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The Relationship Between the Home Environment and Literacy Success in Early Elementary School

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**The Relationship Between the Home Literacy Environment and Literacy Success in Early
Elementary School**

by

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"You may have tangible wealth untold. Caskets of jewels and coffers of gold.

Richer than I you can never be - I had a mother who read to me."

- Strickland Gillilan

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Chapter I: Introduction

Introduction and Background

Each student comes into the classroom with a different set of experiences. Their family structure, home life and support, socioeconomic status, interests, and motivations can all be different than their peer in the next desk (Bradley & Corwyn, 2002; Dulay, Cheung, & McBride, 2018; Hartas, 2012). Socioeconomic status, a measure of family characteristics based on income, parental occupation, and parental education, has been found to be one indicator of school success that can impact achievement from birth to adulthood (Bradley & Corwyn, 2002; Buckingham, Beaman, & Wheldall, 2014). The literacy environment that parents create at home - how often they read to their children, engage in literacy activities, and model literacy practices, is one area that has the potential to increase student's literacy success (Mayo & Siraj, 2015). Literacy success as defined in this secondary research study refers to both student interest in reading and reading scores reported by the research articles analyzed. The extent of the impact of the home environment on student literacy success is debatable (Cipeng, Silinskas, Wei, & Georgiou, 2015; Mayo & Siraj, 2015).

Some researchers have found that as children get older, the frequency of home literacy activities is correlated to poor student performance, although they acknowledge that this could be due to parents increasing activities with children because they realize they are struggling with reading at school (Cipeng et al., 2015). Other studies show there is little or no increase in student success when students come from a home literacy environment with frequent literacy activities (Curry, Reeves, & McIntyre, 2016). Curry et al. (2016) explain the differences in test scores between students from low literacy backgrounds and high literacy backgrounds with the difference in literacy activities promoted by the school. Home literacy activities tend to center

around storybook reading and saying the ABCs, while school literacy activities include phonics and story comprehension (Curry et al., 2016).

Still, there is some evidence that home literacy environments impact student engagement at school, and motivation for literacy activities (Dulay et al., 2018; Payne, Whitehurst, & Angell, 1994). This secondary research study will attempt to define the relationship between student literacy success and the home environment and present a clear picture of how the home environment changes or is changed by student factors. Because there are studies that show increased literacy activities in first and second grade negatively correlate with reading scores (Cipeng et al., 2015, Hammer, Farkas, & Maczuga, 2010), this study will analyze multiple research studies to determine if this pattern is significant.

Research Problem

Although most researchers agree that the home environment has some impact on student literacy environment, the extent of this impact and the importance of parental involvement in student literacy activities is undecided (Boonk, Gijssels, Ritzen, & Brand-Gruwel, 2018). This secondary research study will examine the factors influencing student literacy success in early elementary school. Since most studies about the home environment and student literacy tend to focus on preschool and kindergarten, this study will present a clearer representation of the home environment once students reach school age.

This secondary research study will also analyze and discuss how the home environment changes as students move from kindergarten to second grade. It is not certain how the home environment is changed, that is, how home literacy activities are chosen to continue or stop based on student characteristics, once students reach first and second grade. Other factors that influence student success are also of interest in this research study. If the home literacy

environment has little or no impact on student success, local school and state resources can be better spent by focusing on literacy strategies that have been proven to work. If, however, the home literacy environment is critical to student literacy success, the information should be made available.

Research Purpose

The purpose of this secondary research study is to examine the factors influencing literacy skills and discuss the relationship, if any, between the home literacy environment and student literacy success from kindergarten to second grade. The primary research questions include:

- What is the relationship between the home literacy environment and student literacy success?
- How does the home literacy environment change from kindergarten to second grade?
- What other factors play a part in the literacy abilities of kindergarten through second grade students?

Significance of the Study

Although there are research studies that examine the home literacy environment in kindergarten and in second grade (Piper & Whaley, 2011; Sénéchal & LeFerve, 2002), there are few meta-analyses that offer a comprehensive picture of the impact of the home environment from kindergarten to second grade (Boonk et al., 2018). There is conflicting information about whether the home environment affects student literacy success once children reach elementary school. This secondary research study will examine and discuss the findings of multiple research

studies across grade levels. This will increase the knowledge of the home environment by presenting an analysis of the most current and relevant information regarding the home literacy environment from kindergarten to second grade.

If we can determine the relationship between the home environment and student achievement, we can develop ways to help students succeed. This can be done by designing and implementing targeted programs that can increase the likelihood that students obtain the resources necessary to be effective learners and active contributors in the learning environment. The findings of the study will provide insights on how schools and communities can support families and students toward academic aims. This secondary research study will synthesize and analyze information about the impact on the home literacy environment in early elementary school. This will allow both schools and individuals to better support students.

This study is important because it collects data from the crucial periods of kindergarten to second grade. This critical period is when students first begin to read – students will either do well in reading or fall behind their peers, and some will never catch up. Entwisle, Alexander, and Olson (2005) demonstrated that children’s reading ability in first grade directly correlates to future high school and college success. If the home environment can be proven to have a substantial positive impact on student scores, this information should be made available for schools, teachers, and parents.

Limitations

Limitations to this study include the availability of published research and empirical studies on the home literacy environment from kindergarten to second grade, and the ability to obtain these articles through EbscoHOST, Google Scholar, and Interlibrary Loan. Limitations in this study include the selection of articles from the last ten years. Although this timeframe gave

adequate research articles in terms of numbers and content, there might be more relevant research articles published more than ten years ago. Articles written in languages other than English, although the subject may be the home literacy environment, are unable to be used for this study. Many of the studies available rely heavily on self-reported surveys to gather data from parents and caregivers, and thus may not be an accurate representation of the home literacy environment. Finally, because different researchers have different standards for what constitutes a home literacy environment and literacy success, not all research articles measure the same standards.

Delimitations

Delimitations self-imposed on the study include the scope and number of articles chosen. Articles used to collect and synthesize data have been published in the last ten years. This period was chosen because it allowed me to select the most relevant articles while still reflecting current understandings of the home literacy environment. Although a range of five years is sometimes recommended for meta-analysis of research articles, this did not produce enough focused and high-quality research articles for my purpose. Delimitations also include the scope of articles chosen. Students in the articles chosen for review and analysis were in kindergarten through second grade. Articles chosen also focused on reading literacy goals as opposed to math literacy goals.

