured using the curriculum-based measure, Letter Identification Test, used in the classroom to determine student's ability to identify letters in the alphabet. The data analysis for the study was reviewed including the assumption testing that took place, and the ethical considerations for the researcher were reviewed and explored. Chapter Four discusses the results of the data collection.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this chapter is to report the findings of the research conducted. The purpose of this correlational study was to examine home literacy environments as a predictor for letter identification scores for preschool-aged children. The research used the Get Ready to Read: Home Literacy Environment checklist and children's Letter Identification Test scores to examine this relationship. This chapter will explore the statistical findings from the research conducted through review of research questions, null hypotheses, descriptive statistics and results.

Research Questions

RQ1: How accurately can students' letter identification scores be predicted from the Get Ready to Read: Home Literacy Environment Checklist for preschool-aged children?

RQ2: How accurately can students' letter identification scores be predicted by the subscale "What My Child Has" on the Get Ready to Read: Home Literacy Environment Checklist for preschool-aged children?

Null Hypotheses

$H_0$1: There will be no significant predictive relationship between the predictor variable from the Get Ready to Read: Home Literacy Environment Checklist (total score of Get Ready To Read: Home Literacy Environment Checklist) and the criterion variable (students' letter identification scores on the Letter Identification Test) for preschool-aged children.

$H_0$2: There will be no significant predictive relationship between the subscale ("What My Child Has") from the predictor variable the Get Ready to Read: Home Literacy Environment

Checklist (total sub-score of the "What My Child Has" subscale) and the criterion variable (students' letter identification scores on the Letter Identification Test) for preschool-aged children.

Descriptive Statistics

The descriptive statistics for the correlation of Total Letter Score and The Get Ready to Read: Home Literacy Environment Checklist Score are listed in Table 1.

Table 1

Descriptive Statistics of Total Letter Score and Get Ready to Read: Home Literacy Environment Checklist

	M	*SD*	*N*
Survey Score	31.63	3.76	82
Letter Score	10.46	1.42	82

The descriptive statistics for the correlation of Total Letter Score and The Get Ready to Read: Home Literacy Environment Checklist subscale of "What my Child Has" are listed in Table 2.

Table 2

Descriptive Statistics of Total Letter Score and The Get Ready to Read: Home Literacy Environment Checklist subscale "What my Child Has"

	M	*SD*	*N*
Survey "What my Child Has"	33.96	18.94	82
Letter Score	10.46	1.42	82

Results

Assumption Testing

The requirement of linearity of data could not be demonstrated. The scatterplots for linearity of data are presented in Figure 1 and Figure 2. Thus the assumption of linearity was found not tenable; therefore the Pearson Product-Moment correlation could not be used. The Spearmen Rank-Order correlation which is a nonparametric test was used to determine the results.

