

RE-EXAMINING THE INTUITIVE: READING ALOUD AND
KINDERGARTENERS' EMERGENT LITERACY

by

T. LEE WILLIAMS

(Under the Direction of James F. Baumann)

ABSTRACT

The purpose of my study was to address the research question: What is the relationship between reading aloud and the emergent literacy of kindergarten students? My goal was to empirically evaluate the often-cited claim that reading aloud to young children is “the signal most important activity for developing knowledge required for eventual success in reading” (Anderson, Hiebert, Scott, & Wilkinson, 1985). I examined a pre-existing read-aloud intervention program designed by a school media specialist, in collaboration with the kindergarten teachers, as a way to promote kindergarten students’ exposure to books, appreciation for reading, and development of early literacy knowledge and skills.

Participants included 46 kindergarten students in a suburban public school. The students represented a mix of gender, race, and abilities. Although reading aloud is one of the most discussed topics among early childhood literacy researchers, I was motivated to conduct this study by the large, but somewhat ambiguous research on the outcomes of read alouds. I believed there was an opportunity to help teachers, parents, and media specialists better understand the potential benefits of reading aloud to young children as well as one specific intervention designed to support this practice. There were three key

ways that my study sought to uniquely contribute to the literature: (a) by employing a more precise measure of read-aloud frequency, (b) by evaluating the possibility of a threshold effect for the number of books read aloud to children, and (c) by expanding a broader dependent measure to tap both cognitive and affective dimensions of emergent literacy. The findings from both the quantitative and descriptive data collected as part of my study offered important insight into my research question.

INDEX WORDS: Reading aloud, emergent literacy, reading interventions, home-school reading

RE-EXAMINING THE INTUITIVE: READING ALOUD AND
KINDERGARTENERS' EMERGENT LITERACY

by

T. LEE WILLIAMS

B.S., Auburn University, 1995

M.A.Ed., University of Alabama at Birmingham, 1998

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial

Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2007

© 2007

T. Lee Williams

All Rights Reserved

RE-EXAMINING THE INTUITIVE: READING ALOUD AND
KINDERGARTENERS' EMERGENT LITERACY

by

T. LEE WILLIAMS

Major Professor: James F. Baumann

Committee: Donna E. Alvermann
Linda D. Labbo

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
December 2007

DEDICATION

This dissertation is dedicated to the three most important men in my life: my father, Robert Lee, for valuing education; my husband, Brian, for his help in every way; and my son, George, for being a good sleeper so I could write.

ACKNOWLEDGEMENTS

There have been many people who have helped in both large and small ways to make this dissertation a reality. First, I offer my most sincere thanks to my chair, Jim Baumann, who has coached me through the entire process. He has spent countless hours advising, editing, and listening. His knowledge of the APA manual is mind-boggling, and I'm still convinced that he alone may have secretly authored it. I have benefited from his wisdom, but have also been grateful for his kindness as well. He is the nicest and most sincere man that I know. In addition, I also wish to thank the other members of my committee, Donna Alvermann, and Linda Labbo, who have challenged me in the most nurturing way.

Although my committee played a very big role in the shaping of the dissertation, there are also several others at the University of Georgia who took care of me in different ways. I wish to thank the departmental secretary, Dee Palmer, for her sunny disposition and her fairy-godmother-like ways of making things happen when you need them. Next, I thank Bobbie Ray, the departmental accountant, who cheerfully helped me find funding for conferences, and then helped me sort out all the paperwork when I returned. I also wish to thank Becky Hendren, the degree specialist, who knows everything about registration and who has helped me to sort out my schedule on more than one occasion.

This dissertation would not have been possible without the invitation to conduct research in a real school. I am indebted to Nancy Baumann for her willingness to allow me to study the program that she designed. I appreciate the cooperative spirit of the five

kindergarten teachers at Barnett Shoals Elementary School who allowed me access to their students and to the students' records.

My family has always been very supportive of my education, and I am grateful. Thanks to my parents, Robert and Jeanette Lee, who never really understood the whole process, but encouraged me along the way; to my mother-in-law, Beth, who is always proud of me; and to my siblings, Cindy, Jeffrey, and Jason, who are simply glad that I will finally be finished with school.

Most importantly, I wish to thank my husband, Brian, who has been my loudest cheerleader, my staunchest critic, and my best editor. I couldn't have done it without you.

TABLE OF CONTENTS

| | Page |
|---------------------------------------|------|
| ACKNOWLEDGEMENTS | vii |
| LIST OF TABLES | xi |
| LIST OF FIGURES | xii |
| CHAPTER | |
| 1 Importance of the Study | 1 |
| Research Question | 3 |
| Significance of Study | 4 |
| Organization of Dissertation | 4 |
| 2 Literature Review..... | 6 |
| Conceptual Background | 6 |
| Background Literature..... | 11 |
| Rationale and Research Question..... | 23 |
| Summary | 24 |
| 3 Method | 26 |
| Design and Overview of the Study..... | 26 |
| Preliminary Field Work..... | 30 |
| Data Collection..... | 31 |
| Summary | 38 |

| | | |
|---|--|-----|
| 4 | Results..... | 39 |
| | Participants | 39 |
| | Quantitative Data Analysis..... | 40 |
| | Descriptive Analysis..... | 49 |
| | Summary | 60 |
| 5 | Summary, Discussion, Limitations, and Implications | 62 |
| | Summary | 62 |
| | Discussion | 66 |
| | Limitations..... | 78 |
| | Implications for Practice | 80 |
| | Implications for Research..... | 84 |
| | Conclusion..... | 87 |
| | REFERENCES | 88 |
| | APPENDICES | 99 |
| A | APPENDIX A READING LOG..... | 99 |
| B | APPENDIX B STUDENT PERMISSION FORM..... | 102 |
| C | APPENDIX C CHILDREN’S MOTIVATION TO READ SURVEY..... | 104 |
| D | APPENDIX D STUDENT INTERVIEW GUIDE..... | 109 |
| E | APPENDIX E PARENT SURVEY | 111 |
| F | MEDIA SPECIALIST INTERVIEW GUIDE..... | 113 |
| G | STUDENT READING MATERIAL RECALL | 115 |

LIST OF TABLES

| | Page |
|--|------|
| Table 2.1: Research on Read-Aloud Frequency and Literacy Outcomes..... | 13 |
| Table 2.2: Representative Sample of Read-Aloud Frequency Measures..... | 21 |
| Table 3.1: Cognitive DV: Literacy Items from State Kindergarten Performance Assessment..... | 33 |
| Table 3.2: Variables and Measures Used in Regression Analysis..... | 36 |
| Table 4.1: Ethnicity of the School and Sample..... | 40 |
| Table 4.2: Descriptive Statistics for Continuous Quantitative Variables | 41 |
| Table 4.3: Pearson Bivariate Correlations for Continuous Quantitative Variables | 41 |
| Table 4.4: Multicollinearity Test of Independent and Control Variables..... | 43 |
| Table 4.5: Linear Regression 1: Read-Aloud Frequency and Cognitive Emergent Literacy | 45 |
| Table 4.6: Linear Regression 2: Read-Aloud Frequency and Affective Emergent Literacy | 46 |
| Table 4.7: Curvilinear Regression 1: Read-Aloud Frequency and Cognitive Emergent Literacy | 47 |
| Table 4.8: Curvilinear Regression 2: Read-Aloud Frequency and Affective Emergent Literacy | 49 |
| Table 4.9: Read-Aloud Reader Profile..... | 54 |

LIST OF FIGURES

| | Page |
|---|------|
| Figure 4.1: Distribution of Number of Books Read Aloud | 42 |
| Figure 4.2: Distribution of Read-Aloud Materials Recalled by Students | 56 |
| Figure 4.3: Read-Aloud Materials Reported by Parents | 58 |

CHAPTER 1

IMPORTANCE OF THE STUDY

Reading aloud to young children is one of the most frequently endorsed literacy practices in the United States. Promoted by researchers, classroom teachers, and the popular press, reading aloud to children is considered a basic tenet for early literacy success. The influential *Becoming a Nation of Readers* (Anderson, Hiebert, Scott, & Wilkinson, 1985) proclaimed that reading books aloud to children is “the single most important activity for building the knowledge required for eventual success in reading” (p.33).

In response to the assumed benefits of reading aloud, teachers have embraced this practice. Morrow and Brittain (2003), for example, found that 96% of the 500 prekindergarten and kindergarten teachers that they surveyed reported reading aloud to their students at least five times per week. The frequency of home read alouds is also significant, with government surveys reporting that 60% of American children between the ages of three and five are read to by a family member at least once a day (Federal Interagency Forum on Child and Family Statistics, 2006).

In addition to reports on the value and prevalence of home and school read alouds, there is a large body of research on reading aloud. According to Sulzby and Teale (1991), read alouds have received more attention by researchers than any other topic in the reading field. Hoffman, Roser, and Battle (1993) observe that there may be no more consistent belief in the literacy community than of the value of reading aloud to young

children. Read-aloud research has addressed multiple aspects of the phenomenon, including the impact of read alouds on children of different ages (e.g., Senechal, LeFevre, Hudson, & Lawson, 1996) and SES populations (e.g., Dickinson & Smith, 1994) as well as various teacher read-aloud practices (e.g., Fisher, Flood, Lapp, & Frey, 2004) and intervention strategies (Lovelace & Stewart, 2007).

The results of many studies suggest that the increased frequency of reading aloud with young children is correlated with improvements in literacy performance. Research findings suggest an association between reading aloud and such literacy outcomes as language development (e.g., Crain-Thoreson & Dale, 1992), phonemic awareness (e.g., Sonnenschein & Munsterman, 2002), and comprehension (e.g., Dickinson & Smith, 1994). Likewise, correlational and experimental studies by Senechal and colleagues (e.g., Senechal, LeFevre, Hudson, & Lawson, 1996; Senechal, LeFevre, Thomas, & Daley, 1998; Senechal, Thomas, & Monker, 1995) found that read alouds appear related to alphabet knowledge, word recognition, and concepts of print. Further, longitudinal research by Wells (1987) revealed that the difference in the frequency with which children were read to best explained variance in their individual achievement at the end of the elementary school years.

On closer inspection, however, these findings may not be as compelling as commonly accepted, especially given the substantial emphasis and endorsement of read alouds (Lonigan & Whitehurst, 1998). There are equivocal findings across various studies on the benefits of reading aloud, including those with and without interventions designed to enhance the read-aloud experience. For instance, after examining more than three decades of research, Scarborough and Dobrich (1994) reported that evidence

supporting the benefits of reading aloud with young children is mixed at best, accounting for 7% of the variance in the development of language and literacy skills.

Another meta-analysis of more than 30 read-aloud studies by Bus, van IJzendoorn, and Pellegrini (1995) revealed a similar positive, but limited, correlation with literacy performance. In the case of certain outcomes, such as vocabulary development, Beck and McKeown (2007) observe that convincing support for the benefits of reading aloud alone is “nonexistent to unimpressive”(p. 252). Perhaps even more surprising, Meyer et al. (1994) reported that some studies have found a negative relationship between reading aloud and kindergarten reading achievement. These authors concluded that reading aloud to children has achieved a level of “mystique” and “lore” that may not be supported by research. Lonigan (1994) warned that the read-aloud literature should be viewed with “significantly more suspicion and interpreted more cautiously” (p. 318) than has been the case in literacy research and practice.

Research Question

In response to the mixed or limited empirical findings on the effects of reading aloud to children, my dissertation revisits this mainstay of early literacy. Specifically, my study seeks to provide additional understanding of the potential benefits of reading aloud by addressing the following research question: What is the relationship between read-aloud frequency and the emergent literacy of kindergarten students? As part of this effort, I attempt to address a number of methodological shortcomings found in previous read-aloud studies. My dissertation is responsive to multiple calls for additional research on the association between reading aloud and emerging literacy performance (e.g., Lonigan, 1994; Scarborough & Dobrich, 1994; Whitehurst & Lonigan, 1998).

Significance of Study

I believe that this study has the potential to contribute to the reading literature in at least three ways. First, it represents the opportunity to re-examine a core assumption in reading research and practice by addressing a number of methodological shortcomings found in previous read-aloud studies. Specifically, I attempt to employ a more precise measure of home book-reading frequency than typically found in past related research.

Second, my study seeks to evaluate the possibility of a threshold effect for the number of books read aloud to children (Lonigan & Whitehurst, 1998). In other words, is there some minimum frequency of books read aloud after which there are no significant additional effects? Although such threshold effects are a common pattern in social science research (Trochim, 2001), I am not aware of any prior read-aloud studies that have assessed the potential for non-linear associations.

Finally, I attempt to evaluate the association between reading aloud with a broader measure of emergent literacy. Typically, past research into reading aloud has examined only a narrowly focused set of literacy outcomes (e.g., vocabulary development). In contrast, my study examines an array of *cognitive* emergent literacy components, including comprehension, phonemic awareness, word recognition, concepts of print as well as the *affective* component of reading motivation.

Organization of Dissertation

In this chapter, I provided a brief introduction to my study and its importance. I organize the remainder of my dissertation in the following manner. In Chapter 2, I provide an overview of the theoretical perspective that informs my study and I review the major themes of the extant read-aloud literature. In Chapter 3, I present my research

methodology, including details of the setting, participants, data collection procedures and measures, and analytical approach. In Chapter 4, I report the results of my analysis.

Finally, in Chapter 5, I discuss the results, addressing potential limitations, contributions to research and practice, and future research opportunities.

CHAPTER 2

LITERATURE REVIEW

In this chapter, I present the theoretical framework used to guide my dissertation and provide a review of the relevant read-aloud literature. In my literature review, I highlight the ambiguous and sometimes incongruent empirical support for the association between reading aloud and important early literacy outcomes. In particular, I note a number of potential methodological shortcomings found in past read-aloud research. I conclude this chapter by providing the rationale for my research and stating my research question.

Conceptual Background

Cognitive apprenticeship (Brown, Collins, & Duguid, 1989) provides a theoretical perspective to better understand how kindergarten students' emergent literacy might be enhanced by read alouds. *Cognitive apprenticeship* is a model of instruction that seeks to "make thinking visible" (Collins, Brown, & Holum, 1991). In traditional apprenticeship, a tangible skill, such as cabinet making, is transferred through observation and practice. In such an example, the expert cabinet maker demonstrates to the apprentice the steps involved in building the cabinet. As part of this exercise, the apprentice directly observes the cabinet maker building the cabinet from start to finish. Typically, the apprentice will practice first crafting small portions of the cabinet under the supervision of the expert. Finally, the expert will gradually release the building of the entire cabinet to the

apprentice. After a period of observation and supervision, the apprentice is able then to build the entire cabinet independently.

Like traditional apprenticeship, interpersonal interaction is a fundamental feature of cognitive apprenticeship (Collins, Brown, & Holum, 1991). Active, rather than passive, participation by the novice in the learning process is essential in order for learning to take place. However, cognitive apprenticeship differs from traditional apprenticeship in a number of other ways. Because cognitive apprenticeship involves the intangible, the expert faces the challenge of making his thinking visible to the novice. The expert must also teach the subcomponents of an abstract task (i.e., phonemic awareness, phonics, word recognition, comprehension strategies) so that the larger cognitive goal (i.e., independent reading) may be reached (Stahl, 1998). Cognitive apprenticeship also requires that a wide-range of skills be presented within a context that the tasks will be experienced (Collins, Brown, & Holum, 1991). Contextualized learning enables a novice to see the need and the purpose of the learning.

Researchers have identified six components of cognitive apprenticeship (Collins, Brown, & Holum, 1991). These components may be reflected in many typical read-aloud experiences. *Modeling* requires an expert to perform a task so that the apprentice can watch and create a conceptual model of the steps required in order to accomplish the task. In the case of reading aloud, the expert might read the text using a character voice, but may point out different features, such as the pictures, in her regular voice. *Scaffolding* is the assistance provided by the expert to help the novice execute the task. In read alouds, the expert may read a text that is beyond the instructional reading level of the apprentice, but then provide support for the parts of the book that the novice may not yet be able to

read independently. *Coaching* includes providing feedback to novices while they carry out a task, offering reminders and hints designed to increase their performance to the level of an expert. In reading aloud, the expert may provide cues for sounding out a difficult word that the novice encounters. *Articulation* invites the novice to discuss her process of thinking. In reading aloud, the expert may ask the novice to explain how irony may play itself out through the pictures of a text. *Reflection* encourages the novice to compare her own process of approaching a task to the process of an expert. In the context of reading aloud, a novice may read with a certain dialect because she has heard it read that way from an expert. Finally, *exploration* involves a novice attempting a task independently, and solving problems on his own. In reading aloud, a novice may begin to read books independently or begin to read entire books to the expert.