Definition of Terms

Grade Level: *Preschool*: Preschool is characterized as a child's first experience in school. In the United States, children have two years of preschool, starting at age three and ending at age five. Preschool generally operates on a half-day schedule, with students either attending in the

morning or the afternoon. Preschool attendance is not compulsory, and some families choose not to send their children to preschool (Hammer, Farkas, & Maczuga, 2010).

Kindergarten: The first year that children attend school full time. Generally, children start kindergarten at age five, and graduate when they are age six, although there are some countries that have more than one year of kindergarten (Sénéchal & LeFevre, 2002).

Kindergarten is generally the first year that school attendance is compulsory, although each state has different laws (Table 5.1. Compulsory school attendance laws, 2017).

First Grade: Broadly speaking, first grade is the second year that children attend school full time. In the United States, students generally enter first grade at age six and graduate first grade at age seven (Sénéchal & LeFevre, 2002).

Second Grade: Broadly speaking, second grade is the third year that students attend school full time. Students generally enter second grade at age seven and graduate second grade at age eight (Curry et al., 2016).

Formal Literacy Activities: Formal literacy activities that occur in the home are direct and specific teaching of the alphabet and phonics, word reading, or vocabulary. Formal activities are intentional and meant to increase reading literacy and fluency in students (Inoue et al., 2018).

Home Literacy Environment: The literacy environment that students are exposed to at home. This is made up of literacy games and activities that students do, or parents facilitate (singing the ABCs, naming the sounds and letters of everyday objects), parents or caregivers reading to children, and parents or caregivers modeling literacy activities by reading books, newspapers, or magazines (Curry et al., 2016).

Informal Literacy Activities: According to Inoue et al. (2018) informal literacy activities are “meaning-focused and expose children to print incidentally through activities such as storybook reading by parents” (p. 160). Informal literacy activities are meant to increase interest in reading and act as a bonding opportunity for some families (Inoue et al., 2018).

Literacy Success, or Literacy Ability: Literacy success or literacy ability is a measure of student reading scores and interest in reading. Different research studies have different ideas of what constitutes literacy success. Simply put, literacy success is achieving higher scores on literacy tests and activities than peers.

Parent Engagement: Although specific parent engagement definitions vary among studies, parent engagement broadly described is the level of engagement and interest parents have in their child’s literacy and academic success. Factors of parent engagement include an awareness of how their child is doing at school, involvement with their child’s school or teacher, and supporting their child in academic and personal areas.

SES: Socioeconomic Status - a measure of standard of living based on parent income, parent education, and cost of living. SES is generally used to classify the background of students with high, middle, and low economic advantages. High SES students tend to be from higher income, more educated parents while low income students primarily come from working class or poverty backgrounds (Bradley & Corwyn, 2002).

Student Success, or Academic Achievement: Varied testing practices to obtain a measure of student knowledge and ability. These measures change from study to study (Manolitsis, Georgiou & Tziraki 2013).

Conclusion

This secondary research study is a review and analysis of the relationship between the home environment and student literacy success. Researchers have differing opinions on the impact of the home environment; particularly once students reach first and second grade. This secondary research study intends to discover what the relationship is between the home environment and student achievement, how the relationship changes from kindergarten to second grade, and what other factors play a part in student literacy success. This study is significant because it offers an analysis of the home environment from kindergarten to second grade – previous studies tend to focus on preschool/kindergarten or first and second grade. The data collected from this research study can be used by educators and community partners to increase education and awareness of the impact of the home environment on student success. Limitations to the study include the availability of relevant research articles published in English, and delimitations include the number of research articles chosen for analysis. In the next chapter, a review of the existing literature on the topic will be presented.

Chapter II: Literature Review

Introduction

The aim of this paper is to critically examine the related literature about the effect of the home environment on student literacy ability. In this chapter, the research surrounding the topic of the home literacy environment will be detailed. The methodology for the literature review, trends in the research, and research gaps will be identified. These research gaps will be used to guide the focus of the meta-analysis in Chapter Four of this research study.

Researchers have different ideas about what causes children to do poorly on standardized reading tests, however, most agree that the home literacy environment plays a role in predicting how well a preschool or kindergarten student will perform on literacy tasks. The home literacy environment plays a part in vocabulary acquisition and language ability, both of which are important for later reading success (Niklas & Schneider, 2013; Payne et al., 1994).

Methodology

The related research studies were searched and identified using EBSCO Host database, Google Scholar, and Interlibrary Loan. Keywords included “SES”, “Home Environment”, “Early Literacy”, “Reading Scores” and “Home Literacy Environment”. Research studies chosen were limited based on relevance to the topic, and year published. Literature chosen was further limited based on access to the full text – occasionally only article abstracts were available. Studies were chosen from Peer Reviewed journals, and primary research studies were used when possible. The selected research studies were organized based on the following matrix, which helped to identify trends in the research.

Table 2.1

Summary of Background Research

Author	Year	Variables Considered in the Study						
		Home Literacy Environment	SES	Reading scores	Preschool/ Kindergarten	Grades 1-3	Survey	Longitudinal
Dickenson & Snow	1986		x	x	x			
Payne, Whitehurst & Angell	1994	x	x		x		x	
Sénéchal, M., & LeFevre, J.	2002	x	x	x	x	x	x	x
Hammer, Farkas & Maczuga	2010	x	x	x	x		x	x
Piper & Whaley	2011	x	x		x	x	x	
Niklas & Schneider	2013	x	x		x			
Cipeng, Silinskas, Wei & Georgiou	2015	x		x	x	x		x
Curry, Reeves & McIntyre	2016	x	x		x			
Samiei, Bush, Sell & Imig	2016	x	x	x	x			
Sonnenschein & Sun	2017	x	x		x		x	
Boonk, Gijsselaers, Ritzen & Brand-Gruwel	2018	x	x	x	x	x	x	
Dulay, Cheng & McBride	2018	x	x	x	x			

Note. SES = socioeconomic status. This table was formulated during the information gathering phase of the secondary research study.

Variables and Themes

From the existing research studies above, several variables and themes were identified. The home literacy environment was most closely tied with SES. The majority of studies center on students in preschool and kindergarten, and there are few that focus on students from grades 1-3. The findings are organized below based on main theme and topic, although several studies are detailed under multiple themes. The first of these themes is socioeconomic status.

Socioeconomic Status

Socioeconomic status, or SES, plays a role in student literacy achievement. Although different researchers have differing definitions, often used determinates of SES are income, cost of living, parental education, parental employment, and resources in the home. In Bradley and Corwyn's (2002) review of the literature surrounding SES and success, they found that coming from a low economic background negatively impacts multiple areas of life, starting in infancy. Being born into a low SES background is "associated with lower levels of school achievement and IQ later in childhood" (Bradley & Corwyn, 2002). Other studies looked at the impact of SES in children.