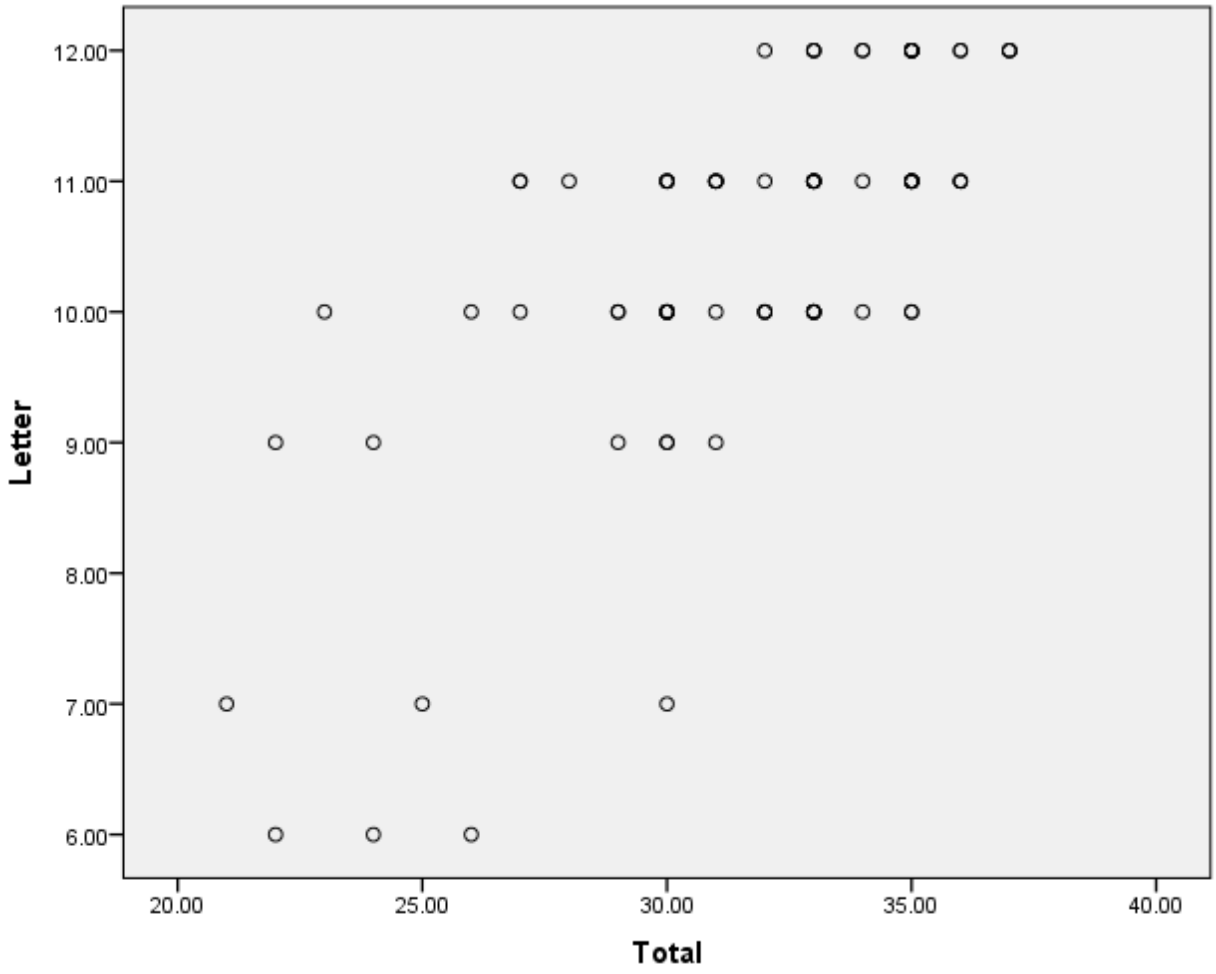

Figure 1. *Scatterplot for Assumption Testing for Letter Score and Total Score Get Ready to Read Checklist.*