Although all six of these components make up the cognitive apprenticeship model, they may be categorized into three groups (Collins, Brown, & Holum, 1991). The first three (modeling, scaffolding, and coaching) represent the essence of cognitive apprenticeship. They are intended to help students acquire a particular set of skills through guided practice and observation of an expert. The second two (articulation and reflection) involve helping students to focus their observations and to internalize their own problem-solving processes. Exploration, the final component, encourages student to be autonomous in not only applying problem-solving processes, but also initiating or designing the problem to be solved.

Cognitive apprenticeship as applied to parents reading aloud to their children also has connections to several literatures in reading education. The cognitive strategy instruction literature (e.g., see Duffy, 2003; Pressley, 2006), which the teacher (or in the

case of read alouds, the parent) provides explanation, modeling, guided practice, and independent practice in the skill or strategy under consideration. Cognitive strategy instruction also has a strong metacognitive component such that the knowledgeable other (teacher, parent) provides the learner explicit and tacit insight into the process of reading or listening to a text.

Another reading education literature that is relevant is the work on literacy balance. For example, Pearson, Raphael, Benson, and Madda (2007) articulate a model of balance that includes various contextual factors, which they refer to collectively as *ecological balance*. Especially relevant to cognitive apprenticeship are the factors of authenticity of the literacy task, the discourse involved, and the role of the teacher (or parent). Although Pearson et al. address ecological literacy balance in the context of reading instruction in classrooms, their notions of the importance of authenticity, discourse, and role of the teacher (parent reader) are critical in achievement a productive educational experience.

The cognitive apprenticeship model has its origins in the work of Vygotsky (1978). In Vygotsky's view, a child constructs knowledge within a social context; different contexts create different forms of development. Vygotsky proposed that a child's key cognitive processes develop through socially mediated interactions (Wertsch, 1991). From this perspective, language becomes the key medium for the transmission and transformation of knowledge (Lee & Smagorinsky, 1999), and may assume multiple forms. In one form, language may be social, such as when a parent instructs a child how to perform a specific task. Vygotsky also suggested that children may then engage in private speech whereby they use the parent's instructions to direct their own behavior.

Such private speech may then become fully internalized as thought processes. Cognitive development occurs when children use this internalized speech to plan and organize their behavior.

Cognitive apprenticeship also draws from Vygotsky's concept of the zone of proximal development (ZPD), the difference between a child's level of actual ability and her or his potential ability. ZPD conveys that less-experienced individuals (e.g., children) learn from more experienced individuals (e.g., adults) through scaffolding. In this sense, scaffolding is a way that the adult supports the child's acquisition of a particular task by allowing the child to experience the task in smaller subcomponents. Breaking a larger task into smaller pieces prevents the child from being overwhelmed by the entire task at once. In comprehension strategy instruction, for example, Pearson and Gallagher (1983) used the phrase "gradual release of responsibility" to describe instruction that proceeded from modeling, to guided practice, to activities that eventually allowed the student to become an independent learner.

In summary, cognitive apprenticeship provides a theoretical perspective to understand the potential benefits of reading aloud on the literacy development of children. Although cognitive apprenticeship has not been applied to the act of parent read alouds, drawing from the cognitive apprenticeship model and literature to undergird the present study is appropriate given that effective read aloud practices (e.g., Van Kleeck, Stahl, & Bauer, 2003) parallel the essence of cognitive apprenticeship. Thus, reading aloud to young children can be viewed as a form of cognitive apprenticeship because the more skilled reader, such as a parent, caregiver, other adult, or older student, models the reading process (Stahl, 1998). Through the dialogue and interaction that often accompany

read alouds, the child gains a better understanding of the abstract aspects of reading. The routine and predictable patterns associated with read alouds help children to gradually assume greater responsibility for the reading experience (Sulzby & Teale, 1991). Thus, the authentic, contextualized, and repeated experience of the read aloud may be a key way to enhance the literacy development of emergent readers.

Background Literature

Reading to children is to literacy education as two aspirins and a little bed rest were to the family doctor in years gone by. Students have an impoverished vocabulary? Read to them. Students struggling with comprehension? Read to them. Students beset with negative attitudes or lacking in motivation? Read to them. Students have second language acquisition problems? Read to them. Reading to children has also been described as a preventative measure: Want to ensure children's success in school? Want your children to read early? Read to them. (Hoffman, Roser, and Battle, 1993, p. 496).

As implied by the above quote from Hoffman et al. (1993), there may be no more consistent belief in the literacy community than the value of reading aloud to young children. More than 50 years ago, researchers began to formally assess the associations between read alouds and various dimensions of early literacy development (Bus, van IJzendoorn, & Pellegrini, 1995; Scarborough & Dobrich, 1994). Within this literature, many terms are used to describe the phenomenon, including, *reading aloud* (e.g., Lonigan & Whitehurst, 1998), *storybook reading* (e.g., Sulzby & Teale, 1991), *joint book reading* (e.g., Bus, van IJzendoorn, & Pellegrini, 1995), and *read aloud* (e.g., Wood & Salvetti, 2001), the term used in this dissertation.

Despite the varying terminology, the research on reading aloud to children shares a common focus on at least three core components of a read-aloud event: a child, a book, and a more capable reader (Martinez & Roser, 1985). Many studies involve one-on-one reading in the home (e.g., Crain-Thoreson & Dale, 1992; Gest, Freeman, Domitrovich, &

Welsh, 2004; Mason, 1980; Roberts, Jurgens, & Burchinal, 2005), and there is a considerable number involving one-to-many or small-group read alouds in classroom settings (e.g., Aram & Biron, 2004; M. H. Brown, Cromer, & Weinberg, 1986; Ukrainetz, Cooney, Dyer, Kysar, & Harris, 2000).

Table 2.1 provides a representative list of studies that address potential benefits of reading aloud. As illustrated by the table, research on read alouds has employed a variety of methodologies. Correlational studies have been the most common, although experimental designs have been frequently used as well. Researchers have also employed observational and other descriptive methods in a limited number of cases. Table 2.1 also reveals that researchers have focused on many different dependent variables in read-aloud research, including oral language growth (DeBaryshe, 1993), story comprehension (Dickinson & Smith, 1994), and knowledge of print (G. Wells, 1985), with young children's vocabulary development being one of the most active research topics (Senechal, LeFevre, Hudson, & Lawson, 1996; Senechal, Thomas, & Monker, 1995). Interestingly, affective measures of emergent literacy, such as reading motivation, are notably less common.

Beyond the relationship between read-aloud frequency and early childhood literacy outcomes, researchers have addressed other aspects of the phenomenon, including nature of different parent-child interaction behaviors (Bus & van IJzendoorn, 1995), varying responses to familiar and novel books (Goodsitt, Raitan, & Perlmutter, 1988), and the use of classroom read alouds in upper elementary grades (Dreher, 2003; Ouellette, Dagostino, & Carifio, 1999).

Consistent with the cognitive apprenticeship model used in this dissertation, most read-aloud studies employ a Vygotskian theoretical perspective, with a primary emphasis on the notion of scaffolding (Fletcher & Reese, 2005). In many read-aloud experiences, a more capable reader guides the child to understand various aspects of reading that include basic book handling skills, vocabulary, and story structure. The more capable reader is typically an adult (e.g., a parent or a teacher), but it may also be another child in a higher grade level. Adopting a Vygotskian theoretical perspective in reading aloud assumes that the more-skilled reader understands the current abilities of the child and then works to help the less-developed reader close the gap in the ZPD (Fletcher & Reese, 2005).

TABLE 2.1

Research on Read-Aloud Frequency and Literacy Outcomes

| Study | Participants | Setting | DV or Outcome | Findings |
|------------------------------|--|---------|------------------------------|--|
| Crain-Thoreson & Dale (1992) | 25 children, 20 months of age | Home | emergent literacy | frequency of story reading was related to children's language ability at ages 2.5 and 4.5 as well as print conventions at age 4.5; not related to certain vocabulary and phonological scores |
| Denton & West (2002) | 22,000 kindergarteners randomly selected across the U.S. | Home | developmental reading skills | 16% difference on beginning sounds; 25% difference on ending sounds; 46% difference on sight words; 60% difference on words in context |

| | | | | |
|---|--|--------------------|-------------------------------------|--|
| Dickinson & Smith (1994) | 25 classes of four year-olds | classroom | vocabulary | significant relationship, strong predictive power for vocabulary ($R^2=.25$) and comprehension ($R^2 = .12$) |
| Dunn (1981) | 40 children, 57-69 months of age | Home | vocabulary | no relationship between reading and student achievement scores; only educational TV and direct teaching of math were significant |
| Gest, Freeman, Domitrovich & Welsh (2004) | 76 kindergarten children and their caregivers | Home | emergent literacy | shared book reading associated with language comprehension skills for children whose parents use non-directive reasoning in discipline |
| Hargrave & Senechal (2000) | preschoolers | classroom | vocabulary | no relationship between frequency and vocabulary |
| Lonigan & Whitehurst (1998) | 91 three and four year-olds from low-income families | home and classroom | vocabulary and oral language skills | children involved in both reading interventions (school and home, and home only) scored highest on the post-test |
| Mason (1980) | 38 preschool children | Home | word reading level | nonsignificant relationship between home reading frequency and word recognition |

| | | | | |
|--|--|-----------|----------------------------------|--|
| Meyer, Wardrop, Stahl & Linn (1994) | 650 k-grade six students | Classroom | literacy performance | negative relationship between frequency of kindergarten teacher read alouds and reading achievement |
| Penno, Wilkinson & Moore (2002) | 47 students ranging in age from 67 to 97 months | classroom | retelling | children acquired new vocabulary, but intervention was not sufficient to overcome Matthew Effect (higher ability children made greater vocabulary gains than lower ability children) |
| Robbins & Ehri (1994) | 51 kindergarten students | classroom | vocabulary | children recognized more vocabulary words from the story read than words not appearing in the story, suggesting that read aloud is effective for building vocabulary |
| Roberts, Jurgens, & Burchinal (2005) | 72 African-American children ages 18-54 months of age | Home | vocabulary and emergent literacy | no correlation between frequency and literacy outcomes |
| Senechal, LeFevre, Hudson, & Lawson (1996) | 119 three-six year-olds in Canadian daycare and nursery school | Home | vocabulary | both parents' and children's knowledge of storybook titles explained 13% of parent and 3% of child variance in vocabulary scores |

| | | | | |
|---|---|-----------|------------------------------------|---|
| Senechal, LeFevre, Thomas, & Daley (1998) | 110 kindergarten and 58 first graders | Home | oral language and written language | home literacy practices have a statistically significant relationship with oral language skills, but not written language skills |
| Senechal, Thomas & Monker (1995) | 32 Canadian four year-olds | classroom | vocabulary | more active reading (pointing, labeling) increased vocabulary acquisition |
| Smetana (2005) | 27 kindergarten students | classroom | story retelling | improvement in retelling |
| Sonnenschein & Munsterman (2002) | kindergarten students | Home | storybook reading frequency | significant relationship with phonemic awareness and orientation toward print; non-significant relationship with comprehension and reading motivation |
| Wasik & Bond (2001) | 127 four year-olds (low SES) | classroom | vocabulary | more interactive book reading appears to improve vocabulary development |
| Wasik, Bond & Hindman (2006) | 207 two to four year-olds, 98% African-American | classroom | vocabulary | children with interactive style of reading perform better on vocabulary measures |

Evaluating the Research Findings

Despite the conventional wisdom regarding the value of reading aloud to children, the intuitive appeal of this practice, and the volume of related studies on reading aloud, empirical support on the efficacy of reading aloud is far from conclusive. In their review, Lonigan and Whitehurst (1998) concluded that correlations between reading aloud and later literacy performance is “weaker than typically thought” (p. 265).

In one of the most extensive analyses of read-aloud research, Bus et al. (1995) conducted a meta-analysis of 30 published and unpublished studies representing more than 40 years of research. They found a positive association between reading aloud with preschoolers and increased language growth, emergent literacy, and reading achievement. However, read-aloud frequency accounted for no more than 8% of the variance in the various reading outcomes. Similarly, Scarborough and Dobrich’s (1994) review of more than three decades of read-aloud research revealed that reading aloud frequency accounted for 7% of the variance literacy achievement measures. While the size of this positive association is not inconsequential, the implied benefit is modest considering the magnitude of emphasis reading aloud receives from researchers and policy makers alike. Acknowledging the size of the relationship between read alouds and literacy achievement, Bus et al. noted that “more and better research is needed to determine the conditions under which storybook reading is most beneficial” (p.17).

Research conducted since the Bus et al. (1995) and Scarborough and Dobrich (1994) analyses has not settled the question about the benefits of reading aloud. In some respect, these studies have generated more ambiguous findings on the relationship between reading loud and literacy performance. For instance, Sonnenschein and

Munsterman (2002) reported a positive correlation between read-aloud frequency and phonemic awareness. Likewise, Denton and West (2002) found that kindergarten children who are read to at least three times a week were nearly twice as likely to score in the top 25% of reading achievement.

On the other hand, Senechal et al. (1998) found that higher levels of reading aloud were associated with only modest gains in vocabulary, listening comprehension, and phonological awareness. These researchers also found that read alouds had no significant relationship with alphabet knowledge, decoding, print concepts, or invented spelling. Similarly, Leslie and Allen (1999) concluded that read-aloud frequency was significantly correlated with growth in comprehension and word recognition with low-performing first graders, but it had no relationship with the comprehension and semantic acceptability of miscues for emergent readers.

A number of more recent studies have failed to generate any statistically significant findings. Roberts, Jurgens, and Burchinal (2005) examined 72 low-income preschoolers but did not find any significant relationship between home read-aloud frequency and vocabulary, expressive and receptive language, and the age at which the children began reading. Similarly, in a study assessing different reading styles, Hargrave and Senechal (2000) found that the at-home reading frequency was not associated with any vocabulary posttest measures given to preschoolers. Moreover, Meyer et al. (1994) found no relationship between the time parents spent reading aloud and their kindergarten-aged children's reading achievement, and they reported a negative correlation between the amount in-class read-alouds and reading achievement. These researchers suggest the negative correlation between in-class reading and reading

achievement may stem from teachers substituting read alouds for direct instruction of discrete literacy skills.

Methodological Issues

What might account for the conflicting results? Some researchers (Lonigan, 1994; Scarborough & Dobrich, 1994) have argued that it may be due to methodological limitations in some studies. In particular, one important shortcoming may relate to how researchers have assessed the frequency of book reading. Senechal, LeFevre, Hudson, and Lawson (1996) note that researchers have employed many different and limited ways of measuring reading frequency. Table 2.2 provides a representative list of the different approaches that researchers have used to define and to measure the construct of reading frequency.

As illustrated in Table 2.2, some studies have measured reading frequency in a direct manner by asking parents or caregivers to record on logs the number of books read or the amount of time they spent reading aloud in the home (e.g., Leslie & Allen, 1999). However, other researchers have used more indirect and possibly imprecise measures to estimate read-aloud frequency. Bus et al. (1995) found that over half of the studies they examined measured read-aloud frequency through some type of composite index of home literacy. Such composite measures often included a variety of characteristics of the child's home environment, such as the number of books owned, periodical subscriptions, or family library visits. Thus, the frequency of parent-child book reading was extrapolated on the basis of these estimates of home literacy.

Parent surveys have also been a popular, but limited, tool for capturing home read-aloud frequency. In addition to the general concern over the potential for a social

desirability bias in the self-reported surveys (Trochim, 2001), there are a number of specific shortcomings in the read-aloud measures obtained from parents. For example, Roberts, Jurgens, and Burchinal (2005) used a single questionnaire item to determine how many days per week parents read to their children. Such a measure, however, does not reveal how many books were read nor the time spent in actual reading, which might vary widely. Likewise, Mason (1980) used a single item that asked parents to report how often they read to their child. However, Mason limited the response choices to three possible time intervals: less than half an hour, about one hour, or more than two hours per week.