Buckingham et al.'s (2014) review of literature focuses on the impact of SES in the early childhood years. One factor that contributes to the lower achievement of economically disadvantaged children is access to resources - children who do not have books and stimulating materials in the home are less likely to be able to achieve their academic potential. On a micro-level, genetic factors associated with cognitive development more common in low SES families, like low birth weight, and smoking during pregnancy can affect academic achievement. The home environment can mediate for genetic factors to a certain extent, however, predisposition to

struggling academic achievement can be compounded by a poor home literacy environment (Buckingham et al., 2014).

One way researchers have looked at mediating the negative effects of low SES is maternal factors. Parcel and Menaghan (1990) completed a research study on how the occupations of mothers affected young children's language. They found that maternal education and occupation have more of an impact than paternal education, and mothers who work in stimulating problem-solving environments tend to have children who have more cognitive development, even if they are from a low SES background (Parcel & Menaghan, 1990). Both maternal and paternal behaviors contribute to the home environment.

Home Environment

There is a correlation between the home literacy environment and performance on reading skill tests. Payne et al. (1994) studied the language development of 236 preschoolers from low income families. Their research found that "literacy environment accounts for 18.5% of child language...and 12% after the effects of caregiver IQ and education are removed" (Payne et al., 1994, p. 435). This is valuable because it distinguishes the importance of the home literacy environment, both with and without the parental factors of knowledge and IQ.

The literacy activities that children participate in at home can differ in scope from the activities that they participate in at school, especially if the child comes from a low-income family. Curry et al., (2016) found that in homes where parents read books to their children and engaged them in questioning the story, the types of interactions were less formal than what the children would expect to receive at school. Even though parents may engage children in shared picture book reading activities at home, school activities emphasize critical thinking skills, phonics, and imaginative retellings. The difference in activities may account for lower test scores

even when the child receives opportunities for literacy activities at home (Curry et al., 2016). In a middle- or high-income home environment, factors are similar but not always the same.

Sénéchal and LeFerve's (2002) longitudinal study on the effects of the home environment looked at Canadian children from middle- and upper-class homes over a period of five years. Children in Canada can start kindergarten at age four and attend for two years. Sénéchal and LeFerve's study followed cohort groups in kindergarten and first grade until the end of third grade. The study found that shared storybook reading in kindergarten affected the receptive language skills of children at the end of third grade, positively contributing to literacy success. The study also found a strong link between teaching literacy skills in kindergarten and first grade with emergent literacy ability, which directly affected reading at the end of first grade and the end of third grade.

Niklas and Schneider (2013) list several variables indicating literacy success in school, including family SES and the home literacy environment. Dulay et al. (2018) count the home literacy environment as indicative of the success of Cebuano speaking children living in the Philippines, along with preschool attendance. The frequency of literacy activities, defined as reading to children and engaging in literacy-based songs and games with children often is correlated with higher reading scores, but this is not always the case.

Not all research reflects a positive correlation between home literacy activities and good test scores. Cipeng et al. (2015) found, in their research on Chinese elementary students, that the more time parents spend on literacy activities with their children in kindergarten, the higher their reading and math test scores. However, by the time a child reaches first and second grade, there is a negative correlation—the more time parents spend on literacy activities, the worse their children do (Cipeng et al., 2015). These findings also reflect what Hammer et al. (2010) found

with kindergarten students, that high literacy activities at home indicated poor performance on school reading activities. One possible explanation for this is that parents who are involved in their child's life notice when their child is struggling and devote more time than they would normally to literacy activities. Along with the home environment, literacy programs play a part in student achievement.

Literacy Programs

Programs that provide opportunities for low income families, like Head Start, a high-quality preschool program for low income families, and Imagination Library, a program which provides a free age appropriate book every month for children from birth through age five, can help to offset negative consequences related to low SES, but they cannot eradicate them (Dickenson & Snow, 1986; Samiei, Bush, Sell, & Imig, 2016). Dickenson and Snow (1986) compared the oral language skills of middle- and working-class children. All 33 kindergarteners in their study attended high-quality preschool programs like Head Start. Their study found that although the working-class children did better than the middle-class children on informal descriptions, the middle-class children did better than their working-class peers on pre-reading tasks and formal descriptions (Dickenson & Snow, 1986). This suggests that a good preschool alone is not enough to equalize test scores between low income students and their higher income peers.

Samiei et al. (2016) studied the relationship between participation in the Imagination Library program and literacy skills. They studied 263 kindergarteners, 80% of whom were low income. They found that participation in the Imagination Library literacy program predicted higher test scores. However, families who participated in the program also tended to have richer home literacy environments (Samiei et al., 2016). This study suggests that families with rich

home literacy environments know about the best practices in reading and literacy learning and seek out programs like Imagination Library in order to supplement their resources. Along with literacy programs, there are other factors that impact student success.

Other Contributing Factors

Children from low SES families often have more disadvantages than their more well-off classmates. They may lack access to tutors or programs that could help them learn, and free programs at their local library could be difficult to get to without reliable transportation. Low income students are also made up of a disproportionate number of minority races. Sonnenschein and Sun (2016) write that “Racial/ethnic differences accounted for 25–50% of the gap in the children's school readiness scores” (p. 3). Their article found that white parents knew more about child development than black or Latino parents, and parent knowledge of child development was related to the number of literacy activities children participated in, which was linked to how well they did on literacy tests.

Family Literacy practices and speaking patterns differ between cultures, and reading tests may be biased to non-standard forms of English (Sonnenschein & Sun, 2016). Nutrition that children receive at home can affect their brain development, and Pieper and Whaley (2011) found that healthy eating habits at home were positively correlated with home literacy activities. English Language Learners who come from low SES homes where their parents do not speak English will also have a more difficult time with English literacy than native English-speaking children.

Boonk et al. (2018) write of another factor in their review of literature on the impact of the home environment on student success, that of parent expectations. Parent expectations are related to the home literacy environment, but not always counted as part of the literacy

environment in studies. In terms of parent expectations, “academic pressure”, in the form of punishments and coercion was found to be negatively associated with student success, while “parental encouragement and support is positively associated with student academic achievement” (p. 23). This support can be material in nature, including appropriate resources for students to learn, but it can also be in the form of steady encouragement and assistance when students need support. The research reviewed did not have conclusive evidence for whether or not homework help was effective - some studies showed a slight increase in student gains while others showed a slight decrease. The variability in testing measures is one of the gaps in the research, others are detailed below.