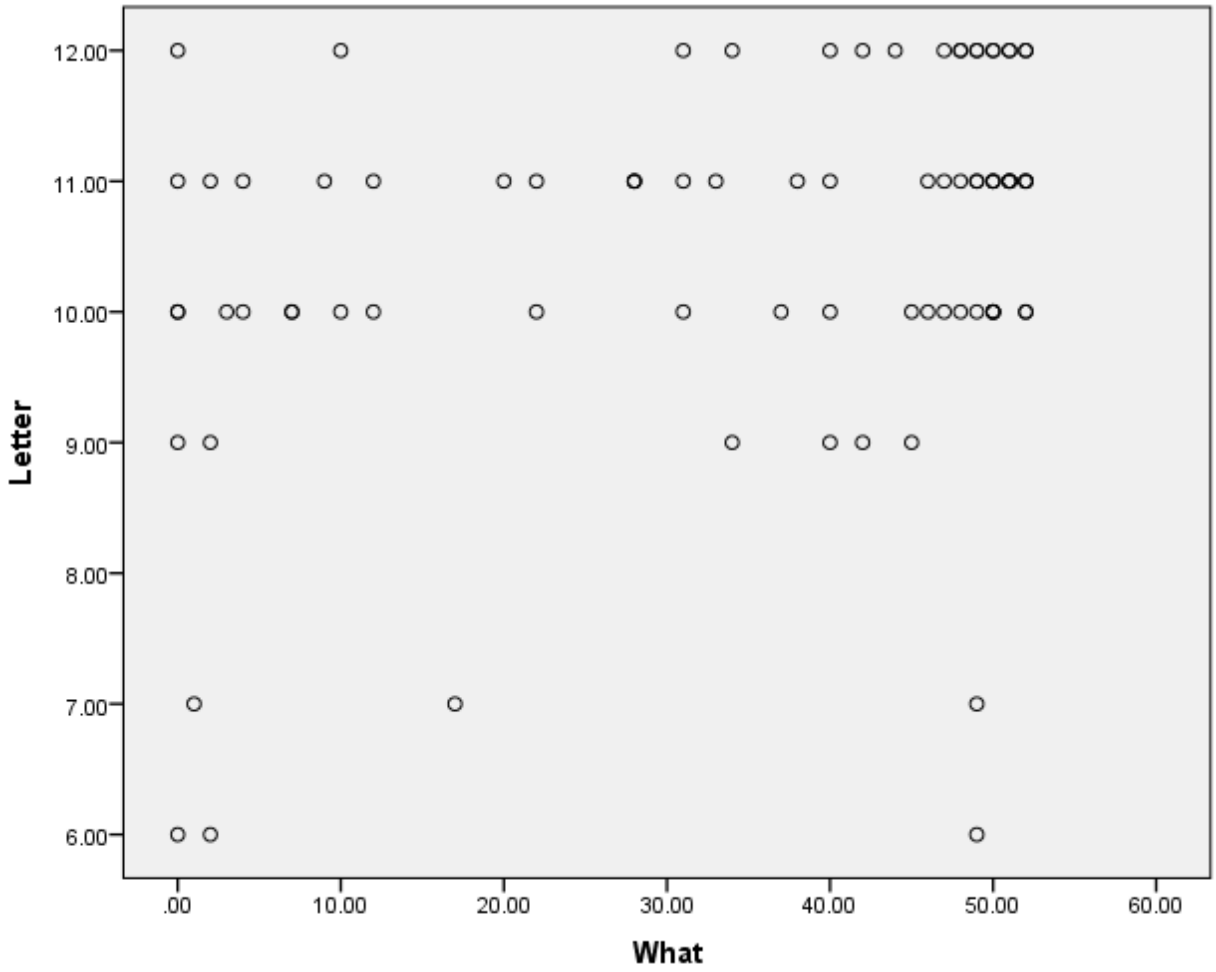

Figure 2. *Scatterplot for Assumption testing for Letter Score and Subscale "What my child has"*.

Null Hypothesis One

The first null hypothesis was: There will be no significant predictive relationship between the predictor variable the Get Ready to Read: Home Literacy Environment Checklist (total score of the Get Ready to Read: Home Literacy Environment Checklist) and criterion variable, students' letter identification scores (score from the Letter Identification test) for preschool-aged children. The null hypothesis was tested using both the Pearson product-moment correlation and the Spearman rank-order correlation. The Spearman rank-order correlation was used because the data did not meet the linearity of the data assumption test. The Spearman rank-order test is used

when researchers have data that does not have a normal distribution (Cohen, Cohen, West, & Aiken, 2003). A Spearman's rank-order correlation was performed to determine the relationship between the total score on the Get Ready to Read: Home Literacy Environment Checklist and the total letter score on the Letter Identification Test. The results of the Spearman's rank-order correlation indicated a statistically significant relationship between the variables, $r(80) = .684$, $p = 0.000$ (see Table 3). Therefore, the first null hypothesis was rejected based on the Spearman rank-order correlation. The Pearson product-moment correlation also indicated a statistically significant relationship between the variables, $r(80) = .721$, $p = 0.000$ (See Table 4). This also indicated that the first null hypothesis could be rejected.

Table 3

Spearman Rank-Order Correlation of Total Score Letter Identification Test and Get Ready to Read: Home Literacy Environment Checklist

	r	*p* (2-tailed)	*N*
Total score	1.00	.000	82
Letter score	.684**	.000	82

Note. **Correlation is significant at $p < .01$ (2-tailed).

Table 4

Pearson Product-Moment Correlation of Total Score Letter Identification Test and Get Ready to Read: Home Literacy Environment Checklist

	r	*p* (2-tailed)	*N*
Total score	1.00	.000	82
Letter score	.721**	.000	82

Note. **Correlation is significant at $p < .01$ (2-tailed).