Denton and West's (2002) analysis employed a frequency derived from a single item question assessing how often parents read to their child, but responses were limited to only two possible options: at least three times per week or fewer than three times per week. Unlike a measure of frequency on a continuous scale, such as number of books read or the actual time spent reading aloud, the constrained-choice responses limited the specificity and precision of read-aloud frequency. Gest (2004) measured frequency on a continuous scale by asking parents to record the number of books read aloud each week, but it is not clear if this measure accounted for multiple readings of the same text, a very common practice with emergent readers (Martinez and Roser 1985).

TABLE 2.2

Representative Sample of Read-Aloud Frequency Measures

| Study | Frequency Measure |
|--|--|
| Crain-Thoreson & Dale (1992) | number of times child read to per week (gathered by parent survey) |
| Denton & West (2002) | number of times child read to per week – response confined to a binary choice of 1) at least 3 times or 2) fewer than 3 times per week (gathered by parent survey) |
| Gest, Freeman, Domitrovich & Welsh (2004) | number of books read to child in a week scored on a six point scale (0=no books, 5=more than 15 books) (gathered by a parent survey); title recognition test |
| Roberts, Jurgens, & Burchinal (2005) | number days per week child read to (gathered by parent survey) |
| Senechal, LeFevre, Hudson, & Lawson (1996) | title recognition test administered to parents (included list of 60 titles, mix of legitimate and foils) |

Another approach to estimating read-aloud frequency has been used by Senechal and colleagues (e.g., Senechal, LeFevre, Hudson, & Lawson, 1996; Senechal, LeFevre, Thomas, & Daley, 1998). These researchers measured read-aloud frequency using a book title inventory. In this technique, parents were asked to indicate the books they recognized from a list that included actual book titles as well as foil titles. The rationale for this approach is that parents who read frequently to their children should recognize more actual book titles when compared to those who read less frequently. Senechal argued that the title recognition inventory helped to guard against an inflated estimate of read-aloud activity.

In addition to measurement issues, another limitation of the extant read-aloud literature is its predominant focus on select outcomes and population segments. For instance, researchers typically do not assess more than one dimension of emergent literacy, with a significant emphasis on measuring the influence of reading aloud on the cognitive components of emergent literacy. The most common cognitive component studied has been vocabulary development (e.g., Dickinson & Smith, 1994; Hargrave & Senechal, 2000; Robbins & Ehri, 1994; Senechal, Thomas, & Monker, 1995; Wasik & Bond, 2001). Although affective constructs such as reading motivation are considered by many researchers to be important components of emergent literacy (Watkins & Coffey, 2004; Whitehurst & Lonigan, 1998), cognitive-related constructs of emergent literacy have been given the most attention.

There is also a significant number of studies that focus exclusively on low SES populations (e.g., Beck & McKeown, 2007; Dickinson & Smith, 1994; Payne, Whitehurst, & Angell, 1994; Roberts, Jurgens, & Burchinal, 2005). Few studies examine the effects of reading aloud with more heterogeneous student populations. Additionally, many studies take place in classroom settings and involve one-to-many or small-group read alouds rather than one-on-one home reading (e.g., Aram & Biron, 2004; M. H. Brown, Cromer, & Weinberg, 1986; Ukrainetz, Cooney, Dyer, Kysar, & Harris, 2000).

In summary, the number and breadth of research studies on the topic of read alouds is substantial. While some studies support the view that reading aloud to young children can influence important literacy outcomes, other studies show limited associations or provide inconclusive results. There also is considerable variation in the manner in which the frequency of reading aloud is measured or estimated, with some

measures possessing limited or questionable validity. Finally, many studies adopt a narrow focus in terms of population segments and dependent variables. Despite considerable attention to reading aloud over the last 50 years, Lonigan (1994) noted that “a significant amount of well-designed research is needed before we achieve a satisfactory understanding of how and how much reading to preschoolers can affect literacy” (p. 318).

Rationale and Research Question

Although new research topics emerge within the literacy field on a regular basis, some seemingly well-researched or “resolved” topics require analysis or “re-examination.” Such is the case with reading aloud. My dissertation seeks to revisit the topic of read alouds and young children’s literacy performance in order to explore and perhaps clarify some of the methodological and substantive issues found in the existing research literature on this topic. Specifically, I addressed the following research question:

What is the relationship between the frequency of books read aloud to kindergarten students and their emergent literacy?

With a focus on kindergarten readers, this study has the potential to expand our understanding of reading aloud as children begin more formal literacy instruction in a school setting. In particular, my study aims to contribute to literacy theory and practice in three ways.

1. My research examines a key tenet of reading research through the use of a more precise measure of read-aloud frequency. In contrast to previous studies that have employed indirect or composite measures to determine read-aloud frequency, my

dissertation purposely uses a count of the number of books read-aloud to children participating in an intervention program, a more direct and explicit measure.

2. My study seeks to move beyond tests of simple linear associations by evaluating the possibility of a threshold effect for the number of books read aloud to children. Specifically, I will test for the potential of a curvilinear relationship between read-aloud frequency and emergent literacy, a correlational association that changes over the range of variables (Trochim, 2001). Lonigan and Whitehurst (1998) note that a threshold effect is an important research topic, but the potential for a nonlinear association between read-aloud frequency and literacy performance has not been directly explored to my knowledge.
3. Finally, I assess the association of read-aloud frequency with a broader measure of emergent literacy. While many prior read-aloud studies have focused on one or only a handful of literacy outcomes, my dissertation assesses a potential association between read-aloud frequency and a more inclusive measure of emergent literacy that encompasses comprehension, phonemic awareness, word recognition, and concepts of print. In addition, I also evaluate a potential association between read-aloud frequency and reading motivation, an affective component of emergent literacy.

Summary

In this chapter, I presented the theoretical framework of cognitive apprenticeship that provides a foundation for this study. Next, I reviewed the extant literature on reading aloud. From this review, I concluded that there was a need for additional research into the possible association between read alouds and emergent literacy outcomes. Finally, I

offered a rationale for my study and specified my research question. In the following chapter, I describe the methodology I used to address my research question.

CHAPTER 3

METHOD

In this chapter, I detail the methodology I employed in my study. First, I provide an overview of my research design. As a part of this discussion, I define the key terms of interest in this investigation and describe the setting, participants, and the intervention program that provides a basis for my study. Second, I highlight preliminary field work I conducted prior to broader data collection. Third, I detail the quantitative data collection process and specify the variables and their associated measures. Finally, I summarize my descriptive data collection procedures.

Design and Overview of Study

The purpose of this research was to investigate the potential association between the frequency of books read aloud to kindergarten students and their emergent literacy performance. My study was a quantitative investigation employing correlational analysis methods (Pedhazur, 1997). This design enabled me to explore possible relationships between read-aloud frequency and the emergent literacy development of kindergarten students. Correlational methods were used to statistically evaluate the strength and direction of the association between two or more variables (Stanovich & Cunningham, 2004). Unlike causal relationships, which are explored typically through experimental and quasiexperimental designs, a correlational design can reveal if two or more variables correspond in a synchronized manner (Trochim, 2001). A correlational design was appropriate for this study because I sought to examine possible relationships between an

existing read-aloud intervention program and kindergartners' emergent literacy development.

Complementing the primary correlational portion of the study were descriptive data that had the potential provide insight into any associations between the independent variable and dependent variables. Descriptive data included interviews with participating students and the school media specialist and an open-ended questionnaire completed by the students' parents or caregivers. These supplemental descriptive data had the potential to provide elaboration on any statistical association uncovered by the primary correlational methods used in the study.

Definition of Key Terms

The outcome of interest in my study is *emergent literacy*. Although researchers differ in their definitions of the term, Whitehurst and Lonigan (1998), building on the work of Teale and Sulzby (1986), define emergent literacy as “the skills, knowledge, and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing” (p.849). Despite Whitehurst and Lonigan's (1998) acknowledgement of an attitudinal or affective component to emergent literacy, very few studies have examined this aspect of the construct. In my study, however, I adopt a two-dimensional perspective on emergent literacy and examine both the cognitive aspect of emergent literacy (e.g., phonemic awareness, letter recognition, comprehension, and vocabulary) and the affective aspect of the construct, specifically, reading motivation.

I use the term *read aloud* to refer to the reading of a book by a more-skilled reader, such as a parent, to a less skilled reader, such as a child. Reading aloud is a basic activity in that it does not necessarily imply any additional interaction or dialogue

between the reader and the listener beyond the reading of the text, although this may occur.

Finally, I define read-aloud *frequency* as the number of books read aloud to a student. My definition of frequency does allow for repeated readings. I chose to use the term *frequency* rather than *number* or *volume* of book read because *frequency* is the most commonly term used in the read-aloud literature.

Setting

The study was conducted during the 2006-2007 school year at Timberton Elementary School (pseudonym), a public school in a medium-sized Southeastern city. Timberton Elementary was a non-Title 1 school at the time of the study that enrolled approximately 550 students in prekindergarten to Grade 5. According to 2005-2006 school district data, 61% of the students were eligible for free or reduced lunch. The school population was 33% European American, 51% African American, 7% Asian, 6% Hispanic, and 4% Multiracial. Seventeen percent of the students received special education services, and 23% were served by the Early Intervention Program, a state-supported initiative that provided additional instructional assistance to children who are struggling academically.

Participants

Kindergarten students were selected as participants in this study because children at this age are beginning to transition from an emergent stage of reading to more formal literate identities as readers and writers (Stahl, 1998). This transition age provided an appropriate time to examine issues related to read-alouds and emergent literacy progress.

During the period of data collection, 96 kindergarten children were enrolled at Timberton Elementary across five kindergarten classes. Invitations to participate were extended to the parents and guardians of all 96 children. The final number of participants was 46, which included kindergarten children for whom parents or caregivers provided written consent to participate and who provided their assent. The five classrooms were heterogeneously diverse with respect to achievement and the number of at-risk students receiving support services such as Early Intervention Program or Title I.

Program Description

My research explored an ongoing program at Timberton Elementary designed to encourage parents of kindergarten students to read aloud regularly at home. The program was developed by the school's media specialist, in collaboration with the kindergarten teachers, as a way to promote the kindergarten students' exposure to books, appreciation for reading, and development of early literacy knowledge and abilities. The program goal was to have kindergarten students listen to a minimum of 25 books read aloud each quarter of the school year (i.e., every nine weeks), for a total of at least 100 books read aloud at home over the course of the entire school year.

At the beginning of the 2006-2007 school year, the kindergarten teachers and media specialist provided kindergarten students and their parents information about the program. Tips for sharing books with the students were included. Rereading of books was encouraged. After the program commenced, a reading log was sent home every Friday with each participating student. The log included a place for recording the book titles as well as the reader's signature (see Appendix A). Students returned logs each Friday, at which time a new log was issued. The media specialist maintained a record of the number

of books read aloud for each kindergarten class. At the end of each quarterly grading period, students who achieved the 25-book goal received a special recognition that included a button and an invitation to a school party. Students received stars on their buttons for every 5 books read beyond the initial 25 book goal. This program has been in process for two years.

The media specialist has worked at Timberton Elementary for many years and knows the students and the community well. The program provided support to help kindergarten students who did not have the opportunity for sufficient at-home reading to reach the quarterly goal. Volunteers who provided this extra reading aloud at Timberton included adults in the community and students from the nearby high school who participate in a co-op program. Additionally, Timberton students from Grades 2-5 were available to read aloud to the kindergarten students. In the fall, applications to be a read-aloud volunteer were made available to all students in Grades 2-5. Volunteer readers meet with a kindergarten student twice a week in the media center at 7:30 a.m. before school or at scheduled times during the school day. Volunteers were responsible for reading to their assigned student and recording books read on the log. During the 2006-2007 school year, the program utilized 5 adult reading volunteers, 3 high school volunteers, and 20 Grade 2-5 student volunteers.

Preliminary Field Work

After I received the necessary permission to conduct the study from the university Institutional Review Board and the school district Office of Educational Research, I began my preliminary field work at the school. I first spent one week observing in Timberton's media center in order to situate myself within the school environment. I met

during the second week with Timberton's principal to better understand the school and student performance issues. In addition, I had informal conversations with the school's media specialist to learn more about the various intervention programs designed to improve reading achievement across all grade levels. Over a series of meetings, we discussed the history and objectives of the kindergarten read-aloud program, which is the focus of this research. Both the principal and media specialist expressed excitement about the kindergarten read-aloud program and were very interested in an assessment of its influence on student emergent literacy performance.

As part of this initial field work, I met with all five of the school's kindergarten teachers and the media specialist. During the session, I offered background information on my study and provided an outline of my plans for data collection. All kindergarten teachers were receptive in facilitating data collection. The teachers also reviewed the materials I planned to use, including the parental permission form, and provided constructive feedback.

Parent permission forms were sent home as part of weekly packet materials that included graded papers, PTA information, and individual notes from teachers. A copy of the participation permission form is included as Appendix B. Due to a limited initial response, additional permission forms were distributed during the second and third weeks to the children who had failed to return a form. Ultimately, 46 students agreed to participate in the study.

Data Collection

My study involved the collection of both quantitative and descriptive data. Quantitative data included baseline and ongoing student assessments, book read-aloud

frequency data, and reading motivation scores. Descriptive data included interviews with children and the media specialists and written feedback gathered through a parent questionnaire.

Quantitative Data

Quantitative data were necessary in order to conduct a correlational assessment of the association between the independent variable, read-aloud frequency, and two dependent variables, a cognitive measure and an affective measure of emergent literacy. In the following section, I discuss how I defined, measured, and collected data for each of these variables.

Independent variable. The independent variable used in the correlational design was *read-aloud frequency*, which was quantified as the total number of books read aloud across the entire year for each program participant. I collected these data from the weekly student read-aloud logs. Each Friday, a reading log was sent home for the parent or caregiver to record the reading for the coming week. On the back of the reading log was a list of suggested titles. Often, these titles were thematic in nature, such as books about animals; other times the titles were seasonal, such as books having to do with Valentine's Day. Reading logs (see Appendix A) for each child were gathered and the total number of books read per child during for the school year was then tallied. Unlike previous research on read alouds, the measure of frequency employed in my study allows for multiple readings of the same book.

Dependent variables. To measure the *cognitive* component of emergent literacy (e.g., phonemic awareness, letter recognition, comprehension, and vocabulary), I used the standardized, performance-based assessment mandated by the state department of

education. This assessment was administered by certified teachers to all kindergarten students in the state at the beginning and end of the school year. The purpose of this assessment is to determine each child’s readiness for the first grade. As detailed in Table 3.1, there are 14 literacy-related items that measure student performance in the areas of phonemic awareness, concepts of print, comprehension, and word recognition. Each item is measured on a three-point scale: *not evident* (0 points), *in progress* (1 point), and *accomplished* (2 points). Each student’s score is summed across items to create a composite score. Thus, the possible range of scores for the cognitive component of emergent literacy measure was 0 to 28. These data were collected at the end of the school year in May.

TABLE 3.1

Cognitive DV: Literacy Items from State Kindergarten Performance Assessment

| Item | Skill |
|------|---|
| 1 | Prints name |
| 2 | Holds print materials in correct position and demonstrates left-to-right and top-to-bottom progression |
| 3 | Draws pictures and/or uses letters and phonetically spelled words to write about experiences, stories, people, objects, or events |
| 4 | Identifies upper- and lower-case letters of the alphabet out of sequence |
| 5 | Blends sounds orally to make words (parts 1 and 2) |
| 6 | Distinguishes between letters, words, and sentences |
| 7 | Responds to literal, inferential, and evaluative questions |
| 8 | Sequences pictures to tell a story |
| 9 | Recognizes rhyming words |
| 10 | Verbalizes consonant sound when shown the consonant letter |
| 11 | Associates letters with sounds |
| 12 | Blends sounds orally to make words (part 3) |
| 13 | Reads selected sight words |
| 14 | Copies letters |

In order to measure the *affective* component of emergent literacy (i.e., reading motivation), I selected the Children's Motivation to Read Survey (CMRS) (Mazzoni, Gambrell, & Korkeamaki, 2000). The CMRS consists of 15 scored items and two unscored sample items. Items are designed with a two, three, or four point response scale, with the most positive responses receiving the lowest values. As a result, the instrument must be recoded in order to allow for the most positive responses to receive the highest values. The range of possible scores on the CMRS is 0 to 40.