Gaps in the Research

Researchers tend to focus more on the home environment before students enter kindergarten but do not examine the impact of the home environment once students reach early elementary school. There is a lack of research articles that compare the home environment of kindergarten students with those in first and second grade. Although there are some articles that follow students starting in preschool or kindergarten, the findings of these studies are not evaluated and analyzed with other studies. There are few meta-analysis studies that track the changes in the home environment as students move up in elementary school. The second research question in this research study is to examine how the home environment changes as students move from kindergarten to second grade, by critically evaluating the published research studies. This will add to the existing knowledge of the home literacy environment, by providing information in a new way. There are research studies that focus on the home environment, SES, or both together. There are few research studies that focus on other considerations for student

literacy ability, including genetic or other factors. The third research question will address this point.

Conclusion

This chapter has presented a critical review of the background studies related to the home literacy environment and student reading success. The home literacy environment, SES, and other factors including parental expectations were all found to be predictors of literacy success. However, despite the abundance of research articles written about the home environment of preschool students, there are fewer studies that examine how the home environment changes once children reach school age. The following chapter will detail the methodology for selecting and organizing articles to answer the research questions.

Chapter III: Methodology

Introduction

As detailed in previous chapters, the purpose of this study is to determine the relationship between the home environment and literacy ability in early elementary students. These findings can be used by local, state, and national program directors as reason for increasing funding and interest in the development and implementation of programs designed to increase awareness of and ability to create strong and nurturing home literacy environments. The primary research questions in this paper focused on the impact of the home literacy environment on the literacy ability of kindergarten through second grade students.

The purpose of this chapter is to outline the methodology for the study, including how research articles were selected, how data was organized and how conclusions were drawn. First research databases and article selection are discussed, then data organization methods are detailed.

Institutional Review Board Exemption

Ordinarily, permission from the IRB, or Institutional Review Board, must be collected before research studies involving human subjects commence. This protocol is to insure the safety and privacy of human subjects. However, this secondary research study does not collect its own primary data from human subjects. The information sources in this paper came from already existing research studies in which all the identifying features of individuals have already been removed. This study did not collect data first-hand from any human participants. As a result, this secondary research study did not require IRB approval.

Methodology

The related research studies from which the secondary data were drawn were identified using the keywords “home literacy environment”, “home environment”, “literacy”, “low SES”, “early elementary”, “kindergarten”, “first grade”, “second grade”, “qualitative” “impact”, and “test scores”. The studies were found using a combination of EBSCOhost and Google Scholar. Summaries were scanned for relevant details and information. The relevant studies were also found by reviewing references for each article, to find more relevant literature. Twelve of the most useful research studies were chosen. This number gave enough data for the purposes of this study but was still manageable enough to collect and analyze thoroughly. For items where the full text could not be obtained, requests were made via Minitex interlibrary loan system when available. The studies were limited based on year published, grade level of subjects (kindergarten to second grade), and qualitative findings.

A range of ten years, 2009-2019, was chosen for this study, although most studies chosen were published in the last five years. The articles chosen for review were included in this study because they were able to identified results concerning the impact of the home literacy environment on the literacy ability of kindergarten to second grade students. Some of the articles detailed in Chapter Two were chosen for analysis because they directly related to the research questions.

The age range of kindergarten to second grade was selected because some studies (see Chapter Two), have identified that parent/child literacy interaction in first and second grade can be negatively correlated with literacy success, as opposed to positively correlated results in kindergarten. For this reason, second grade students were also included to determine whether the trend stayed the same or reverted to kindergarten results. Although many of the studies included

were not longitudinal studies, the nature of many national achievement tests administered in elementary school make them ideal for use in evaluating students from different school environments. Studies focusing students above second grade were not included in this review, however, some studies that included third graders were used if they also focused on kindergarten through second grade students.

SES was also chosen as a factor for selecting studies because children from higher SES backgrounds often have access to additional help and support for literacy activities, including better school systems, babysitters or nannies, and tutors. Because the focus of this literature review was the impact of the home literacy environment (i.e., only the impact of those living with the student), the majority of studies focused on low SES students and families. There were a few studies that included middle SES students and families. It has been shown in numerous studies that SES can be a predictor of current and future academic success (Buckingham et al., 2014; Dickenson & Snow, 1986; Niklas & Schneider, 2013).

This secondary research study examines already published articles on the effect of home literacy environments. Because each study uses different terminology and different methods, I did not attempt to equalize all studies through quantitative measures. Rather, this study examines the qualitative factors and identified trends of home literacy environments. This study presents an overall picture of the relationship between the home literacy environment and student outcomes, including identifying other factors that may play a part in impacting student success.

Studies were organized using a computer. After reading articles, the main trends were identified and imputed into a table in Microsoft Word. This made it possible to see a comprehensive picture of research and evaluate the data. Categories of information in the table include author, year, title of article, summary of findings, number of participants, country in

which the study took place, and any other factors which might be relevant to interpreting the data.

Timeline

The planned completion date for this research paper is May 2019. In November 2018, Chapter One was completed, and December saw the revision of Chapters One, Two, and Three. The first committee meeting was completed at the end of January. The committee is made up of three graduate faculty members, including Dr. Yun Claire Park, who will act as the Committee Chair, Dr. Jennifer Hill, and Dr. Fatemeh Zarghami. November through February consisted of research, with all studies selected for analysis by February 15th. February 16th- April 6th consisted of data analysis and paper writing. Copies of the paper were sent to members of the committee the week of April 7th, and the committee held the final meeting April 19th. The committee approved the starred paper with edits. Once the final paper edits were completed and approved, the paper was sent to Graduate Studies for approval before being added to the SCSU Repository.

Conclusion

Articles were found for the literature review and analysis using databases such as EBSCOhost, Google Scholar, and interlibrary loan, as well as by combing through references of relevant research articles. Terms used to find articles included “home environment”, “SES”, “Literacy Scores”, and “Early Elementary Students”. Articles were limited based on grade of subjects and year published. Data was organized using tables in Microsoft Word. The next chapter will show the findings of that data.

Chapter IV: Findings

Introduction

The home literacy environment is one factor of student reading and literacy success, although how important it is to student ability has not been determined. There is clear data that shows a positive correlation between the home literacy environment and student success in preschool and kindergarten, but there is conflicting data about the effectiveness of the home environment once students enter first and second grade. This secondary research study attempted to clarify the relationship between the home environment and student literacy ability and examine how the relationship changes as students get older.