Null Hypothesis Two

The second null hypothesis was: there will be no significant predictive relationship between subscale ("What My Child Has") from the predictive variable the Get Ready to Read: Home Literacy Environment Checklist (total sub-score of the "What My Child Has" subscale) and the criterion variable (students' letter identification scores from the Letter Identification Test) for preschool-aged children. The null hypothesis was tested using both the Pearson product-moment correlation and the Spearman rank-order correlation. The Spearman rank-order correlation was used because the data did not meet the linearity of the data assumption test. The Spearman rank-order test is used when researchers have data that does not have a normal distribution (Cohen et. al., 2003). A Spearman's rank-order correlation was performed to determine the relationship between the subscale "What my Child Has" of the Get Ready to Read: Home Literacy Environment Checklist and the total letter score from the Letter Identification Test. The results indicated a statistically significant relationship between the variables, $r(80) = .300$, $p = .006$ (see Table 5). Therefore, the null hypothesis was rejected. The results of the

Pearson product-moment correlation also indicated a statistically significant relationship between the variables, r (80) = .312, p = .004 (see Table 6). This also indicated that the second null hypothesis could be rejected.

Table 5

Spearman Rank-Order Correlation of Total Score Letter Identification Test and Sub-scale "What my Child Has" Get Ready to Read: Home Literacy Environment Checklist

	r	*p* (2-tailed)	*N*
Total score	1.00	.006	82
Letter score	.30**	.006	82

Note. **Correlation is significant at $p < .01$ (2-tailed).

Table 6

Pearson Product-Moment Correlation of Total Score Letter Identification Test and Sub-scale "What my Child Has" Get Ready to Read: Home Literacy Environment Checklist

	r	*p* (2-tailed)	*N*
Total score	1.00	.004	82
Letter score	.312**	.004	82

Note. **Correlation is significant at $p < .01$ (2-tailed).

The Pearson product-moment correlation is used when the variables are expressed using continuous scores to determine the significance of the relationship between the two variables (Gall et al., 2007). This statistical analysis was most appropriate due to the nature of the variables within the study. The Pearson product-moment correlation examines the variables in terms of their relationship to each other on a straight line. The closer the variables are to the straight line, the weaker their correlation. The correlation is strong when the line is positioned in

a diagonal which represents a negative or positive correlation depending on the direction of the line (Boslaugh & Watters, 2008). The data in this study indicated that the Pearson product-moment correlation was not the most appropriate method to analyze due to the requirement of linearity. Therefore, the Spearman rank-order correlation was used. The Spearman rank-order correlation is a non-parametric statistical analysis and therefore, does not have the statistical power that a parametric analysis has (Gall et al., 2007). A non-parametric analysis is used when assumptions cannot be made about the distribution of data (Gall et al., 2007). This information should be taken into consideration when examining the results of this study. The Spearman rank-order correlation determines the relationship between variables in the same way that the Pearson product-moment correlation does except it puts the data in rank order and determines the relationship based on that information (Boslaugh & Watters, 2008). The Spearman rank-order correlation was most appropriate in this study due to the absence of the requirement of linearity of data for the Pearson product-moment correlation. The Spearman rank-order correlation provides information about the relationship between the variables, and the researcher therefore used the information to determine if the null hypotheses could be accepted or rejected.

Summary

Chapter Four reviewed the statistical findings of the research study, including a review of the research questions and null hypotheses. The descriptive statistics for the research were provided and the results were presented. Within the results was a review of the assumption testing that took place, and each null hypotheses was reviewed in terms of the statistical significance. Chapter Five discusses the conclusions that can be drawn from the research and the implications for future research.

CHAPTER FIVE: CONCLUSIONS

Overview

This study sought to determine if home literacy environments were a predictor of letter skills identification for preschool-aged children. The research findings are included in Chapter Four and within Chapter Five and an explanation of the research findings are discussed. The implications of this current study are also included within Chapter Five along with the limitations of the current study, and finally, the researcher's recommendations for further research.

Discussion

The purpose of this study was to determine if home literacy environments are a predictor for letter identification scores for preschool-aged children. This study used the Get Ready to Read: Home Literacy Environment Checklist to examine home literacy environments and the Letter Identification Test curriculum based measure to examine letter identification. The requirement of linearity of data could not be determined for this study; therefore, the Spearman rank-order correlation was used to statistically analyze the data.

The first research question that was addressed through this research was: How accurately can students' letter identification scores be predicted from the total score on the Home Literacy Environment Checklist for preschool-aged children? The results indicated a strong correlation between letter identification scores and home literacy environments. This supported the early theories of Piaget, Vygotsky, and Dewey which stated that environments have an impact on early literacy skills. This research provides parents, teachers, and care givers valuable information about the home literacy environment and the role it plays in a child's ability to identify letters. Bracken and Fischel (2008) indicated that low income children who show an interest in reading from an early age at home have small but significantly higher letter knowledge than their peers

who do not show an interest in reading at home. This finding was supported through the current research and provides assistance to parents, teachers and caregivers.