Prior to administration of the CMRS instrument, I made a modification to the pictures that accompany each item. In the original instrument, the pictures were repeated for multiple items. However, following feedback gathered from discussions with the school's kindergarten teachers, I assigned a unique picture to each item. The teachers believed that kindergarten students would be more likely to follow along if the pictures did not repeat. The modified CMRS is included in Appendix C.

Control variables. To improve the precision and interpretability of my analysis, I collected three control variables. A *control variable* represents other factors in a study that may have an influence on the dependent variable. Incorporating one or more control variables allows researchers to isolate variables that might be extraneous to the particular relationship being examined (Pedhazur, 1997). In my study, the control variables include two demographic attributes of the students: race and gender. These variables were obtained from each participant's permanent file. Inclusion of demographic data enabled me to account for any potential variance in emergent literacy stemming from a student's race or gender.

In addition, I collected a third control variable, baseline literacy performance. This variable was measured by the results of the first administration of the Rigby Literacy Assessment (Rigby, 2005), which was conducted within the first two weeks of the school year. This baseline assessment was administered by the classroom teachers and contains a limited number of literacy-related measures. By incorporating the baseline score as a control variable, I attempted to account for potential variance in emergent literacy at the end of the program that may be influenced by a student's literacy abilities present prior to the start of the intervention program. Table 3.2 summarizes these variables, their measurement, and the data source.

TABLE 3.2

Variables and Measures Used in Regression Analysis

| Variable | Measure | Source |
|---|---|---|
| Read-aloud frequency (independent variable) | Total count of the number of books read aloud to each child for the duration of the intervention program (allows for multiple readings of the same book) | Weekly take-home reading logs completed by parents or caregivers |
| Cognitive component of emergent literacy (dependent variable) | 14 three-point response items that assess literacy performance in the areas of: phonemic awareness, concepts of print, comprehension and word recognition | State-mandated kindergarten performance assessment administered by the classroom teacher at the end of the academic school year |
| Affective component of emergent literacy (dependent variable) | 15 two-, three-, or four-point response items that assess a child's self concept as a reader and perceived value of reading | Children's Motivation to Read Survey (Mazzoni, Gambrell, & Korkeamaki, 2000) |
| Gender (control variable) | Binary variable indicating child's gender | Student's permanent record file |
| Race (control variable) | Categorical variable indicating child's race | Student's permanent record file |
| Baseline literacy performance (control variable) | A leveled performance score derived from 11 comprehension questions, four concepts of print tasks, and a miscue analysis. | Rigby Literacy Assessment administered within the first two weeks of school by the classroom teacher |

Quantitative Data Analysis

Quantitative data analysis involved a series of four ordinary least squares (OLS) regressions (Pedhazur, 1997). As a preliminary step, I conducted tests for multicollinearity, outliers, and other potential data issues that could negatively influence results. There were two separate regression analyses: one using the composite literacy

score from the state kindergarten performance assessment (the cognitive measure of emergent literacy) and a second using the modified CMRS score (the affective component of emergent literacy). The sign and significance of these regression results will indicate any statistical association between read-aloud frequency and emergent literacy in my sample.

As noted in my literature review, past research has evaluated a linear relationship between frequency and literacy outcomes. To evaluate the possibility of a threshold effect that would be revealed by a non-linear correlation between frequency and emergent literacy, I conducted two subsequent regressions using a quadratic, or squared, transformation of my independent variable (read-aloud frequency).

Descriptive Data

To augment and to help interpret my correlational analysis, I collected three types of descriptive data: student interviews, a parent questionnaire, and an interview with the media specialist. The student interviews consisted of structured interviews with each of the 46 student participants. Given the age and attention spans of kindergarteners, the interviews were designed to allow me to gather as much information as possible in a limited amount of time. Each interview, which lasted approximately 5 to 10 minutes, was audiotaped and later transcribed. Following an interview guide, I asked the student participants to discuss various aspects of reading aloud, such as their favorite books, who read to them, and how they felt about participating in the focal intervention program. I also made brief, handwritten notes during and immediately following each interview session. The interview guide for these interviews is included as Appendix D. I conducted a descriptive analysis to identify the key themes of these student interviews.

A second form of descriptive data was derived from a take-home parent survey (see Appendix E) distributed by the classroom teachers along with the final weekly reading log. The survey sought caregivers' views on the read-loud program. Open-ended questions asked parents about the nature of the book read-aloud experience and the success of the program. The survey was designed to provide a richer view into the read-aloud program and offered insight into the cognitive apprenticeship parents may provide children through read alouds.

Finally, I conducted a semi-structured interview with the school's media specialist, the creator and sponsor of the read-aloud intervention. Taking place at the conclusion of data gathering phase of my study, the interview attempted to gather additional insight into the intervention program and provide an opportunity for the media specialist to comment on preliminary findings. A copy of the interview guide is included as Appendix F. The interview lasted one hour and was audiotaped and later transcribed. Detailed procedures for analyzing the descriptive data are presented in Chapter 4.

Summary

In this chapter, I presented the methodological approach employed in my study. I described the study's research setting, participants, and intervention program. I also detailed the independent, dependent, control variables, and their associated measures. In addition, I described the three forms of descriptive data collected as part of my study. In the following chapter, I provide the results of my analysis.

CHAPTER 4

RESULTS

In this chapter, I present the results of the study. First, I summarize the key demographic characteristics of the participants. Second, I present quantitative findings and the results of my analysis of those data. Finally, I present the findings from my analysis of the three forms of descriptive data I collected.

Participants

As a result of the recruitment process outlined in Chapter 3, 46 kindergarten students, ranging in age from 5.8 to 6.9 years old in May 2007, were included in the study. The gender of the sample was skewed, with 41% of the participants being boys and 59% being girls. However, the gender of the sample is generally comparable to the overall kindergarten class gender breakdown at Timberton School of 47% boys and 53% girls.

The ethnic makeup of the sample consisted of 46% African-American, 9% Asian-American, 30% European-American, and 15% Latino-Hispanic American students, which approximated the racial make-up of the entire school (see Table 4.1). Thirteen percent of the participants received special education services, four percent were identified as gifted, and another 4% were being served by the school's Early Intervention Program (EIP).

TABLE 4.1

Ethnicity of the School and Sample

| Ethnicity | N | Sample Percentage | School Percentage |
|-------------------|----|-------------------|-------------------|
| African-American | 21 | 45.7% | 51% |
| Asian-American | 4 | 8.7% | 7% |
| European-American | 14 | 30.4% | 33% |
| Latino-Hispanic | 7 | 15.2% | 6% |

Quantitative Data Analysis

There were four key quantitative measures in this study: an independent variable, two dependent variables, and three control variables. The independent variable was read-aloud frequency, which I measured as the total number of books read aloud to each child during the course of the year-long intervention program. The first of the two dependent variables was a score obtained from the May administration of the state-mandated kindergarten performance assessment. This variable represented my measure of the cognitive component of emergent literacy. The second dependent variable, which represented the affective component of emergent literacy, was each student's total score on the Children's Motivation to Read Survey (CMRS) (Mazzoni, Gambrell, & Korkeamaki, 2000).

In addition, I gathered three control variables. The first was baseline literacy performance, which was obtained from the Fall administration of the Rigby Literacy Assessment (Rigby, 2005). The second and third controls were the categorical variables of race and gender, which were collected from each child's permanent record. Table 4.2

presents the mean and standard deviations and Table 4.3 presents the Pearson bivariate correlations among the variables.

TABLE 4.2

Descriptive Statistics for Continuous Quantitative Variables

| Variable | Type | <i>M</i> | <i>SD</i> |
|--|-------------|----------|-----------|
| Read-aloud frequency (book count) | Independent | 148.24 | 153.39 |
| Spring state performance assessment | Dependent | 24.85 | 5.09 |
| Spring motivation to read (CMRS) | Dependent | 31.04 | 4.56 |
| Fall baseline literacy performance (Rigby) | Control | 2.46 | .91 |

TABLE 4.3

Pearson Bivariate Correlations for Continuous Quantitative Variables

| | 1 | 2 | 3 | 4 |
|---|-------|-------|------|---|
| 1. Read-aloud frequency (book count) | | | | |
| 2. Spring state performance assessment | .390* | | | |
| 3. Spring motivation to read (CMRS) | -.069 | -.005 | | |
| 4. Spring baseline literacy performance (Rigby) | .271 | .510* | .121 | |

* Correlation is significant at the 0.01 level (2-tailed).

As can be seen from Table 4.2, the standard deviation for read-aloud frequency, as measured by the number of books read, is quite large, indicating considerable variability in this measure. Given the centrality of the read-aloud frequency data to this study, it is important to understand fully this variation as well as measures of central

tendency. In addition to a mean of 148.24 books read aloud across the year for all 46 children in the sample, the median number of books read aloud is 94.50. The range of books read aloud is zero to 578.

In addition, Figure 4.1 illustrates the distribution of the number of books read-aloud across the 46 participants. Ordered from low to high, the figure visually illustrates that several children were read aloud very few books, and others were read aloud very many.

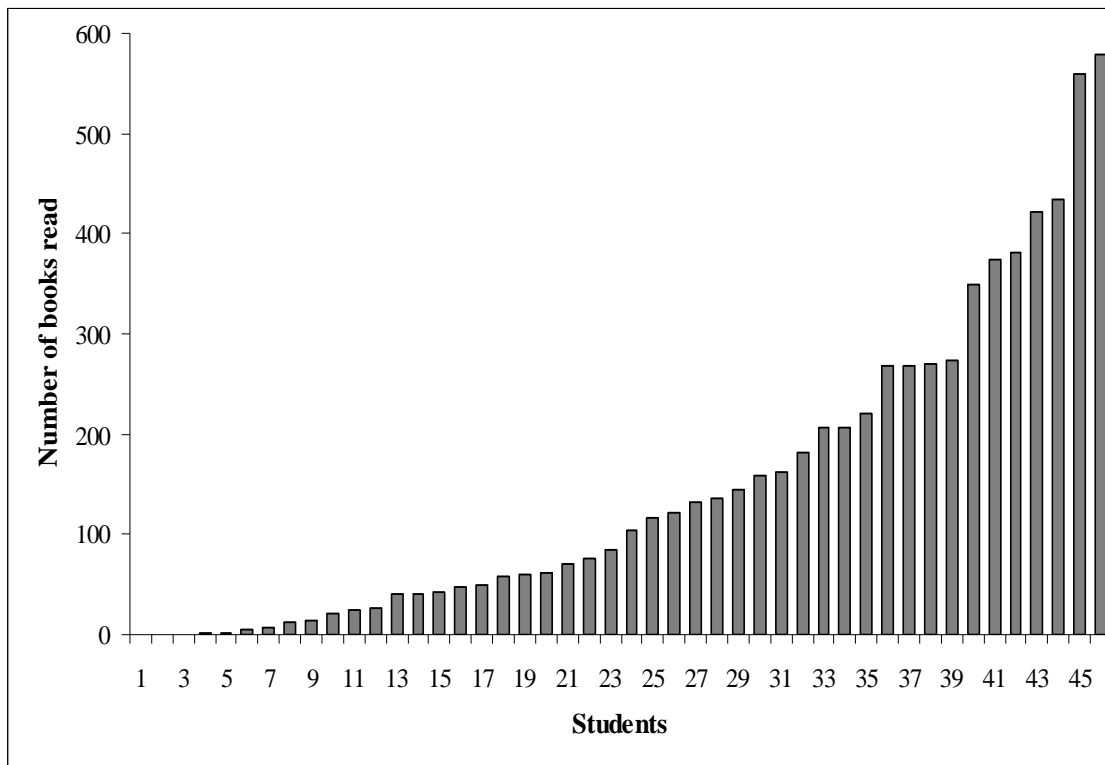


FIGURE 4.1

Distribution of Number of Read-Aloud Materials

Data Assumptions

Prior to completing the regressions, I used scatter- and box-plots to examine the data for possible outliers. This analysis did not reveal any extreme cases that might negatively affect the analysis. In addition, I evaluated the potential for multicollinearity among the independent variables. The presence of conceptually related independent variables and the fact that I included both the linear and quadratic, or squared, transformations of the read-aloud frequency variable in two of the regressions increased the risk of multicollinearity (Trochim, 2001). To partially address this concern, I followed the recommendations of Cohen, Cohen, West, and Aiken (2003) and mean-centered the values of the original and squared read-aloud frequency variables. I then conducted a formal test for adverse multicollinearity. As shown in Table 4.4, this procedure revealed that all variance inflation factor (VIF) values were less than 10, a number indicating minimal risk of multicollinearity (Pedhazur, 1997).

TABLE 4.4

Multicollinearity Test of Independent and Control Variables

| Variable | Variance Inflation Factor (VIF) |
|---|---------------------------------|
| Read-aloud frequency (mean centered) | 1.93 |
| Read-aloud frequency ² (mean centered) | 1.13 |
| Baseline literacy performance | 1.17 |
| Race | 1.56 |
| Gender | 1.14 |

Regression Analysis

To evaluate the quantitative data, I completed a correlational analysis that involved a series of four ordinary least squares regressions. These regressions were designed to determine the potential association between the number of books read aloud and the emergent literacy of kindergarten students. Such an association may assume four possible patterns (Trochim, 2001): (a) no statistically significant association between the variables, (b) a positive relationship (i.e., high values of one variable correspond with high values of the other variable), (c) a negative relationship (i.e., high values of one variable correspond with low values on the other variable), or (d) complex, non-linear patterns (e.g., a curvilinear relationship in which high values of one variable correspond with high values of another variable to a certain point, at which such a pattern ceases or reverses).

The first and second regression models assessed the possible linear relationship between read-aloud frequency and the cognitive component of emergent literacy and the affective component of emergent literacy respectively. The third and fourth regression models evaluated the possibility of a threshold effect, or curvilinear association, between read-aloud frequency and the cognitive and affective components of emergent literacy respectively. All four of the regressions controlled for differences in baseline literacy performance, race, and gender.

Linear Regression 1: Read-Aloud Frequency and the Cognitive Component of Emergent Literacy

Table 4.5 provides the results of the regression model that examined read-aloud frequency and the cognitive component of emergent literacy while accounting for the

three control variables of baseline literacy performance, race, and gender. Overall, the independent and control variables in this model accounted for 36.3% of the variance in the cognitive component of emergent literacy ($F = 4.83, p < .01$).

TABLE 4.5

Linear Regression 1: Read-Aloud Frequency and Cognitive Emergent Literacy

| Variable | Standardized Coefficients | t-Value |
|-------------------------------|---------------------------|---------|
| Race | -.188 | -1.098 |
| Gender | .006 | .045 |
| Baseline literacy performance | .459 | 3.146** |
| Read-aloud frequency | .382 | 2.318* |
| F | 4.834 | |
| R^2 | .363** | |

* $p < .05$

** $p < .01$

My study sought to examine the potential association between the number of books read aloud to kindergarten students and their emergent literacy. The outcome of my first regression provides potential support for this association as there is a statistically significant and positive association between the read-aloud frequency variable and the cognitive component of emergent literacy ($\beta = .38, t = 2.32, p < .05$). These results indicate that key cognitive-related aspects of a kindergartener's emerging literacy appear to increase in a linear pattern in correspondence to the number of books read aloud. In other words, the more books a child hears read aloud, the higher her or his cognitive emergent literacy ability at the end of kindergarten. In terms of simple correlation, the association between read-aloud frequency and the year-end cognitive component of emergent literacy was significant ($r = .39, p < .01$).

Linear Regression 2: Read-Aloud Frequency and the Affective Component of Emergent Literacy

The second regression explored any potential association between read-aloud frequency and a child’s motivation to read, the affective dimension of emergent literacy measured in the study. As revealed in Table 4.6, this second regression model was not statistically significant ($F = .313, p = .867$). Moreover, the independent and control variables did not demonstrated a significant relationship with the participants’ motivation to read. These results indicate that the number of books read aloud to kindergarten children does not appear to correlate with positive or negative changes in the reading motivation of the participants ($\beta = -.010, t = -.050, p = .960$).