This chapter focuses on the findings of this secondary research study. The discussion of the findings is organized to answer the three areas of the research questions – the relationship between home environment and early elementary students, how the home environment changes from kindergarten to second grade, and other factors that influence the literacy ability of early elementary students.

Summary of Findings

The findings of the research are organized in the table below. As seen in Table 4.1, the examination and the analysis of the selected studies have been conducted. As well as the author(s), year of publication, title, grade, and summary of each article, the number of students in each study, the county in which the study took place, and other factors/mediators that were found in each study were recorded. This made it possible to see the trends in the research as well as any differences that might be the result of study or language differences.

Table 4.1

Summary of the Analysis of the Related Research Studies Findings

Author	Year	Title	Grade	Summary of research	n	Other Factors/Mediators	Country
Silinskas, Lerkkanen, Tolvanen, Neimi, Poikkeus & Nurmi	2011	The frequency of parents' reading related activities at home and children's reading skills during kindergarten and grade 1.	K-1	The researchers found a positive relationship between shared reading and student reading at the beginning of kindergarten, and a negative relationship between home literacy experiences in first grade.	1436	Teachers give more feedback about children's progress in first grade, leading parents to engage with struggling students.	Finland
Hartas	2012	Inequality and the home learning environment: Predictions about seven-year-olds' language and literacy.	1	Maternal education and maternal reading for pleasure positively correlated with student reading and writing scores, non-significant correlation between homework support and literacy activities and student outcomes. SES not a component in home literacy frequency.	9419	Child emotional and behavior regulation in school and reading a predictor of literacy ability	UK

Korat, Arafat, Aram & Klein	2013	Book reading mediation, SES, home literacy, and children's literacy: Evidence from Arabic speaking families	K-1	- Maternal mediation (paraphrasing) in storybook reading showed no relationship to student achievement. Home learning environment and number of resources in the home had the highest impact on student outcomes, more so in first grade than kindergarten. SES did not impact frequency of shared reading.	109	Arabic spoken language is different from written language	Israel
Manolitsis, Georgiou, & Tziraki	2013	Examining the effects of home literacy and numeracy environment on early reading and math acquisition.	K-1	Home literacy activities were positively correlated with student success in Kindergarten, however, frequency of activities in grade 1 was associated with lower reading scores.	90		Greece
Sénéchal & LeFevre	2014	Continuity and change in the home literacy environment as predictors of growth in vocabulary and reading.	K-2	Home literacy environment activities positively correlated with literacy ability for K-1st, negative for 2nd grade.	168	English speaking students in French schools, study measured English abilities	France

Cipeng, Silinskas, Wei & Georgiou	2015	Cross-lagged relationships between home learning environment and academic achievement in Chinese.	1-2	This study found a negative relationship between informal reading activities at home in both grades one and two.	202	No moderation with SES or gender	China
Moon & Hofferth	2016	Parental involvement, child effort, and the development of immigrant boys' and girls' reading and mathematics skills: A latent difference score growth model	K-2	This study examined the impact of the home environment on math and literacy scores of boys and girls in immigrant families. They found that boys benefited more from parental involvement in the early elementary years, while girls benefited more from a higher SES environment in the early elementary years.	2613	Immigrant families have varying levels on English, and children of parents who had better English skills tended to do well.	USA
Tichnor-Wagner, Garwood, Bratsch-Hines & Vernon-Feagans	2016	Home literacy environments and foundational literacy skills for struggling and nonstruggling readers in rural early	K-1	Both having literacy materials in the home and participating in shared storybook reading activities was positively correlated with higher reading scores.	1108	Being female, and having higher maternal education were associated with higher scores. Only 30% of families had more than	USA

		elementary schools.				50 children's books in the home.	
Chansa-Kabali	2017	Home literacy activities: Accounting for differences in early grade literacy outcomes in low income families in Zambia.	1	Formal literacy activities positively related to literacy outcomes, informal activities yielded no relationship.	72	Overall low literacy environments in the study	Zambia
Puglisi, Hulme, Hamilton & Snowling	2017	The home literacy environment is a correlate, but perhaps Not a cause, of variations in children's language and literacy development.	Pre-K to K	Maternal literacy skills were a predictor of storybook exposure, and storybook exposure was a predictor of language and reading ability. These gains disappeared once maternal education and occupation were accounted for. Formal literacy activities positively correlated to student success.	251	Study suggests genetic factor may influence student success more than home environment.	USA
Inoue, Georgiou, Muroya,	2018	Can earlier literacy skills have a negative impact on future home literacy	1-2	The study reported an overall shift from informal to formal literacy activities from grade one to grade two. Children's reading ability in grade one	142	Study indicates that higher educated mothers are more sensitive to their children's literacy	Japan

Maekawa & Parrila	activities? Evidence from Japanese.		was negatively correlated to parent involvement in grade two.		needs than mothers with less education.	
Liu, Georgiou & Manolitsis	2018 Modeling the relationships of parents' expectations, family's SES, and home literacy environment with emergent literacy skills and word reading in Chinese.	K	Parent expectations positively correlated with student word reading, as did number of books in the home. The number of books in the home correlated with SES.	143	Chinese uses characters rather than an alphabetical structure for the written word.	China

Note: n= Number of students.

Relationship between Home Environment and Student Success

As detailed in previous chapters, the home literacy environment is the culmination of all literacy factors students experience at home. The number of books in the home, the frequency in which an adult or older sibling engages the child in reading or literacy activities, and the type of literacy activities are all contributing factors that constitute the home literacy environment. Student success in literacy activities at school, or literacy ability, is made up of reading fluency and comprehension tests, vocabulary, writing, interest in reading, and other factors described in individual studies. Since all studies differ in what they used to measure student literacy ability, student success is a broad category that encompasses many traits.

Within the home environment there are two types of literacy activities: informal and formal (Sénéchal & LeFevre, 2002). Informal literacy activities are activities that are meant to increase student enjoyment and interest in reading, and often serve as a way for parents and caregivers to engage with their children. Informal literacy activities may include a parent reading a story to children, prompting a child to re-tell a story, and literacy songs like singing the “ABC’s”. Formal literacy activities, on the other hand, are strategic and meant to increase a student’s skill in reading or fluency. Informal literacy activities seem to have the most impact in kindergarten (Silinskas, Lerkkanen, Tolvanen, Neimi, Poikkeus & Nurmi, 2011; Tichnor-Wagner, Garwood, Bratsch-Hines & Vernon-Feagans 2016; Puglisi, Hulme, Hamilton & Snowling, 2017).