The second research question that was addressed through this research was: How accurately can students' letter identification scores be predicted by the subscale "What My Child Has" on the Get Ready to Read: Home Literacy Environment Checklist for preschool-aged children? The results indicate a correlation between the subscale "What my Child Has" of the Get Ready to Read Home Literacy Environment Checklist and letter identification scores from the Letter Identification Test for preschool-aged children. Although the correlation between the subscale "What my Child Has" from the Get Ready to Read: Home Literacy Environment Checklist and letter identification score on the Letter Identification Test existed, it was not as strong as the correlation between the total score from the Get Ready to Read: Home Literacy Environment Checklist and the letter identification scores on the Letter Identification Test; therefore, it may not be as significant in terms of providing information to parents, teachers and caregivers. It does provide valuable information to parents, teachers and caregivers about the materials that make up a home literacy environment to encourage letter identification skills.

The home literacy environment provides children with their first literacy experiences (Brown et al., 2013). This research can assist parents, teachers, and caregivers with knowledge to know more specifically about the kind of environment and materials to provide children with to encourage literacy skill development. This environment should include access to picture books, materials for writing, alphabet materials, adults who engage in reading activities regularly, opportunities to develop pre-literacy skills including vocabulary development and letter knowledge, and exposure to rhyming (National Center for Learning Disabilities, 2016). Froiland et al., 2013 indicated that frequency of shared book reading, the age in which shared

book reading begins, and the number of books in a home are key indicators of a quality home literacy environment that promotes pre-literacy skills for young children. This finding is supported through this study by the statistically significant relationship between total score on the Get Ready to Read: Home Literacy Environment Checklist and letter identification scores from the Letter Identification Test for preschool-aged children.

This research has an impact from a national and local initiative standpoint in that it provided information about improving a child's ability to recognize letters through their home literacy environments. Information was provided for law makers that could help provide young children with the pre-literacy skills necessary to learn to read and school success from an early age. The strongest predictor of first grade reading achievement is alphabet knowledge that is developed through print knowledge (Dynia et al., 2011). With this knowledge, law makers have the opportunity to educate communities to help members provide the best literacy environment possible for young children. This could include providing resources to families in need. Armbruster, Lehr, & Osborn. (2000) provided valuable information for teachers in terms of reading instruction; this research could be the start of valuable information that could be developed for families to give them the skills to help their children develop pre-literacy skills at home.

Implications

The need to determine if there is a connection between home literacy environments and early school success is great for parents and educators. There is currently a focus on the need for children to develop a strong literacy foundation in their preschool years (Schryer et al., 2015). The methods in which a strong literacy foundation is developed are currently being researched and explored. There is a specific gap in the research concerning home literacy environments and

building a strong literacy foundation. Closing this gap in the research provides parents, teachers and caregivers with the information necessary to build strong literacy skills for young children.

Within the United States, there is a push towards building early literacy skills for young children in order to increase reading achievement (Armbruster et al., 2000). The home environment is a child's first exposure to literacy skills. The interaction between parents and children begin the moment that a child enters the world. As the demands of education become greater and children are required to perform more and more skills from a younger age, it is important to know and understand the impact of a child's home literacy environment. This knowledge provides parents, teachers, and caregivers with a greater understanding of ways to provide early literacy skills. Law makers were also provided with valuable information through this research to determine ways to implement change in education to provide young children with the best opportunities for later literacy success.

Limitations

There are limitations within educational research that may affect the internal and external validity of the research. It is important to address these limitations when conducting research.

A limitation to this study was that the Get Ready to Read: Home Literacy Environment Checklist was complete as a self-report survey (Gall et al., 2007). Parents were expected to provide authentic answers on the true and false questions which made up this survey, and this presents a limitation. Another limitation of this study was the population the participants came from, which was an affluent school district in Arizona. Therefore, the population presented a limitation. The population also presented a limitation, as the study took place in a special education preschool that practices inclusion. The families of general education preschool students in this population paid to attend preschool whereas their special education peers

attended free of cost. The majority of the participants in this study came from households in which their parents were married, and this presented a limitation in the population of the study. Another limitation in this study was that it was conducted in one state and did not span the country to examine the effects of home literacy environment on letter identification skills for preschool-aged children in different regions. Finally, another limitation of this study was the letter identification assessment which was a school-created, curriculum-based measure. A measure with more research addressing validity may provide more reliable results in future studies.