TABLE 4.6

Linear Regression 2: Read-Aloud Frequency and Affective Emergent Literacy

| Variable | Standardized Coefficients | t-Value |
|-------------------------------|---------------------------|---------|
| Race | -.123 | -.582 |
| Gender | .051 | .287 |
| Baseline literacy performance | .154 | .856 |
| Read-aloud frequency | -.010 | -.050 |
| <i>F</i> | .313 | |
| <i>R</i> ² | NS | |

Curvilinear Regression 1: Read-Aloud Frequency and the Cognitive Component of Emergent Literacy

It is reasonable to suggest a possible threshold effect when it comes to the number of books read aloud to kindergarten students and their emergent literacy (Lonigan and

Whitehurst, 1998). To explore a possible book threshold effect or curvilinear relationship between read-aloud frequency and emergent literacy, I conducted two additional regressions. I created a quadratic, or squared, transformation of my original read-aloud frequency variable in order to properly examine this potential nonlinear statistical correlation. As noted previously, I also mean-centered the original read-aloud frequency variable and the associated squared variable to minimize the threat of multicollinearity in the final two of my four regression models.

TABLE 4.7

Curvilinear Regression 1: Read-Aloud Frequency and Cognitive Emergent Literacy

| Variable | Standardized Coefficients | t-Value |
|-----------------------------------|---------------------------|---------|
| Race | -.190 | -1.102 |
| Gender | .017 | .117 |
| Baseline literacy performance | .440 | 2.946* |
| Read-aloud frequency | .682 | 1.494 |
| Read-aloud frequency ² | -.310 | -.706 |
| <i>F</i> | 3.910 | |
| <i>R</i> ² | .372* | |

* $p < .01$

The first curvilinear regression model assessed the potential for a nonlinear correlation between read-aloud frequency and the key cognitive components of emergent literacy as measured by the year-end administration of the state-mandated kindergarten performance assessment. The overall model was significant ($F = 3.910, p = .007$), accounting for 37.2% of the variance in the cognitive component of emergent literacy. However, the regression results did not support the proposed threshold effect for the

number of books read aloud with respect to cognitive aspects of emergent literacy ($\beta = -.310$, $t = -.706$, $p = .485$). Only the baseline literacy performance measure, one of the three control variables in the model, demonstrated a significant correlation with the cognitive emergent literacy dimension. This significant association between the students' literacy skills present at the beginning of the school year and their year-end literacy scores was expected and was also found in the first regression model.

Curvilinear Regression 2: Read-Aloud Frequency and the Affective Component of Emergent Literacy

The final regression model examined a potential nonlinear relationship between read-aloud frequency and reading motivation, the affective component of emergent literacy included in my study. Table 4.8 provides the results of this analysis. The overall model used in this regression, which included the squared read-aloud frequency variable, was not statistically significant ($F = .635$, $p = .674$). Likewise, the regression results did not support the proposed threshold effect for the number of books read aloud with respect to the affective measure of emergent literacy ($\beta = .728$, $t = 1.375$, $p = .178$), suggesting the absence of a threshold effect between read-aloud frequency and a kindergartener's motivation to read.

TABLE 4.8

Curvilinear Regression 2: Read-Aloud Frequency and Affective Emergent Literacy

| Variable | Standardized Coefficients | t-Value |
|-----------------------------------|---------------------------|---------|
| Race | -.118 | -.564 |
| Gender | .026 | .146 |
| Baseline literacy performance | .198 | 1.099 |
| Read-aloud frequency | -.714 | -1.30 |
| Read-aloud frequency ² | .728 | 1.375 |
| <i>F</i> | .635 | |
| <i>R</i> ² | NS | |

In summary, the regression results support the existence of a linear relationship between read-aloud frequency and the cognitive literacy development of young children. There is no support, however, for a relationship between read-aloud frequency and an affective measure of emergent literacy, reading motivation. In addition, there is no indication of a curvilinear relationship, or threshold effect, between read-aloud frequency and emergent literacy.

Descriptive Data Analysis

I collected three types of descriptive data: a student interview, a parent survey, and a semi-structured media specialist interview. These data were intended to augment the quantitative analysis by providing some insight into the practice of reading loud to kindergarteners in the intervention program. The descriptive data enabled me to corroborate or challenge what the quantitative data suggested, while providing nuance to parent read-aloud practices and children's responses to them and the school program.

My analysis of the descriptive data encompassed two major phases. The first phase involved basic organization and transcription of the data. As an initial step in organizing the data collected in the student interviews, for example, I created an electronic spreadsheet. The spreadsheet was used to aggregate the children's response to the questions that I asked during the structured interviews. Each of the five questions was placed in a column across the top of the spreadsheet. I also assigned a number to mask the identity of the participants, and these numbers were assigned to each row down the left-hand side of the spreadsheet. The participant's response to each question was then transcribed from the audiotapes to the spreadsheet. I followed a similar approach in organizing the data from the parent survey, by placing the six questions in the columns across the top of the spreadsheet, and assigning the parents the same identification number as their child.

The second phase of data analysis involved *logical analysis* procedures as detailed by Patton (2002) to code the data, identify patterns, and label themes. Logical analysis enables the researcher to "move back and forth between the logical construction and the actual data in a search for meaningful patterns" (Patton, 2002, p. 468). This second phase involved two steps.

Step 1 involved reading all of the entries on a hard-copy of the spreadsheet, making notes and writing comments in the margins. This first reading allowed me to develop initial coding categories by merging common elements across responses. Because my data analysis was inductive, codes were generated from the data rather than being predetermined. For example, when coding the students' responses to the interview question about their favorite books (Question 5, see Appendix D), I coded them by

author, title, and topic. For instance, one student said “One Fish Dr. Seuss,” which was coded as a response for author and title. Another student simply said “A to Z Mystery Series,” which I coded as a title. Another child said “books by Eric Hill,” which was coded as author only (see Appendix G).

Step 2 involved a more systematic coding process during subsequent readings of the data. In this step, I used different colored highlighters to represent different concepts. This color-coding enabled me to induce the reoccurring categories in my data. For example, when examining the students’ statement of their favorite books, I noticed that the category for titles was the most common code. Therefore, to further understand the nature of the title responses, I then coded the titles and topics as fiction or nonfiction. For example, “One Fish” was categorized as fiction, and “dinosaur books” was coded as nonfiction. Then I examined all the fiction titles and coded them as mass media or book character. For example, “Barbie,” “Brats,” and “Care Bears” were coded as mass media, and “Junie B. Jones,” “No David,” and “Pirate Girls” were coded as book characters (see Appendix G).

This two-phase analysis process was then replicated for the parent survey data and the media specialist interview. Lastly, I looked across the categories that were induced from the three separate analyses of the student interview, parent survey, and media specialist interview and induced cross-data source patterns. For example, I realized that there was a discrepancy between the number of nonfiction books parents reported and the number of titles the students reported reading.

Student Interviews

Interviews were scheduled during the least-intrusive part of the school day, so that classroom instruction would not be interrupted. The interviews were conducted in a common area outside of each classroom. Normally utilized for small-group instruction, this area was relatively distraction free. I interviewed each student individually, using a structured interview guide (see Appendix D). I wrote down each student's responses during the interview, which I later corroborated against an audiotape of the interview sessions.

I asked five questions of each student, and it was clear that the students were excited to talk about their reading. Two of the questions elicited limited responses, so I report here the findings of the three questions that received the most informative responses.

What do you like best about reading? Students were eager to respond to this question and were often animated in doing so. Many commented on enjoying the intimate nature of the experience, such as sitting on a parent's lap or in a favorite chair. Two students pointed out the importance of spending time alone with a parent: "I get to have my mom all to myself when we read before bed." Another student expressed his enjoyment of the experience by noting: "My dad makes silly voices when the people in the book talk."

In addition to the students' comments about the closeness of the read-aloud experience, many other responses addressed reading motivation. This was in contrast to the correlational analysis, which failed to demonstrate any statistically significant relationship between book count and scores on the reading motivation survey. For

example, five of the 46 students stated that they simply liked books and wanted to read more about a subject that interested them. One child stated that “books give me ideas of getting pet frogs,” and another stated that “I like some of my brother’s animal books, so I can learn about penguins and I have some cat books that I like.” One student mentioned “making up [her] own books and reading them to [her] mom.”

Motivation appeared again in students’ responses given that nine children stated that the primary focus of their motivation for reading books was prizes and recognition. Student statements included “We get treats if we do a good job. Cookies,” “I have a badge from every year—two from this year,” “You gotta read. You win a book prize,” “When they give you those little things to wear on. Because I’m very good and special reader,” “It’s a great thing! You get to read books and mark them down. It has a dog on the paper,” and “It’s fun. I like trying to fill up my paper. I try to every week.”

Interestingly, the rewards tied to the intervention program were intentionally designed not to be the primary focus. In fact, the rewards only included a simple button for 25 read alouds per quarter. These buttons were presented to students at an assembly that included cookies. Despite the deliberate down-playing of the rewards, many students still cited these prizes as a primary motivation for reading.

Who reads books with you? As detailed in Table 4.9, students reported that there were a wide variety of individuals who read aloud to the participants, with most students reporting that more than one person read to them. Nearly 60% of the children reported that their mothers were readers. About one-fourth of the children reported that fathers and brothers or sisters read to them, with about one-fifth reported that an extended family

member read to them. Extended family members were almost as common as fathers, representing 20% of the total readers.

TABLE 4.9

Read-Aloud Reader Profile

| Reader | Count | Percentage |
|------------------|-------|------------|
| Mother | 27 | 58.7% |
| Father | 13 | 28.3% |
| Sibling | 11 | 23.9% |
| Extended family | 9 | 19.6% |
| - Grandmother | 5 | 10.9% |
| - Aunt/uncle | 4 | 8.7% |
| School volunteer | 1 | 2.2% |
| Friends | 1 | 2.2% |
| Don't know | 6 | 13.0% |
| No response | 3 | 6.5% |

Note: The count totals more than number of participants and the percents sum to more than 100% as children often noted more than one reader.

When asked if persons who read to them did so differently, most children were unable to identify or articulate any notable differences. Although one might expect different readers to employ differing approaches to guiding less skilled readers through the read-aloud experience, the kindergarteners' responses indicated that they did not note specific differences.

Do you have any favorite books that were read to you? What are they? Why are they your favorites? This question was designed to probe for children's read-aloud book recollection, book topics of interests, specific authors, series titles, or any other

information related to the books read aloud. Many children mentioned specific book titles, and a listing of those mentioned by the children appears in Appendix G.

Several students offered summaries of their favorite books. For example, Jack offered the following summary for *Purple is Best* (Rau, 2000):

It's about two kids painting with red and blue and they trade. The paints crash and land on the table. Red lands on blue and blue slathers all over the kid who's painting with red.

Other children named favorite book series (e.g., *The Magic Tree House* series and the *A-Z Mysteries* series) and authors (e.g., Dr. Seuss and Eric Hill). Given the traditional emphasis on fiction for young readers (Duke, 2000; Palmer & Stewart, 2005), it was not surprising that the vast majority of the book and series titles were fiction.

An analysis of the recall responses provides some perspective into the types of books of interest to these kindergarten students. This analysis (see Figure 4.2) revealed that the read alouds included fiction, nonfiction, and periodicals. Of note, 23% of the specific titles recalled by the students related to cartoons that appear on television, such as Sponge Bob, Strawberry Shortcake, and assorted Disney characters.

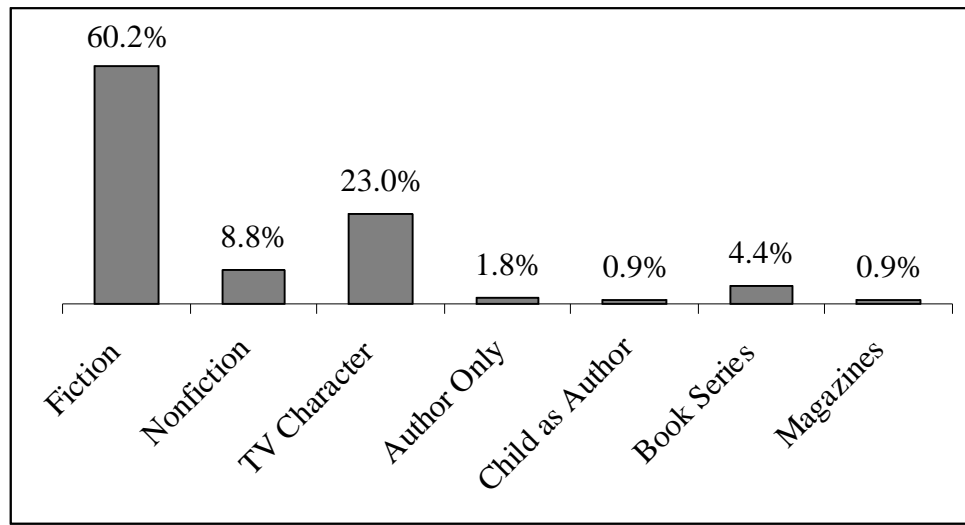


FIGURE 4.2

Distribution of Read-Aloud Materials Recalled by Students

To compare the reading material information conveyed by the students in the interviews with the actual book counts from the book logs, I created a mean split of the book count data, dividing the students into two categories: (a) those who reported above average read alouds and, (b) those who reported below average book counts. I then examined the data to identify potential book type differences between students in the higher count group and students in the lower count group. Students in the high book count group generally responded with a wider variety of reading material types. In addition, these students were able to provide more exact book titles rather than the often times general topic-related responses provided by the students with lower than average book counts.

Parent Survey

An end-of-year survey consisting of six questions was distributed to the parents of all students who participated in the read-aloud program. A copy of this survey is included in Appendix E. Created by the school's media specialist, the parent survey appeared on the back of the final weekly reading log. Fourteen parents of the study participants returned completed surveys (all respondents were parents rather than other family members or caregivers). After I organized the parent responses and matched them to each participating kindergarten student, I sorted and coded the responses.

Question 1 asked parents if they and their child had a regular time to read and record books. Eighty-six percent of the parents responded "yes" to this question, and the most common time noted for reading aloud was before bed. Question 2 asked parents if their child ever asked to be read to, and 79% responded "yes." Question 3 inquired whether the child asked to buy books, go to the library, or bookstore for books to read, and 71% responded "yes."

Question 4 asked parents to specify the kinds of material they read. Results are shown in Figure 4.3, the majority of readers reported that picture books were the most common type of reading material, representing 50% of the total types of material. Interestingly, parents reported that nonfiction was the second most common type of book read, representing 28.6% of the read alouds. Compared with the title recalls from the student interviews (Appendix G), there is a disparity in the types of reading materials reported by the parents on the survey and the favorite books articulated by the students in their interviews. For example, of the 113 titles recalled by the students directly, 60.2% were fiction and only 8.8% were nonfiction. It is important to note that genres or

categories were not provided on this open-ended survey item, and parents did not offer any clarification or explanation on these categories. Two of the parents based their responses on reading levels, rather than particular genres. For instance, one parent reported she and her child read “books on pre-k and first grade level” and another responded that “the reading level could vary between K and 3rd.”