Informal literacy activities. Silinskas et al. (2011) completed a two-year longitudinal study of Finnish students starting in kindergarten and continuing to the end of first grade. Students were tested at the beginning and end of each school year, and parents were given surveys to detail the frequency and type of literacy activities conducted at home. The researchers

found a positive correlation between the frequency of storybook reading and reading fluency in kindergarten students.

Informal literacy activities like storybook reading contribute to student engagement with and interest in reading (Hartas, 2012; Tichnor-Wagner et al., 2016). Tichnor-Wagner et al. (2016) used surveys to interview the parents of 1,108 rural kindergarten and first grade students. In their questionnaire, they asked parents to detail how many literary resources they had in the home, including children's books and literacy games, how often they helped their children with homework, as well as how often they read to their children. The results indicate that parents of kindergarten and first grade students who read to their children more frequently were more likely to have non-struggling readers. This is valuable because it points to the importance of informal literacy activities in the early school years.

However, some studies did not see a relationship between informal literacy activities and student reading ability (Cipeng, et a., 2016; Chansa-Kabali, 2017). Cipeng et al. (2016) surveyed the parents of 202 Chinese first grade students. Items on the questionnaire included family background characteristics and the frequency and type of literacy activities done at home. The first grade students were then followed into second grade, to determine the effects of parental involvement and the home literacy environment in first grade. Their study reported that informal literacy activities had no effect on student outcome in first grade, and formal literacy activities were negatively correlated with student outcomes in second grade.

Chansa-Kabali's 2017 article examined the home literacy environment of children in Zambia. Her research study also asked parents of 72 first graders to complete a survey on parent background, literacy activities, and literacy resources. Children were tested at the beginning and end of first grade. The researcher found no correlation between reading picture books and

student literacy skills, indicating that in first grade informal literacy activities appear to be neutral in affecting student literacy ability. However, in Chansa-Kabali's (2017) study, teaching letters and other formal literacy activities had a positive effect on student outcomes.

Formal literacy activities. Formal literacy activities also tended to have a positive correlation with student reading ability in kindergarten and first grade (Manolitsis, Georgiou, & Tziraki, 2013; Sénéchal & LeFevre, 2014; Chansa-Kabali, 2017). Manolitsis et al., (2013) followed Greek children from kindergarten to first grade. Using a combination of surveys and student literacy and math scores, they predicted the ability of students in first grade in relation to parent formal literacy activities in kindergarten. Their study found that formal teaching of literacy skills in kindergarten correlated to higher literacy ability in first grade.

Manolitsis et al.'s (2013) study is similar to Sénéchal and LeFevre's (2014) study, which examined the home environments of English-speaking students and families in Québec, Canada. Sénéchal and LeFevre's 2014 study was unique because English speaking students in French speaking Québec schools were not taught English at school; all of their English literacy ability was learned at home. Like Manolitsis et al.'s study, formal literacy instruction in kindergarten accurately predicted children's English ability in first grade. Moreover, in Sénéchal and LeFevre's study, parents adapted their instruction as early as kindergarten to improve their student's ability. These two studies indicate that formal literacy activities in kindergarten are beneficial for students in first grade. Also beneficial for students are parent's positive attitudes about reading.

Attitudes and expectations. Parent attitudes about reading can contribute to children's ability (Hartas, 2012; Liu, Georgiou, and Manolitsis, 2018). Hartas's 2012 research study used a multi-level approach to determine student risk factors in education. Looking at SES, the home

environment, and maternal characteristics, Hartas (2012) studied the odds that UK first grade students would be at or below average in school. He found that “having a mother who read every day resulted in a 43% reduction in the odds of being rated below average in speaking and listening, 85% in reading and 80% in writing” (p. 868). Parents can impact their children by demonstrating an interest in reading and modeling literacy activities.

Liu et al. (2018) used surveys to gather data from the parents of 143 Chinese students on their literacy activities, income, and educational expectations for their child. Parent expectations of educational outcomes correlated significantly with actual child educational outcomes- parents who had high expectations of their children tended to have children who performed better on literacy tasks. Parent expectations and behaviors can be beneficial for students who use their parents as role models and literacy supports. Across all background levels, parents can support their children through positive attitudes about reading and supporting their children’s literacy acquisition.

The role of socioeconomic status. Interestingly, SES did not correlate to the frequency of informal literacy activities (Hartas, 2012; Korat et al., 2013; Tichnor-Wagner et al., 2016). Hartas (2012) found no difference in the frequency of storybook reading in his study of differences between high and low SES literacy environments. In Korat et al.’s 2013 study, which centered on Arabic speaking families, low SES families read books to their children at the same frequency as high SES families. These findings were mirrored in Tichnor-Wagner et al.’s (2016) research study of student in rural Southern parts of the United States. SES can impact how many literacy resources children have access to, however.

The number of literacy resources in the home (which is positively correlated to SES) tends to have a positive correlation with student literacy success (Moon & Hofferth, 2016;

Tichnor-Wagner et al., 2016; Liu et al., 2018). Moon & Hofferth's 2016 research study, which examined the home environment and gender differences in immigrant students, found that higher SES families had more resources. Girls in immigrant families were especially influenced by family SES in first and second grade. Tichnor-Wagner et al.'s research on rural low SES students found that only 30% of homes had more than 50 children's books. Access to resources can be an important part of children's literacy and is compounded by low income environments. However, literacy resources are only impactful if they are being used regularly. As Tichnor-Wagner et al. (2016) state "For parents, it was both what they *had* and also what they *did* that was related to reading outcomes." (p. 18). Some studies found a correlation between maternal characteristics and student literacy success.

Maternal factors. It seems that the mother's reading habits, education, and involvement in literacy activities matter in children's literacy success (Hartas, 2012; Tichnor-Wagner et al., 2016; Puglisi et al., 2017). Hartas (2012) found a clear link between how often mothers read (to themselves) and the chance that children would be rated as a nonstruggling reader. Puglisi et al. (2017) used maternal factors as one indicator of student success. Using three different assessment periods, the researchers assessed maternal language skills when children were 3.5 years old, the home environment when children were 4.5 years old, and finally the children's ability were 5.5 years old. Their research indicates that maternal literacy skills greatly predict the informal literacy activities that occur at home, and these informal literacy activities affect vocabulary. Direct instruction, or formal literacy activities, affects children's reading and spelling skills, once maternal factors are accounted for.