Recommendations for Future Research

The following are recommendations for future research:

(a) Conduct a similar study with a different population to determine if a predictive relationship can be determined between home literacy environments and letter identification scores using a parametric test.

(b) Use a different tool to measure home literacy such as observations and interviews to determine the quality of the home literacy environment in relation to letter identification scores.

(c) Use a different population to determine if home literacy environments are a predictor for letter identification scores.

(d) Conduct a study with kindergarten-aged students to further explore the link between home literacy environments and letter identification scores.

(e) Examine home literacy environments and letter identification scores across different ethnic groups.

(f) Explore the difference between males and females in relation to specific aspects of home literacy environments (for example: how many books in the home, are children read to and for how long, at what age did parents begin reading to children, etc.) and letter identification scores.

(g) Explore the difference between special education students and non-special education students in relation to home literacy environments and letter identification scores (such as type of disability, verbal versus non-verbal, type of services receiving, etc.).

(h) Explore household make up (people living in the home) in relation to home literacy environments and letter identification scores.

(i) Explore the impact of household income on home literacy environments and letter identification scores.

(j) Compare children who attend day care settings versus children who stay at home and their home literacy environment in relation to letter identification scores.

Conclusion

The statistical connection between home literacy environments and letter identification skills for preschool-aged children was explored through this research. A great amount of information was provided through this research, and it is important to continue to examine the relationship between the home literacy environment and literacy skills. Young children across the country are expected to enter school with a strong literacy foundation, and this research provided information to enhance pre-literacy development from an early age. As Schryer et al. (2015) claimed, "Children not at grade –level literacy by third grade experience reduced curricular access, require long-term support and continue to lag behind in literacy and curricular achievement" (p. 156). The impact of pre-literacy skill development lasts throughout a child's

life. It is vital educators begin to focus on the youngest learners to provide them with the literacy skills necessary to be successful community members.

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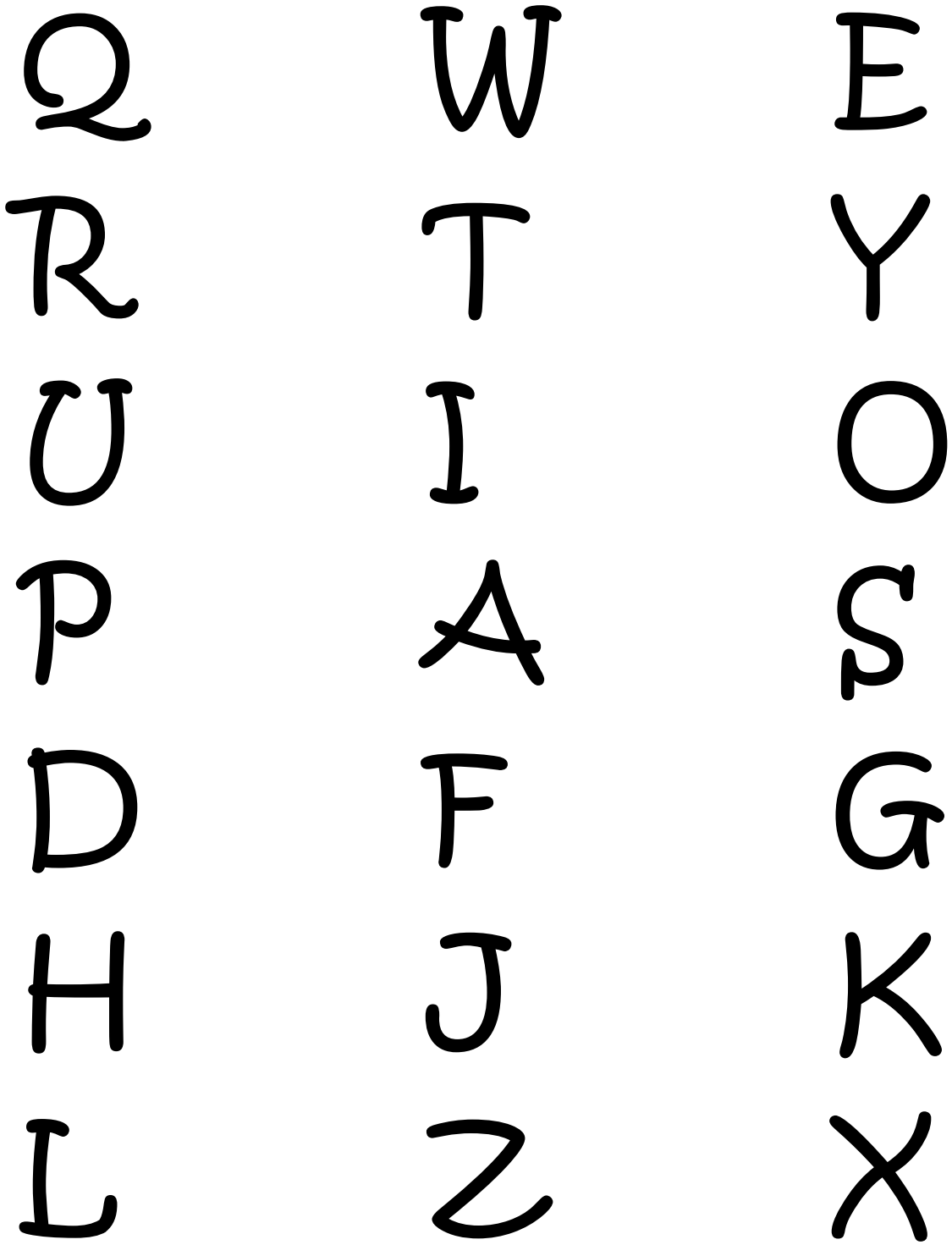
APPENDIX A