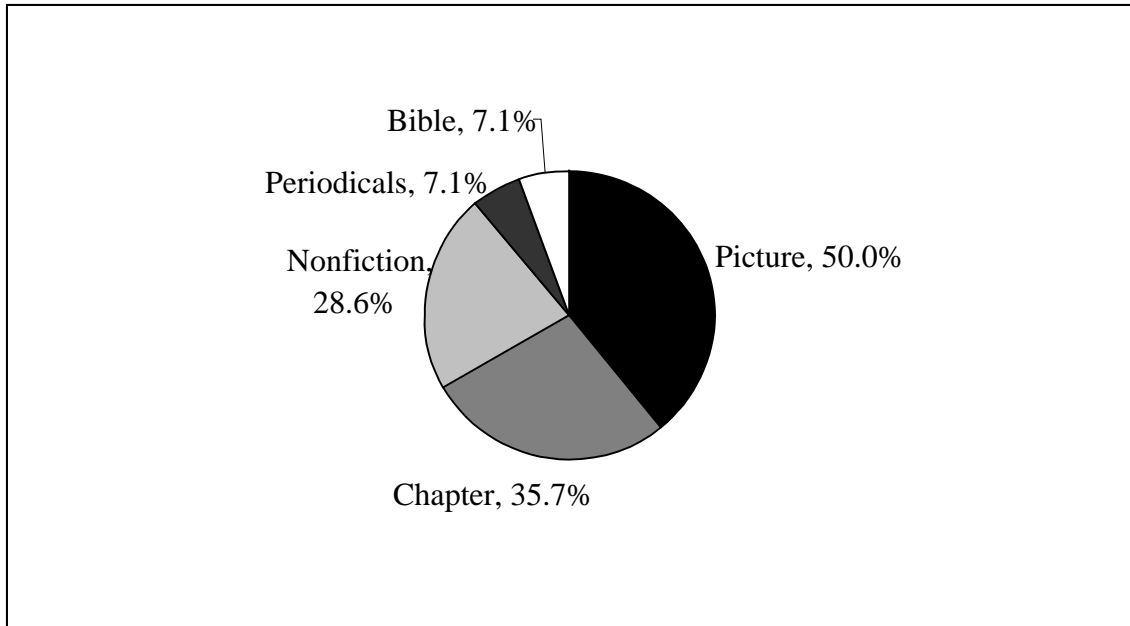


FIGURE 4.3

Read-Aloud Materials Reported by Parents

Question 5 asked parents if their children began to read books to them during the year, to which 93% of parents responded “yes.” Three parents stated that their child could read books with sight words. Three other parents used the adjective *simple* to describe the type of books their child could read. Some respondents observed that this beginning reading capabilities of their children appeared to be more than simple word recognition

and decoding, advancing to the making of meaning. For instance, one parent stated that “she now reads pictures and remembers stories.”

The final question asked whether the school should continue with the reading program, to which 100% of the parents responded affirmatively. Some parents described the program as “wonderful” or “great,” but many offered a more elaborate explanation of their satisfaction. For example, one parent replied, “It helps me to remember to read to her—but I also feel guilty if she doesn’t get at least 5-10 books per week.” Another parent proposed that there was a need to enhance elements of the program by “focusing more on a network of volunteers or matching kindergarteners with older kids [because] only three families in my son’s class participated.” Other parents focused on the motivational benefits of the program. For instance, one parent commented that “it’s great for kids to track their progress and feel a sense of accomplishment” while another noted that her son “enjoyed receiving the badges and stars.” Finally, one parent summed it up by saying, “children enjoy reading or getting read to and spending one-on-one time with a parent or parents! It has really helped me see what my child is capable of!”

Media Specialist Interview

After the data-gathering phase of my research study, I conducted a semi-structured interview with the media specialist. The purpose of this interview was to gain additional insight into her reasons for initiating the program, and a number of statements from the interview helped to interpret findings quantitative results and other descriptive data from the study.

First, the media specialist shared that the reading program was designed primarily to meet the needs of the kindergarten students’ low reading performance. Prior to the

implementation of the program, the kindergarten teachers and the media specialist were concerned with the students' lack of storybook recognition. , especially their lack of book character knowledge of a character not associated with a popular television show (i.e., *Corduroy*). As discussed previously, the kindergarteners' considerable familiarity with television-based characters rather than strictly book-based characters was observed in my student interviews. The general consensus among the teachers was that the kindergarten students were not being read to at home. As evidence of this view, the teachers observed that most students performed poorly on the vocabulary section of the end-of-year state performance assessment. In addition, very few of the kindergarten students were actually reading independently by the end of the school year.

The media specialist also explained that the program was designed to be “easy to manage, with the highest return on parent involvement. The goal was to build a family reading habit.” Responses from the parent survey suggested strong support for the program, with all of the parents expressing their desire for the program to continue.

The media specialist indicated that there was variation in the degree of participation in the program across classrooms. Student participation ranged from 100% in some classes to 67% in others. There was also variation in the number of books read across classrooms. For example, in one classroom led by an experienced teacher who promoted the program ambitiously, the participating children read a total of 3,796 books. In contrast in another classroom led by a novice teacher, the class only read 538.

Summary

In this chapter, I provided the results of my analysis of the quantitative and descriptive data collected as part of this study. After detailing the descriptive statistics, I

reported the results of my correlational analysis that involved four multiple regression models. I then summarized the findings from my analysis of the descriptive data. In the next chapter, I discuss these results further, including their implications for literacy research and practice.

CHAPTER 5

SUMMARY, DISCUSSION, LIMITATIONS, AND IMPLICATIONS

In this final chapter, I discuss the results of my research. I first provide a summary of the study, including the key findings. Second, I discuss and interpret the findings in relation to extant research and theory on the relationship between read alouds and children's literacy development. Third, I acknowledge the limitations of the study. Finally, I discuss the implications of the results for future research and home-and-school literacy practices for young children.

Summary

The purpose of my study was to address the research question: What is the relationship between reading aloud and the emergent literacy of kindergarten students? My goal was to empirically evaluate the often-cited claim that reading aloud to young children is “the single most important activity for developing knowledge required for eventual success in reading” (Anderson, Hiebert, Scott, & Wilkinson, 1985). I examined a home-school, read-aloud program designed by a school media specialist in collaboration with five kindergarten teachers.

Although reading aloud is one of the most researched topics by early childhood literacy researchers (Sulzby and Teale, 1991), the body of evidence supporting this practice is somewhat equivocal. This study was significant in that it had the potential to provide teachers, parents, and media specialists a better understanding of the possible benefits of reading aloud to young children as well as one specific intervention program

designed to support this practice. It was the purpose of my study, therefore, to explore potential relationships between the number of books read aloud to kindergarten children and their performance on end-of-kindergarten cognitive and affective measures of emergent literacy.

My dissertation sought to contribute to the research literature in three ways. First, my design attempted to address measurement-related methodological shortcomings in previous studies by employing a more precise measure of read-aloud frequency. Second, my study examined the possibility of a threshold effect for the number of books read aloud to children. Such a relationship, which would manifest itself in the form of a non-linear correlation between read-aloud frequency and the literacy outcome variables, might account for the modest and/or insignificant results found in past read-aloud research. Third, by incorporating dependent measures to tap both cognitive and affective dimensions of emergent literacy, I assessed the relationship of reading aloud with a broader conceptualization of emergent literacy than found in most other studies.

The study was conducted at a racially, ethnically, and economically diverse public elementary school in a medium-sized Southeastern community. Participants included 46 kindergarten students. The program involved a cooperative arrangement between the media specialist and kindergarten teachers and the children's parents or caregivers. The program asked parents to read aloud to their children regularly, with the goal of reading 25 or more books aloud to the children each quarter of the school year. The objective was to promote kindergarten students' exposure to books, appreciation for reading, and development of early literacy knowledge and skills.

I employed a number of quantitative data sources in this correlational study. The independent variable was read-aloud frequency, which I measured using a count of the number of books read aloud to the students as part of the year-long program. This book count was collected weekly using take-home reading logs completed by parents or caregivers. There were two dependent variables in my design. The first was a composite measure of cognitive emergent literacy measured by student scores on the last of four quarterly state-mandated performance assessments. The measurement, which evaluated students in the areas of phonemic awareness, vocabulary, comprehension, and concepts of print, was administered by classroom teachers at the end of the school year in May.

A second dependent variable assessed the affective dimension of emergent literacy and was measured by a modified reading motivation survey. I administered this instrument individually to the students at the end of the school year. Finally, my design incorporated the three control variables of race, gender, and baseline student literacy performance. Race and gender data were obtained from each participant's permanent school record. Baseline literacy performance was measured by each participant's instructional reading level as determined by the Rigby Literacy Assessment administered by the classroom teachers within the first two weeks of the school year.

Complementing the quantitative data, three forms of descriptive data were gathered as part of my study. This descriptive data encompassed student interviews conducted at the end of the school year, a take-home parent survey distributed along with the final weekly reading log, and a semi-structured interview with the school media specialist. These data painted a richer picture of the read-aloud program and helped in the interpretation of the findings obtained from the quantitative analysis.

Analysis of the quantitative data involved both linear and curvilinear regression models. The linear model included two least squares regressions: one that tested for a possible relationship between the number of books read aloud and the children's performance on the end-of-year cognitive measure, while partialing out variation related to beginning of the year literacy skills and the children's race and gender. The second least squares regression was identical except that the dependent measure was the affective measure of student reading motivation.

The curvilinear regression model was used to determine if there was a possible threshold effect for books read aloud; that is, a potential change that the strength or direction of any correlation between the number of books read and the cognitive or affective emergent literacy measures. The two curvilinear regression models paralleled the linear models, with the first incorporating the cognitive dependent variable and the second one addressing the affective dependent variable.

The linear regression analysis revealed a positive association with the number of books read aloud and year-end cognitive emergent literacy ($\beta = .38, t = 2.32, p < .05$). Along with the three control variables, read-aloud frequency accounted for 36.3% of the variance in student scores on the literacy items of the state-mandated performance assessment conducted at the end of the school year. A second linear regression found no statistically significant association between read-loud frequency and student reading motivation. Similarly, the two curvilinear regressions models demonstrate no significant correlation between read-aloud frequency and either cognitive or affective emergent literacy.

The descriptive data revealed an array of read-aloud practices among the program participants, including the participation of a variety of adult readers and a range of reading material. The parent reported book titles and genres read as part of the program differed somewhat from that reported by the students. In addition, the descriptive data indicate a mix of student motivations for reading aloud, with some kindergartners focused on extrinsic factors, while others seemingly motivated more by intrinsic factors. The descriptive also revealed a strong parental endorsement of the read-aloud intervention program.

Thus, this investigation provided additional support for the positive relationship between the number of books read aloud to young children in their homes and the children's literacy development within the kindergarten grade level. Additional insight on reading aloud to kindergartners was provided by the descriptive data. In the following section, I discuss these findings in relation to the theoretical and empirical literacy on reading aloud.

Discussion

The purpose of this study was to explore the relationship between reading aloud frequency and the emergent literacy of kindergarten students. Quantitative data, which were the primary vehicle for addressing the research question, led to two primary findings of the study. First, the number of books read aloud at home by parents and other family members was positively correlated with kindergarten children's performance on a cognitive measure of emergent literacy (a test of early reading and literacy behaviors). Second, the number of books read aloud did not predict children's responses to an affective measure of emergent literacy (a reading motivation instrument). The

complementary descriptive data in this study provided a mechanism for considering and trying to situate the quantitative findings.

My discussion of these findings is organized into five sections. In the first three sections, I interpret the quantitative data by addressing findings associated with the cognitive dimension of emergent literacy, the affective dimension of student reading motivation, and the exploration of a potential threshold effect in reading aloud. In the fourth section, I consider how the descriptive data address the quantitative findings. Finally, I address how my findings inform the potential utility of the cognitive apprenticeship model in the context of reading aloud.

Reading Aloud and the Cognitive Component of Emergent Literacy

The findings of this study provide support for the intuitive, but empirically equivocal, proposition that reading aloud to emergent readers is associated with demonstrable benefits in literacy development. The number of books read aloud combined with three control variables of race, gender, and baseline literacy performance accounted for just over 36% of the variance in the cognitive emergent literacy of the kindergarteners in my study. The statistical correlation between the read-aloud frequency and cognitive emergent literacy was $r = .39$ ($p < .01$). The size of the positive correlation between the two variables is higher than the combined mean correlation of $r = .28$ identified by Bus et al. (1995) in their meta-analysis of 29 read-aloud studies. Similarly, no correlation coefficient exceeded $r = .28$ across the 31 read-aloud studies examined by Scarborough and Dobrich (1994). Thus, these results support and perhaps extend prior research suggesting that the number of books read aloud to young children is related to their literacy development.

What might account for my finding of a statistical correlation equal to or greater than those reported by other researchers? One explanation may be the design and implementation of the read-aloud program. There are three key features of the program that may contribute to its positive relationship with emergent literacy development. First, the program was implemented within the first two weeks of the beginning of the school year. The speed with which the program was started may have capitalized on the enthusiasm of parents, students, and teachers that accompanies a new school year. Second, the program was adopted by the entire grade level, and was reinforced by the media specialist as well as the teachers. This team-like approach may have provided students a network of support and a continuous reason to participate. Third, the reading program itself was easy for both parents and teachers to manage. Parents knew to expect the log each week. The log's straight-forward design most likely contributed to the parents' willingness to participate in the program.

Another possible explanation involves my measure of read alouds. A limitation of previous research is the diverse manner in which read-aloud frequency has been measured. All but one of the 29 studies reviewed by Bus et al. (1995) relied on parental self-reports, a large percentage of which were derived from indirect measures of reading aloud, which may be subject to social desirability bias (Trochim, 2001). Subsequent studies continued this trend. For instance, the read-aloud frequency measure used by Denton and West (2002) was calculated from a two-option, forced-choice question asking parents how often they read to their child: at least three times per week or fewer than three times per week. Beyond social desirability bias, this type of book frequency measure also lacks precision.

In contrast, my study used a continuous variable representing the *actual count* of books that were read. This count, which was collected on a weekly basis over the course of the school year, also allowed for repeated readings of the same book—a factor not accounted for in prior research. The use of a direct and continuous read-aloud measure increased the confidence in the statistical relationship found by the first regression. Hence, the higher levels of association between book frequency and the cognitive measure of emergent literacy may be attributed, at least in part, to the more precise measurement tool used in this study.

Additionally, my use of control variables may have clarified the relationships between reading aloud and cognitive emergent literacy. A long-standing concern with all correlational analyses is what has been termed “the third variable problem” (Cohen, Cohen, West, & Aiken, 2003). In other words, the influence of an unmeasured third variable might lead researchers to misinterpret the conceptual relationship between the two variables of interest. I attempted to address this potential confound by including a baseline measure of literacy knowledge as well as the two key demographic descriptors of race and gender. Use of the three control variables provided the ability to assess the association between read-aloud frequency and emergent literacy, holding differences in baseline literacy skills, gender, and race constant.

It is interesting to note that the race and gender variables demonstrated no significant relationship with cognitive emergent literacy. This finding challenges prior research suggesting that race and gender influence literacy performance (Delpit & Dowdy, 2002; Rogers, 2002). Additional research is needed to explore further if and

under what conditions read-programs provide advantages to various subgroups of children.

Reading Aloud and the Affective Component of Emergent Literacy

The quantitative and descriptive data collected in this study addressed the issue of reading motivation. Although my regression analysis indicated a significant and positive linear relationship between read-aloud frequency and the cognitive dimension of emergent literacy, I found no such association with the affective dimension as measured by the CMRS instrument. Previous research has identified a number of factors that appear to influence student reading motivation, including enhanced parental involvement (Baker, 2003), use of various incentives (Gambrell, 1996), social collaboration activities (Turner, 1997), and the presence of an extensive collection of books (Pressley, 1998). It could be argued that a number, if not all, of these factors were features of the read-aloud program of interest in my study. Given this, the lack of a significant statistical association with reading motivation was an unexpected finding.

Previous researchers have not consistently measured the affective and cognitive dimensions of emergent literacy as distinct components. The fact that in my study one dimension demonstrated a significant correlational relationship, while the other did not suggests the need for greater care in defining and measuring emergent literacy. Measures that acknowledge the distinct components of emergent literacy might yield more meaningful results.

It is also possible that the CMRS instrument lacked validity with a kindergarten population. Previously, the instrument was used with first-grade students and determined to be a valid and reliable measure of reading motivation (Gambrell, 1996). When

designing my study, I contacted Linda Gambrell, first author of the CMRS, and discussed its applicability with end-of-year kindergarten students. Given her previous use of the instrument, she believed it would be appropriate considering the age of my participants. During my administration of the CMRS, I did not observe the students having difficulty responding to the questions. However, there has been limited use of the CMRS in research, so further evaluation of validity of the CMRS should be explored in subsequent investigations.

Reading motivation was also addressed in both the student interviews and parental survey. Over the years, researchers have developed various perspectives to explain the reading motivation of children. Many of these views were derived from the goal-oriented theories of motivation (e.g., Eccles, 1983), which focus on students' attitudes toward reading and the self-perception of their reading abilities. Guthrie, Wigfield, and colleagues (e.g., Guthrie, McGough, & Wigfield, 1994; Guthrie, Van Meter, McCann, Anderson, & Alao, 1996; Wigfield & Guthrie, 1995) addressed both intrinsic and extrinsic factors, identifying seven components of reading motivation: (a) reading efficacy, (b) reading challenge, (c) curiosity, (d) involvement, (e) recognition, (f) social, and (g) competition.