However, Korat et al. (2013) found no correlation between maternal mediation and literacy ability. Korat et al. (2013) focused on the home environment of 109 Arabic speaking

kindergarten and first grade students in Israel. Using both surveys and video recordings of mothers reading, the researchers analyzed the home environment and compared that with the child's literacy success at school. Their findings suggest that maternal mediation skills or paraphrasing of books (Arabic has different written and spoken languages) had no effect on student ability. Differences in language type can account for some of the differences in these research studies.

There are a great many variations in the home environment across grades and countries. Parental support and high expectations seem to have a positive effect on all students, regardless of location or age. In addition, most studies seem to suggest that informal literacy activities are positively associated with student success in kindergarten, and formal literacy activities are positively associated with student ability in kindergarten and first grade. The change of literacy activities from kindergarten to second grade is interesting, as we will read in the next section.

Change from Kindergarten to Second Grade

Once students enter first grade and second grade, the frequency and type of home literacy activities change (Inoue, Georgiou, Muroya, Maekawa & Parrila, 2018). Inoue et al.'s (2018) research study followed 142 Japanese students from first to second grade. The aim of the study was to determine how parent education and home literacy activities related to children's success in school. Parents were surveyed about their education and the frequency in which they initiated home literacy activities, while students were tested at the beginning of first and second grade. Their study found that overall, literacy activities decreased from first grade to second grade. Their study also found that how well a child did in first grade predicted how much their parents would be involved in second grade – higher performing students had parents who participated less in home literacy activities, while low performing students in first grade were more likely to

have parents who had higher levels of home engagement in second grade. The researchers concluded that this was likely due to parental sensitivity to the performance of their children.

Although frequency of both informal and formal literacy activities is positively correlated with student ability in kindergarten, formal literacy activities are negatively correlated in second grade, and sometimes in first grade (Silinskas et al., 2011; Manolitsis et al., 2013; Sénéchal & LeFevre, 2014; Cipeng et al., 2015; Inoue et al., 2018). Manolitsis et al. (2013) found that in first grade, home literacy activities are negatively correlated with student literacy ability. The more time parents spend on literacy activities with their children, the more likely their children struggle in reading. Similarly, Cipeng et al. (2015) reported that home literacy activities correlated negatively with child ability in second grade.

This change is partly due to the differing nature of activities that occur when the child is in school. Tichnor-Wagner et al. (2016) describe this as follows:

“Once children enter elementary school, they have direct reading instruction and hours of exposure to literacy throughout the school day; therefore, the role of families and home caregivers change in helping children develop foundational literacy skills is shared with and shaped by the school” (p. 9).

In kindergarten, much emphasis is placed on students being read to and learning their alphabet and sight words (Sénéchal & LeFevre, 2002). In first and second grade, students move on to more advanced reading activities, and more emphasis is placed on formal literacy activities (Silinskas et al., 2011; Manolitsis et al., 2013; Sénéchal & LeFevre, 2014). Moreover, teachers tend to give more feedback to parents in first and second grade and encourage parents to help their children more when their children are struggling (Silinskas et al., 2011). Silinskas et al. (2011) report that teachers in first grade give more feedback to parents about how to assist their

children, and parents of struggling readers may be more inclined to implement suggested strategies.

The negative correlation between the frequency of literacy activities and student success might come from a couple of factors. Firstly, most parents care about their children and want to help them when they notice their child is struggling (Silinskas et al., 2011; Manolitsis et al., 2013; Cipeng et al., 2015). Silinskas et al. (2011) report that teachers give more feedback in first grade, leading parents to engage more with children who need help. Secondly, parents who are intuitive to their children's needs modify the type of activities to benefit their child (Sénéchal & LeFevre, 2014, Inoue et al., 2018). Sénéchal and LeFevre's 2014 study of Canadian families found that parents adapt their teaching as early as kindergarten to meet the needs to their children. Inoue et al. (2018) noted that higher educated parents were more sensitive to modifying home instruction to help their children. The researchers found that although all parents increased formal literacy activities to help their struggling children, but parents with more education were better able to meet the needs of their children. This indicates that parent education is important a student's success. As well as the shift in frequency of activities from kindergarten to second grade, other factors influence student success.

Other Factors

"Other Factors" as initially conceived in the third research question proved to be too broad of a category to adequately cover in this paper. Because of this, more attention was placed on the first two research questions, which led to concrete research studies. The following section includes other factors of student literacy success described in research studies in this chapter's meta-analysis. The meta-analysis articles mainly focus on the home environment and the change

from kindergarten to second grade, however, several interesting factors were gleaned from the research studies.

Puglisi et al. (2017) suggest that genetic factors may play into student success more than we realize. Puglisi et al.'s (2017) longitudinal study followed 251 students considered at risk of dyslexia. Their study looked at maternal characteristics in prekindergarten and kindergarten (only findings from kindergarten were considered in this review) and found that genetic factors predicted children's literacy ability. They state:

“It is not solely the amount of literacy activity a child is exposed to that determines his or her early language and literacy development; it is also the linguistic ability of the parent ... who is providing the literacy environment at home” (p. 510).

Genetic factors influencing literacy ability can be passed down from parent to child, affecting the child's literacy ability. This finding was similar to Buckingham et al.'s (2014) study reviewed in Chapter Two, which concluded that genetic factors like predispositions to dyslexia can be passed down from parent to child. Buckingham et al. (2014) also found that genetic challenges affecting literacy were more common in low SES families. Parent literacy levels can also influence immigrant children.

In their study of immigrant families, Moon and Hofferth (2016) examined gender differences in the literacy ability of immigrant children. Their study used data from a national U.S. Early Childhood study to synthesize information about 2,613 children from immigrant families. They found that while boys tended to do better with more direct instruction, girls thrived in higher SES families, and were not as impacted by direct instruction. The variability in student literacy success, however, was also impacted by the reading and speaking ability of the parents. Gender differences were also found in Inoue et al.'s (2018) study, which showed that

higher educated parents of boys were more sensitive to their children's needs, and Tichnor-Wagner et al.'s (2016) study, which found that girls did better than boys overall on literacy tasks. All these factors together contribute to the literacy success of early elementary students.

Conclusion

This chapter discussed the findings of this secondary research study in order to answer the research questions. Both informal and formal literacy activities were positively correlated with student literacy success in kindergarten. Starting in first grade, the changing school environment leads parents and caregivers to either increase or decrease their home literacy activities depending on how their child is doing. If their child is doing well, most families decrease their involvement. If their child is struggling, most families increase their involvement. The relationship between the home literacy environment and student success, the reasons for the changes in number and type of literacy activities from kindergarten to second grade, and other factors influencing student success were discussed. The next chapter will offer a summary of the secondary research paper as well as implications for further research.