Uppercase Letter Identification



C V B

N M

Lower Case Letter Identification

q w e

r t y

u i o

p a s

d f g

h j k

l z x

c v b

n m

APPENDIX B

Email to Parents with Explanation of Study

A Prediction Study of Home Literacy Environments and Letter Identification Scores

Jillian L Kennen

A Doctoral Candidate

Liberty University

You are invited to participate in a research study exploring the relationship between home literacy environments and letter identification. You are receiving this email because your child attends the inclusive preschool in the school district and has been identified as pre-kindergarten age. I ask that you read the information provided below and ask questions before you consent to being a part of this research study by contacting the researcher by e-mail (jlkennen@liberty.edu), phone: 520-284-2365 or appointment. Your child will not be contacted for this study.

Important Information:

The relationship between pre-literacy success and home literacy environments is linked. The specific relationship between letter identification and home literacy environments for preschool aged children has not been established. This research hopes to explore that relationship in order to help families of preschool aged children help their children be successful readers.

APPENDIX C

A Prediction Study of Home Literacy Environments and Letter Identification Scores

Jillian L Kennen

A Doctoral Candidate

Liberty University

You are invited to participate in a research study exploring the relationship between home literacy environments and letter identification. You are receiving this email because your child attends the inclusive preschool in the school district and has been identified as a pre-kindergarten aged child. I ask that you read the information provided below and ask any question before you consent to being a part of this research study. Your child will not be contacted for this study. If you have questions please contact me through e-mail (jlkennen@liberty.edu) , phone (520-284-2365) or appointment.

Background Information:

The relationship between pre-literacy success and home literacy environments is linked. The specific relationship between letter identification and home literacy environments for preschool aged children has not been established. This research explores, that relationship in order to help families help their preschool aged children be successful readers.

Procedures:

If you agree to participate in this study by filling out the survey and giving permission for your child's letter identification baseline scores to be used, then please click on the link below. The survey will take you about ten minutes to complete and will help provide an understanding of the home literacy environment in your home. The survey begins with demographic questions and then asks five sets of true or false questions about the literacy environment in your home.

Risks and Benefits to the Study:

The risks of this study are no more than having the parent fill out a survey using the computer. There are no risks to your child. The identity of both the parents and children will remain confidential. By participating in this study you will help to provide valuable information about home literacy environments and their connection to a child's ability to identify letters.

Confidentiality:

The results of both the survey and letter identification scores will remain confidential. Published reports will not contain any names or identifying information. Letter identification scores and home literacy environment information will be coded with numbers as soon as they are matched. All results and research information will be stored on a password-protected computer. Only people related to this research will have access to the information.