While the quantitative data did not support an association between book count and reading motivation, data obtained from students and parents provides a view into the reading motivation of kindergarteners. The differing factors cited by the students and the parents for participation in the program support the view that young children's motivations can be both intrinsic and extrinsic (Pintrich & Schunk, 2002; Wigfield, 1997).

For instance, parent survey data revealed that a sizable majority of the children asked that their parents to read to them. Such a request may indicate reading motivation by the child. Also, 71% of the parents indicated that their child was interested in locating books for reading, either by asking to visit the library or the bookstore. Many parents also stated that they possessed a large number of children's books in their personal libraries. Previous research has found a positive association between the number of accessible books and reading motivation (Lipson, Mosenthal, Mekkelsen, & Russ, 2004; Pressley, 2006). While this previous research has primarily focused on classroom settings, the presence of a large number of books in a large percentage of homes is an encouraging finding.

The student interview data also offered support for intrinsic and extrinsic factors in the context of kindergarteners. Some students indicated that they were motivated by the enjoyment of having someone read aloud to them and the personal experience it provides (e.g., sitting in a lap or having one-on-one time with a caregiver). These intrinsic factors appear to illustrate the social dimension identified in the Wigfield and Guthrie research (e.g., Wigfield, Guthrie, & McGough, 1996; Wigfield, Guthrie, Tonks, & Perencevich, 2004). Some students also indicated that they were motivated by the modest, symbolic "prizes" associated with the program, such as a simple button or recognition at a quarterly school program. These examples appear to represent Wigfield and Guthrie's and recognition and competitive aspect of reading motivation. Students who read for recognition enjoy the praise they receive from teachers, parents, or peers, while students who read for competition simply want to surpass the other students in the class.

Threshold Effect

One goal of this study was to evaluate a possible threshold effect for the number of books read. It is possible that reading a specific number of books aloud might be positively associated with increases in key literacy outcomes, but that such an association may be less strong or cease to exist when more than this number of books are read. The form of relationship would not follow a straight line, but would be represented by a curvilinear pattern. In many respects, this argument would be akin to a Pareto principle (Sanders, 1987), or 80/20 rule, for reading aloud: 80% of the consequences derive from 20% of the effort.

The Pareto principle has been applied to a variety of natural and sociological phenomena (Sanders, 1987). For example, statisticians have found that 80% of auto accidents are caused by 20% of drivers. The resource limits of contemporary society, especially the time and attention of parents and children, highlight the importance of determining if there is some level of read-aloud activity that might result in the majority of the outcome benefits. Despite the intuitive appeal, the notion of a threshold effect appears to be a new concept in this stream of research and, to my knowledge, has not been examined in previous read-aloud studies.

I evaluated the potential for a nonlinear relationship between reading aloud and both the cognitive and affective aspects of emergent literacy. The regression models did not demonstrate a statistically significant curvilinear relationship between book frequency and either the cognitive or affective measures of emergent literacy. However, several researchers note that larger and more diverse samples may improve the ability to discern nonlinear correlations (Cohen, 1988), so the limited sample size may have been a

factor in my study. Clearly, further investigations or replications are needed in order to explore the possibility of a threshold effect in parent read aloud.

While these results imply the absence of a threshold effect in reading aloud in the context of my sample, this issue is worthy of additional study. A potential nonlinear relationship between reading aloud and literacy development outcomes might add additional explanatory power to this body of research. In particular, if the benefits of reading aloud commonly followed a curvilinear pattern, it might account for the relatively modest or lack of findings found in past correlational studies. The nature of my sample may be a factor to consider when interpreting the finding of nonlinearity. Several researchers note that larger and more diverse samples may improve the ability to discern nonlinear correlations (Cohen, 1988).

Read-Aloud Practices

The interviews with 46 children revealed that a variety of immediate and extended family members read aloud to the students, with the largest percentage of readers being mothers. The diversity of readers is an important finding to note, for there are little research data quantifying the reader profiles found in read-aloud programs.

This issue of varied adult readers is related to the research on the interpersonal interactions that take place during shared reading (e.g., Roberts, Jurgens, & Burchinal, 2005; Sonnenschein & Munsterman, 2002). This literature has considered the role of specific communication, coaching, and modeling behaviors demonstrated in different pairs of experienced-novice readers. Although my study did not examine the read-aloud interaction between reader and child, the finding of multiple adults reading to children

suggests that subsequent research ought to explore possible style differences when examining the key outcomes of reading aloud.

The parent surveys revealed that there generally was a consistent time for reading each day, with the reading most often occurring before bedtime. This finding was encouraging and connotes a level of commitment by the parents to the program and reading aloud.

The parental survey provided support for the efficacy of the read-aloud program. For instance, it is a common instructional goal for students to read independently by the end of the first grade. However, more than 90% of the parents responded that their child began to read by the end of the kindergarten school year. Parents also voiced their strong support for the read-aloud program, and all of the respondents indicated that they wanted the read-aloud program to continue. Many commented that they would like to see the program continue not only for kindergarteners, but also be implemented for first-grade students. Although these are self-report data, and one does not know precisely what the parents determined as “beginning to read,” it is significant that parents viewed the program as being successful.

Another key finding from the analysis of the descriptive data related the reading materials used in the read alouds. The parental surveys and the student interviews revealed similar findings about the reading materials used in the read alouds. Both parents and students reported that fiction books were the most common genre read. The parents reported on the survey that nearly 86% of their reading was fiction, with half of those titles being picture books and a third being chapter books. Likewise, students reported fiction as the most frequently read genre, representing 60% of the identified

titles. However, there was a disparity between the number of nonfiction titles parents reported and those that students reported. Parents reported reading nearly 30% nonfiction titles, while students indicated that less than 10% of their reading was nonfiction.

Although less common than fiction, the notable number of nonfiction books stands in contrast to the findings of previous researchers (Duke, 2000; Palmer & Stewart, 2005).

The fact that a minority of titles were nonfiction might be a practical reflection of the design and structure of nonfiction books, which may not promote linear reading (i.e., reading from the beginning to the end of a text) in the same way as fiction titles.

In addition, parents did not mention any books relating to mass-media characters on their survey. However, students indicated that 23% of the books they recalled were about these characters. It is difficult to assess how students were first exposed to these media-based characters. Some popular media characters, such as *Clifford, the Big Red Dog*, originally appeared as a book, but then evolved into a character on television series. Other characters, such as Sponge Bob, began as a television character but later began to be featured in books.

Cognitive Apprenticeship

Cognitive apprenticeship provided the conceptual foundation for my study. The cognitive apprenticeship model proposes that the more experienced individual plays a critical role in modeling the desired behavior or skill to be acquired by the less experienced individual (Collins, Brown, & Neuman, 1990; Rogoff, 1990). As noted earlier in this dissertation, however, cognitive apprenticeship has not been applied to read-aloud practices previously, so the application of this model for this study required an adapted view of cognitive apprenticeship. In addition, research on cognitive processes

during language comprehension events (Duffy, 2003; Pressley, 2006), as well as contemporary views of literacy balance (Pearson et al., 2007), suggest that a modified model of cognitive apprenticeships may be useful in interpreting data on parent/child read alouds.

A variety of different people read to the children in this study, so the expert role potentially was assumed by different persons. In some cases, the expert-novice relationship may have been reversed, with a child asserting him- or herself more actively. From the perspective of cognitive apprenticeship, this level of initiative illustrates the notion of exploration, the stage in which children seek to test a skill independently (Collins, Brown, & Holum, 1991). For example, one parent commented that her child “prefers to read books to us.” Another parent reported that her kindergartener eventually began “taking over” the reading from the adult. Pearson and Gallagher (1983) might characterize this action as an example of the “gradual release of responsibility.” Similar to the apprentice whose desire to learn connotes an interest in the craft at hand, the simple request to be read to is a signal of interest as well.

I also questioned the students about the interactions with their parents during reading. Collins, Brown and Holum (1991) suggest that coaching, modeling, and scaffolding are the three core components of cognitive apprenticeship. In this regard, I focused on identifying specific scaffolding, modeling, or coaching behaviors that may have taken place during the read-aloud experience. However, none of the student participants offered any comments about the verbal or nonverbal interactions during reading. Specifically, there were no comments relating to specific parental questioning or scaffolding during reading. In contrast, the cognitive apprenticeship model connotes a

deliberate and pre-mediated series of knowledge transfer strategies. Thus, additional inquiries are required to examine the degree to which cognitive apprenticeship helps explain read-aloud interactions.

In sum, the results of this study suggest that the cognitive apprenticeship model provides promise when exploring parent-child read aloud practices. Further research is needed, however, to explore directly the nature of experienced other/emergent reader interactions during reading aloud to determine if the model adequately grounds empirical findings of the complexities of a read-aloud dyad.

Limitations

As with all research, there are several limitations to my study that should be considered when reviewing the findings. First, the relative small size and the fact that all participants were selected from a single school within one community setting limits the generalizability of my findings. However, the sample was somewhat diverse in terms of racial, achievement, and economic demographics, which may improve the potential to apply learnings from this study more broadly.

Second, there are several measurement-related limitations to the design. A major objective of my study was to improve the measurement of read-aloud frequency, the key independent variable in this research and a large number of other similar studies.

Although I believe the direct approach I took to measuring book count may be more accurate than what previous studies have employed, there are shortcomings to other variables in my correlational analysis. For instance, the baseline literacy skills and year-end cognitive emergent literacy measures involved judgment by the teachers who administered them, potentially affecting the reliability of these measures. My inability to

control for the administration and scoring of these measures provided a potential threat to internal validity.

Third, the self-report format of the parent survey may have introduced a social desirability bias (Trochim, 2001) into this measure. My attempt to triangulate some of these data by asking similar questions to the students as part of their individual interviews may have ameliorated any social desirability bias.

Fourth, the study did not control for variation across teachers and classrooms. A variety of factors—such as the frequency and nature of in-class read alouds, general teaching ability, and classroom environmental factors, just to name a few—influence student’s literacy development, and they were considered random factors in this study. Scarborough and Dobrich (1994) suggest that the significance of teacher-specific factors may likely diminish the discernable effects gained from at-home read alouds. Allington and Johnson (2002) observed that the modeling of literacy behaviors and an enthusiasm for reading by a classroom teacher were characteristics of highly effective literacy teachers. To partially address this potential confound, I compared the mean year-end literacy performance scores from the students in each classroom. The results of this test revealed no statistically significant differences across the classrooms.

Finally, it is important to emphasize that the results of the correlational analyses employed as part of the study should not be used to suggest causality between the independent and the dependent variables. Certain elements of the regression models did demonstrate high levels of statistical significance, but these tests only demonstrate association beyond chance, not causality.

Implications for Practice

This study involved a pre-existing read-aloud intervention program designed by a school media specialist. Given the practical nature of this study, the findings provide the opportunity to consider implications for instructional practice. In many ways, these implications are relevant to teachers, administrators, policymakers, parents, and teacher-educators.

At the most basic level, this study provides further support for at-home read-aloud programs. Although many factors may influence children's literacy development (Fielding & Pearson, 1994), my findings indicate that the frequency with which students engage in reading aloud is positively associated with the cognitive aspect of emergent literacy. At a minimum, this finding should encourage kindergarten teachers to strongly consider incorporating this literacy practice into their instructional program. Building on the cognitive apprenticeship model, reading aloud provides an authentic context for learning about and through language. Additionally, reading aloud appears to be beneficial for those who enter kindergarten with limited or low literacy skills as well as those with more advanced literacy skills, suggesting that all students can benefit from reading-aloud in the home.

Another notable implication of my study involves the professional development of both pre-service and in-service teachers, and thus, should be of special interest to those seeking to train, recruit, and retain outstanding literacy teachers. My analysis found that the most inexperienced classroom teacher in the study had the lowest level of student participation in the program. The students in the classroom of the teacher who was in her first year of teaching read 538 books over the course of the school year. While this is not

an insignificant number, this statistic is notably lower than students in the more experienced teacher's classroom, who read nearly 3,800 books during the same period. A number of factors might explain this disparity, but one must wonder whether reading aloud was not emphasized in less-experienced teacher's preparation program. Discussion of the cognitive apprenticeship model with pre-service teachers provides an opportunity to expose future teachers to the importance of modeling, scaffolding, and coaching, as well as the role of social interaction in literacy development (Bus & van IJzendoorn, 1995).

My finding should also encourage teacher-educators to communicate a number of points to pre-service teachers. For example, the level of student involvement in the read-aloud program seems to be linked to the degree that the classroom teacher believes in the practice of reading aloud and encourages her students to engage in this activity at home. The more experienced teacher was actively involved in recruiting her students' parents to participate in the program. First, she shared her belief about the benefits of reading aloud to parents at the first parent meeting, which occurred around the time the read-aloud program was launched. She then followed-up each week with a phone call to the parents of the students who failed to return the weekly reading log. Participation in the program also became a key talking-point during the parent conferences that took place throughout the school year. Even if reading aloud is featured as an effective strategy in pre-service training, my findings should lead us to consider how we can help new teachers understand the importance of taking advantage of supplemental programs available within the school designed to improve reading. Often, as was the case with my research site, such programs are initiated by a media specialist.

In addition to the teacher's level of commitment to reading aloud, both pre-service and in-service teachers must recognize the range of more experienced readers that might be available to read aloud to students. Although my study revealed that parents, particularly mothers, were the most common adults reading aloud to young children, there exists a wider group of potential readers, including older siblings, grandparents, extended family members, and even volunteers. Teachers should be encouraged to take advantage of this varied group of readers in order to maximize the opportunities for student exposure to reading aloud. Part of this effort might involve specific communication tools and messages that reinforce reading aloud targeted to audiences beyond a child's parents (Wasik, 1998). This outreach should also attempt to acknowledge the varying levels of home literacy practices (Payne, Whitehurst, & Angell, 1994; Senechal, LeFevre, Thomas, & Daley, 1998).

In terms of reading materials, parents, media specialists, teachers, and others should continuously challenge themselves to consider fully the range of items that might appeal to this age group. My study revealed that books with animated, mass-media-related characters were a favorite of the participants. Similarly, other researchers have noted the growing impact of popular cultural on literacy practices (Gee, 2002). In fact, 23% of the books that students could recall were related to animated characters from television or movies. Does this finding imply something about the parents' degree of knowledge of quality literature? How might teachers facilitate engagement in a broader array of high-quality text?

The suggested book list included as part of the reading aloud program examined in my study may be especially important in this situation. However, more effort may be

needed to encourage parents to make use of this information. The media specialist prepared a list of suggested readings each week, yet only one parent commented on it. Unfortunately, that parent indicated that she didn't use it. There appears to be an opportunity for more direct intervention by media specialists and teachers to encourage students to bring these recommended books home and make them a feature of their read-aloud experience.

Previous research has identified the importance of balancing young readers' exposure to fiction with nonfiction. My findings compliment this view by pointing to the fact that both narrative and expository nonfiction books are appropriate choices for reading aloud (Doiron, 1994). Narrative nonfiction often provides more in-depth information about a topic of great interest to a child (Moss, 1991). In addition, the language of narrative nonfiction is more familiar and accessible to students. Reading logs from the read-aloud program in my study indicated that parents and students were in fact reading expository nonfiction. However, because this type of book does not necessarily lend itself to being read in a continuous, story-like manner, teachers and media specialists must consider how to best incorporate expository texts into read-aloud programs.

In addition to specific book titles, the school media specialist provided a number of tips for the parents to enhance the at-home read-aloud experience. The recommendations included such things as using different voices, asking children to make connections with other books, and encouraging parents to reread. This effort on the part of the media specialist might be viewed as an example of the scaffolding component of cognitive apprenticeship. This suggests an opportunity for teachers and media specialists to scaffold for parents as they scaffold for students.