Chapter V: Conclusion

Introduction

Over the course of this secondary research study, the importance of the home literacy environment in student literacy success, including SES and other factors has been discussed. The main questions of the study, including how the home environment impacts student literacy ability, how the home literacy environment changes from kindergarten to second grade, and what other factors influence student success, have been expanded upon. This chapter offers a conclusion to the paper, including a discussion of the findings of the literature analysis, limitations of the study, suggestions for further research, and a personal reflection.

Discussion of the Findings

The three research questions this secondary research study sought to answer were:

- What is the relationship between the home literacy environment and student literacy success?
- How does the home literacy environment change from kindergarten to second grade?
- What other factors play a part in the literacy abilities of kindergarten through second grade students?

In line with the literature review, the research suggests that the home environment is important for forming early literacy interest in kindergarten. The relationship that parents have with reading and their interest in it is passed down to children through informal activities and modeling of reading. SES did positively correlate with the number of literacy resources like books in the home, and the number of resources in the home positively correlated to literacy ability. Even though lower SES parents and caregivers report reading to their children at the

same rate as higher SES families, the disparity between access to materials can impact student success. However, parents of any SES level can still increase their child's literacy ability by being available and supportive when their child needs help.

The findings of the research indicate that the home literacy environment changes from kindergarten to second grade in response to the changing literacy activities that occur at school. Although informal literacy activities like shared picture book reading positively correlate to literacy in kindergarten, informal literacy activities tend to decrease once the child reaches first and second grade. Formal literacy activities, which include focused efforts to improve reading ability, increase at this time, especially for students who are struggling. The negative correlation between formal literacy activities in second grade is not due to the inefficiency of parents, rather it is due to the involvement that parents have in their child's life. Moreover, the increased feedback from teachers about school progress in first and second grade spurs parents to increase formal literacy activities designed to increase reading skills with students who need help.

Other factors of literacy ability include genetic factors and parent ability. Parents who have learning impairments like dyslexia may pass on their genes to their children, setting them up for difficulties in reading. Other genetic factors that restrict aptitude for reading can affect children's literacy abilities. If children come from immigrant families, the support that they receive at home is limited by the English ability of their parents. Like in Chapter Two's literature review, non-standard forms of English spoken at home may reflect an inaccurate picture of literacy ability.

Limitations of the Study

There is a scarcity of papers that have been published in the last decade that examine the impact of the home literacy environment on school age children, although there are many papers published about preschool children. Ten years was the recommended amount of time suggested by culminating project committee members in order to present a current understanding of educational standards and knowledge. As a researcher with only reading fluency in English, I was not able to use research articles written in other languages, which may have impeded the ability of the study to garner knowledge from all relevant articles.

Twelve articles were chosen for analysis because this number allowed for a full analysis of each article while being conscious of time and ability constraints. Because I could not find twelve articles that dealt solely with the home environments of kindergarten through second grade children in English speaking countries, some of the articles were focused on children in countries that spoke different languages, some of which had different writing and speaking systems. This may have affected the ability of the study to measure the same standards. Finally, because many of the studies used surveys to report on the home literacy environment, there are could be larger than normal study errors.

Implications

When considering the home environment, it is important to remember that surveys, which were employed by many studies as a means of gathering data, can only capture so much of the dynamic between a child and the parent/caregiver. The relationship between a child and adults at home is always changing and cannot be captured by single interviews or brief home visits. Informal literacy activities in kindergarten correlate positively with student ability in kindergarten, indicating that reading picture books increases interest and motivation for reading.

In first and second grade, the changing literacy environment triggers a change in the home environment, leading to more formal literacy activities.

Actual literacy ability differs even among students from high SES and high literacy backgrounds. What appears to be a decline in student ability as a result of increased parent literacy activities may be parents trying to help their struggling student by providing more opportunities for practicing literacy skills. In terms of parenting differences, SES does not predict how often parents read to their children, and It is good to know that parents everywhere understand the importance of reading to their children, especially in the early years. Although parents can and do try to help their children by increasing the frequency of formal literacy activities when their child is struggling, it is important to remember that their efforts are impacted by their own genetic makeup, environment, and literacy ability.

Efforts to increase the frequency of literacy activities between parents and children in elementary school should change focus from simple storybook reading, which is an informal literacy activity, to increased formal literacy activities like guided reading practice and other activities designed to improve reading skills. Teachers and school administrators should develop ways of instructing parents of struggling readers with best practices to foster reading ability and literacy success.

Personal implications to this study include the importance of supporting all students and providing high quality resources to low SES families. Although our family is not considered high SES, I still have many literacy resources and children's books in our home. As a mother who has reached the graduate level of education, theoretically my daughter and subsequent children will have an advantage in literacy ability. However, several of my family members have dyslexia, and genetic factors might influence my daughter's reading. Having high expectations regarding

literacy standards for my daughter and being available when she needs help can aide her in her reading ability.

Suggestions for Further Research

As this study examined students in varying environments, it would be useful to complete a secondary research study strictly focusing on students in English speaking countries, possibly incorporating findings from preschool. It would also be interesting to complete a literature review on the specific changes from kindergarten to second grade that make formal literacy activities more necessary. A longitudinal study following students from preschool to fifth grade measuring the changes of the home environment would shed more light on the activities that take place at home.

A further literature review on genetic factors such as dyslexia and low birth weight influencing literacy success in elementary school would be helpful in discovering how much of student literacy ability is determined by genes, and how much is influenced by the environment they grow up in. While we cannot change children's genes, we can encourage change in the home environment by providing parents and caregivers with the necessary skills and training programs to help their child succeed. By determining the genetic factors that influence literacy ability, parents will also be able to evaluate the potential setbacks that their children experience in order to prepare for them.

Conclusion

In this secondary research paper, the relationship between the home literacy environment and the literacy ability of early elementary students was examined. Previously published studies were reviewed, and the findings of the research indicate that informal literacy activities (like shared storybook reading) in kindergarten increase student's reading ability. In contrast, once a

student reaches first and second grade, the changing nature of reading activities at school subsequently changes the nature of literacy activities at home. Parents and caregivers shift from informal activities like picture book reading to formal activities designed to engage their child in reading and literacy skills. There is a negative correlation between how often parents and caregivers participate in literacy activities at home and how well their first or second grader does in reading – the research suggests this is largely due to parents and caregivers noticing that their child is struggling and devoting more time and effort to teaching literacy skills. Genetic factors and maternal education may also play a part in literacy ability. Further research into how genetics affect literacy ability is recommended.

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* Indicates studies used in Chapter Four's meta-analyses.