Voluntary Nature of the Study:

Participation in the study is voluntary. Your decision to participate or not participate in this study will not affect your relationship with Liberty University, the researcher or the school district. If you decide to participate in the study you are free to withdraw at anytime.

Non-participants will not skew results, non-participants will be those children who completed the Letter Identification test but parents did not complete the survey. These test scores will not be used within the study.

Contacts and Questions: (dissertation committee information)

If you have any questions pertaining to this study please contact the researcher Jillian L. Kennen, at jlkennen@liberty.edu or any of the committee members listed above.

Statement of Consent:

I have read and understand the information above. I have had the opportunity to ask any questions pertaining to the study. I consent to participate in the study.

Thank you for your participation in this research study.

Jillian L Kennen

Liberty University

School of Education Doctoral Program

APPENDIX D
Instructions for Survey

Thank you so much for your participation in this research study. Before you begin the survey please know that it will take about ten minutes to complete. Please begin by answers four demographic questions. After you have completed the demographic information, please click on the most appropriate answer (true or false) for each of the statements.

APPENDIX E
Survey

Demographic Information:

Martial Status:_____

Male/female: _____

My Child Qualifies for Special Education Yes:_____ No:_____

Number of children (0 to 18) living at home: _____

Home Literacy Environment:

Get Ready to Read Home Literacy Checklist:

http://www.getreadytoread.org/images/content/downloads/literacy%20checklists/HomeLiteracyEnglish.pdf

APPENDIX F

December 15, 2015

Dear Jillian Kennen:

The Vail School District approves of your proposal to conduct research within the Vail Inclusive Preschool.

It is understood that the purpose of your data collection at VIP with be to examine the relationship between home literacy environments as measure by the Get Ready To Read Home Literacy Checklist and student's letter identification scores as measured by the combine upper and lower case letter identification score on the baseline school wide screening given at Vail Inclusive Preschool. It is further understood that the data collection for this research will begin in the spring semester of 2016.

Please coordinate your data collection efforts with the Director of VIP, Heather Nordbrock. If you or the IRB requires any additional information to proceed with your research, please don't hesitate to contact me directly.

Sincerely,

John Carruth
Associate Superintendent
Vail Unified School District
(520) 879-2005
carruthj@vail.k12.az.us

The Liberty University Institutional
Review Board has approved
this document for use from
4/19/16 to --
Protocol # 2480.041916

CONSENT FORM

Home Literacy Environment as a Predictor for Letter Identification Skills for Preschool-aged Children

Jillian L Kennen
Liberty University
School of Education

You are invited to be in a research study of home literacy environments and letter identification skills. You were selected as a possible participant because your child attends the pre-kindergarten program at Vail Inclusive Preschool. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

Jillian L Kennen, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information:

The purpose of this study is to explore the relationship between letter identification and home literacy environments for preschool-aged children. The goal of this research is to explore that relationship in order to help families better prepare their preschool aged children to be successful readers.

Procedures:

If you agree to be in this study, I would ask you to do the following things:

1.) Complete an on-line survey that takes about 10 minutes of your time. The survey begins with demographic questions and then asks five sets of true or false questions about the literacy environment in your home.
2.) Agree to have your child's letter identification scores collected from the classroom baseline testing.

Compensation:

You will not receive compensation for taking part in this study.

Confidentiality:

The benefits to participation are that you will help to provide valuable information about home literacy environments and their connection to a child's ability to identify letters which may help improve pre-literacy skill development for preschool aged children. There are no direct benefits to the participants in this study, the benefits of this study will impact society.

The results of both the survey and letter identification scores will remain confidential. Published reports will not contain any names or identifying information. Letter identification scores and home literacy environment information will be coded with numbers as soon as they are matched to the surveys. All results and research information will be stored on a password-protected computer. Only people related to this research will have access to the information.

The Liberty University Institutional
Review Board has approved
this document for use from
4/19/16 to --
Protocol # 2480.041916

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University, the researcher. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study:

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Contacts and Questions:

The researcher conducting this study is Jillian L Kennen. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at jlkennen@liberty.edu or 520-284-2365. You may also contact the research's faculty advisor, Dr. Meredith Park, at mjpark@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Carter 134, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study. By typing your name and the date below you are providing your consent to participate in the study and agree to have your child's letter identification scores collected from the classroom baseline testing

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

_____

Signature Date