Implications for Research

My study suggests the need for additional research in a number of areas related to reading aloud. First, researchers should investigate how various moderating conditions may influence read-aloud outcomes. Limited research has already begun in this area. For instance, a number of researchers have studied the interaction between the mother and child during reading aloud (Roberts, Jurgens, & Burchinal, 2005; Sonnenschein & Munsterman, 2002). However, there are many other moderators that need to be addressed in the context of read alouds. My study found notable differences among the classroom teachers in the level of support for the read-aloud program. Given the overall influence of classroom teachers in the literacy habits of students (Hoffman, 1991), a teacher's degree of support for reading aloud may be an important variable of interest. For example, researchers might conduct a quasi-experimental study across a wide variety of classrooms. Such a design might include a pre-intervention assessment of literacy-related beliefs and behaviors among the different teachers. Research could then examine how the degree with which such teacher characteristics interact with student literacy outcomes.

It would also be interesting to better understand how these findings might generalize to different settings or demographics sectors. A number of specific issues worthy of additional research relate to a student's language and home environment (Au, 2003). For example, there is an opportunity to consider how reading aloud outcomes differ for English learners, especially if the adult reader is not a native English-language speaker. Likewise, it would be interesting to replicate my study in the form of a comparative design that examines potential differences in outcomes from students in schools in rural and urban classroom settings.

A minor, but intriguing finding from my study involved student recall of book titles they read as part of the read-aloud program. As discussed previously, a sizable percentage identified animated mass media characters. Understanding more about the evolution of interest around books that contain mass media-related characters is another potentially fruitful stream for research. It would be helpful to better understand which came first – student interest in the character books, or their interest in the television shows or movies that may have then prompted students to turn to the book form (Gee, 2002). Rather than solely relying on student recall, to improve validity, this research would require some level of data triangulation.

A topic in need of further study revolves around the need to better assess how teachers recruit, and then continuously engage, parents and other caregivers in reading aloud (Duke & Purcell-Gates, 2003; Mason & Dunning, 1986, April; Senechal, LeFevre, Thomas, & Daley, 1998). There seems no doubt that some of the parents in my study were simply complying with the program so that their child would reach the target goal (i.e., a minimum of 25 books per 9-week period). However, others may have been more cognizant of the benefits that derive from reading aloud, even though they may be intuitive. Does the parent's personal motivation for participation in the program affect the outcomes? Additional research is needed to assess potential differences in a reader/listener team that simply complies with the reading aloud requirements compared to those that fully understand not only the benefits of reading aloud, but also some of the important strategies to enhance reading performance, such as comprehension (Beck & McKeown, 1996).

A related point involves the student's direct motivation for reading (Gambrell, 1996; Wigfield, Guthrie, Tonks, & Perencevich, 2004). Specifically, it would be interesting to assess if and how peer pressure effects influence behaviors and outcomes? In my study, there was a considerable difference in the number of books read within one classroom as well as across classrooms. Subsequent research might examine how personal recognition and the sense of competition among students and classrooms over the number of books read affects students motivation to participate and the benefits they derive from the activity.

My study sought to assess the possibility of a threshold effect in the number of books read. Despite the insignificant findings, additional research may be illuminating, for little work has been done in this area since this issue was recognized by Lonigan and Whitehurst (1998). Given the time constraints of most parents and children in today's busy lifestyles (Federal Interagency Forum on Child and Family Statistics, 2006), the ability to identify some minimum level of read-aloud activity that can yield meaningful outcomes is an area ripe for additional research. Clearly, such work should not suggest that parents intentionally limit their read alouds, but providing research-based guidance on this subject should be a practical objective.

Finally, more literacy research is needed that employs the cognitive apprenticeship model. While this perspective is intuitive and appealing, there is a surprisingly limited number of studies that attempt to examine the role and form of apprenticeship taking place in the read-aloud experience. The results of my study suggest a particular opportunity to examine differences in expert role among different experienced readers (Senechal, Thomas, & Monker, 1995). Although my research

revealed considerable diversity in the individuals who read aloud to the child, we have limited understanding of how different types of expert readers go about guiding the novice.

Conclusion

On the surface, it is intuitive that reading aloud offers important advantages to the literacy development of young children. Indeed, a large body of policy and practice supports this point of view. However, the research literature in this area is somewhat ambiguous. This study attempted to revisit the topic of read alouds with the aim of better understanding this important issue from the perspective of research and practice. The findings provide limited support for the benefits of reading aloud on the cognitive emergent literacy of kindergarten students. Yet, other findings point out the complexity of this issue and that, far from decided, this topic represents a rich area for additional research. Even assuming the base-level benefits of reading aloud, I believe my study points to a number of opportunities to identify how teachers and parents might maximize the experience.

REFERENCES

- Allington, R. L., & Johnston, P. H. (2002). *Reading to learn: Lessons from exemplary fourth-grade classrooms*. New York: The Guilford Press.
- Anderson, R. C., Hiebert, E. H., Scott, J. A., & Wilkinson, I. A. G. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: National Institute of Education
- Aram, D., & Biron, S. (2004). Joint storybook reading and joint writing interventions among low SES preschoolers: Differential contributions to early literacy. *Early Childhood Research Quarterly, 19*, 588-610.
- Au, K. H. (2003). Balanced literacy instruction: Implications for students of diverse backgrounds. In J. Flood, D. Lapp, J. R. Squire & J. Jensen (Eds.), *Handbook of research on teaching the English language arts* (Vol. 2, pp. 955-966). Mahwah: NJ: Lawrence Erlbaum.
- Baker, L. (2003). The role of parents in motivating struggling readers. *Reading and Writing Quarterly, 19*, 87-106.
- Beck, I. L., & McKeown, M. G. (1996). Questioning the author: A yearlong classroom implementation. *Elementary School Journal, 96*(4), 385-415.
- Beck, I. L., & McKeown, M. G. (2007). Increasing young low-income children's oral vocabulary repertoires through rich and focused instruction. *Elementary School Journal, 107*, 251-271.

- Brown, J., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.
- Brown, M. H., Cromer, P. S., & Weinberg, S. H. (1986). Shared book experiences in kindergarten: Helping children come to literacy. *Early Childhood Research Quarterly*, 1, 397-405.
- Bus, A. G., & van IJzendoorn, M. H. (1995). Mothers reading to their 3-year-olds: The role of mother-child attachment security in becoming literate. *Reading Research Quarterly*, 30, 998-1015.
- Bus, A. G., van IJzendoorn, M. H., & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale: Erlbaum Associates.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Collins, A., Brown, J. S., & Holum, A. (1991). Cognitive apprenticeship: Making thinking visible. *American Educator*, 12(6), 38-47.
- Collins, A., Brown, J. S., & Neuman, S. B. (1990). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Lawrence Erlbaum.

- Crain-Thoreson, C., & Dale, P. S. (1992). Do early talkers become early readers? Linguistic precocity, preschool language, and emergent literacy. *Developmental Psychology*, 28, 421-429.
- DeBaryshe, B. D. (1993). Joint picture-book reading correlates of early oral language skill. *Journal of Child Language*, 20, 455-461.
- Delpit, L., & Dowdy, J. K. (Eds.). (2002). *The skin that we speak*. New York: The New Press.
- Denton, K., & West, J. (2002). *Children's reading and mathematics achievement in kindergarten and first grade* (No. NCES 2002-125). Washington, DC: National Center for Educational Statistics.
- Dickinson, D. K., & Smith, M. W. (1994). Long-term effects of preschool teachers' book readings on low-income children's vocabulary and story comprehension. *Reading Research Quarterly*, 29, 105-122.
- Doiron, R. (1994). Using nonfiction in a read-aloud program: Letting the facts speak for themselves. *The Reading Teacher*, 47, 616-624.
- Dreher, M. J. (2003). Motivating struggling readers by tapping the potential of information books. *Reading & Writing Quarterly*, 19, 25-38.
- Duke, N. (2000). 3.6 minutes per day: The scarcity of informational texts in first grade. *Reading Research Quarterly*, 35, 202-224.
- Duke, N., & Purcell-Gates, V. (2003). Genres at home and at school: Bridging the known to the new. *The Reading Teacher*, 57, 30-37.
- Eccles, J. S. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives* (pp. 75-146). San Francisco: Freeman.

- Federal Interagency Forum on Child and Family Statistics. (2006). America's children in brief: Key national indicators of well-being. Vienna, VA: U.S. Department of Health and Human Services.
- Fielding, & Pearson, P. D. (1994). Reading comprehension: What works. *Educational Leadership, 51*(5), 62-68.
- Fisher, D., Flood, J., Lapp, D., & Frey, N. (2004). Interactive read-alouds: Is there a common set of practices? *The Reading Teacher, 58*, 8-17.
- Fletcher, K. L., & Reese, E. (2005). Picture book reading with young children: A conceptual framework. *Developmental Review, 25*, 64-103.
- Gambrell, L. B. (1996). Creating classroom cultures that foster reading motivation. *The Reading Teacher, 96*, 14.
- Gee, J. P. (2002). Millennials and bobos, Blue's Clues and Sesame Street: A story for our times. In D. E. Alvermann (Ed.), *Adolescents and digital literacies in a digital world*. New York Peter Lang.
- Gest, S. D., Freeman, N. R., Domitrovich, C. E., & Welsh, J. A. (2004). Shared book reading and children's language comprehension skills: The moderating role of parental discipline practices. *Early Childhood Research Quarterly, 19*, 319-336.
- Goodsitt, J., Raitan, J. G., & Perlmutter, M. (1988). Interaction between mothers and preschool children when reading a novel and familiar book. *International Journal of Behavioral Development, 11*, 489-505.
- Guthrie, J. T., McGough, K., & Wigfield, A. (1994). *Measuring reading activity* (No. 4). Athens, GA: National Reading Research Center.

- Guthrie, J. T., Van Meter, P., McCann, A., Anderson, E., & Alao, S. (1996). *Does concept-oriented reading instruction increase motivation, strategies, and conceptual learning?* (No. 66). Athens, GA: National Reading Research Center.
- Hargrave, A. C., & Senechal, M. (2000). A book reading intervention with preschool children who have limited vocabularies: The benefits of regular reading and dialogic reading. *Early Childhood Research Quarterly, 15*, 75-90.
- Hoffman, J. V. (1991). Teacher and school effects in learning to read. In R. Barr, M. L. Kamil, P. B. Mosenthal & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 911-950). Mahwah, NJ: Lawrence Erlbaum.
- Lee, C. D., & Smagorinsky, P. (Eds.). (1999). *Vygotskian Perspectives on Literacy Research: Constructing Meaning through Collaborative Inquiry*. New York, NY: Cambridge University Press.
- Leslie, L., & Allen, L. (1999). Factors that predict success in an early literacy intervention project *Reading Research Quarterly, 34*, 404-424.
- Lipson, M. Y., Mosenthal, J. H., Mekkelsen, J., & Russ, B. (2004). Building knowledge and fashioning success one school at a time. *The Reading Teacher, 57*, 534-542.
- Lonigan, C. J. (1994). Reading to preschoolers exposed: Is the emperor really naked? *Developmental Review, 14*, 303-323.
- Lonigan, C. J., & Whitehurst, G. J. (1998). Relative efficacy of parent and teacher involvement in a shared-reading intervention for preschool children from low-income backgrounds *Early Childhood Research Quarterly, 13*, 263-290.

- Lovelace, S., & Stewart, S. R. (2007). Increasing print awareness in preschoolers with language impairments using non-evocative print referencing. *Language, Speech, and Hearing Services in Schools, 38*, 16-30.
- Martinez, M., & Roser, N. (1985). Read it again: The value of repeated readings during storytime. *The Reading Teacher, 38*, 782-786.
- Mason, J. M. (1980). When do children begin to read: An exploration of four year old children's letter and word reading competencies. *Reading Research Quarterly, 15*, 203-227.
- Mason, J. M., & Dunning, D. (1986, April). *Toward a model relating home literacy with beginning reading*. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, CA.
- Mazzoni, S. A., Gambrell, L. B., & Korkeamaki, R. L. (2000). A cross-cultural perspective on early literacy motivation. *Reading Psychology, 20*, 237-253.
- Meyer, L., Wardrop, J., Stahl, S., & Linn, R. (1994). Effects of reading storybooks aloud to children. *Journal of Educational Research, 88*, 69-85.
- Morrow, L. M., & Brittain, R. (2003). The nature of storybook reading in the elementary school: Current practices. In A. van Kleeck, S. A. Stahl & E. B. Bauer (Eds.), *On reading books to children: Parents and teachers*. Mahwah: NJ: Lawrence Erlbaum.
- Moss, B. (1991). Children's nonfiction tradebooks: A complement to content area texts. *The Reading Teacher, 45*, 26-32.
- Ouellette, G., Dagostino, L., & Carifio, J. (1999). The effects of exposure to children's literature through read aloud and an inferencing strategy on low reading ability

- fifth graders' sense of story structure and reading comprehension. *Reading Improvement*, 36, 73-89.
- Palmer, R. G., & Stewart, R. A. (2005). Models for using nonfiction in the primary grades. *The Reading Teacher*, 58, 426-433.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3 ed.). Thousand Oaks, CA: Sage.
- Payne, A. C., Whitehurst, G. J., & Angell, A. L. (1994). The role of home literacy environment in the development of language ability in preschool children from low-income families. *Early Childhood Research Quarterly*, 9, 427-440.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8, 317-344.
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research*. Belmont, CA: Wadsworth Publishing
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Upper Saddle River, NJ: Pearson Education.
- Pressley, M. (1998). *Reading instruction that works. The case for balanced teaching*. New York: Guilford Press.
- Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching* (3rd ed.). New York: Guilford.
- Rau, D. M. (2000). *Purple is best*. San Francisco, CA: Children's Press.
- Rigby. (2005). *Rigby literacy*. Orlando, FL: Harcourt.
- Robbins, C., & Ehri, L. C. (1994). Reading storybooks to kindergartners helps them learn new vocabulary words. *Journal of Educational Psychology*, 86, 54-64.

- Roberts, J., Jurgens, J., & Burchinal, M. (2005). The role of home literacy practices in preschool children's language and emergent literacy skills. *Journal of Speech, Language, and Hearing Research, 48*, 345-359.
- Rogers, R. (2002). "That's what you're here for, you're suppose to tell us": Teaching and learning critical literacy. *Journal of Adolescent & Adult Literacy, 48*(8), 772-787.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.
- Sanders, R. (1987). The Pareto principle: Its use and abuse. *Journal of Consumer Marketing, 4*(1), 47-53.
- Scarborough, H. S., & Dobrich, W. (1994). On the efficacy of reading to preschoolers. *Developmental Review, 14*, 245-302.
- Senechal, M., LeFevre, J., Hudson, E., & Lawson, E. P. (1996). Knowledge of storybooks as a predictor of young children's vocabulary. *Journal of Educational Psychology, 88*, 520-536.
- Senechal, M., LeFevre, J., Thomas, E. M., & Daley, K. E. (1998). Differential effects of home literacy experiences on the development of oral and written language. *Reading Research Quarterly, 33*, 96-116.
- Senechal, M., Thomas, E., & Monker, J. (1995). Individual differences in 4-year-old children's acquisition of vocabulary during storybook reading. *Journal of Educational Psychology, 87*, 218-229.
- Sonnenschein, S., & Munsterman, K. (2002). The influence of home-based reading interactions on 5-year-olds' reading motivations and early literacy development. *Early Childhood Research Quarterly, 17*, 318-337.

- Stahl, S. (1998). Understanding shifts in reading and its instruction. *Peabody Journal of Education*, 73(3&4), 31-67.
- Stanovich, K. E., & Cunningham, A. E. (2004). Inferences from correlational data: Exploring associations with reading experience. In N. K. Duke & M. H. Mallette (Eds.), *Literacy research methodologies* (pp. 28-45). New York: The Guilford Press.
- Sulzby, E., & Teale, W. H. (1991). Emergent literacy. In R. Barr, M. L. Kamil, J. H. Mosenthal & P. D. Pearson (Eds.), *Handbook of reading research* (2nd ed., Vol. 2, pp. 727-757). New York: Longman.
- Teale, W. H., & Sulzby, E. (Eds.). (1986). *Emergent literacy: Writing and reading*. Norwood, NJ: Ablex.
- Trochim, W. M. K. (2001). *The research methods knowledge base* (second ed.). Cincinnati, OH: Atomic Dog Publishing.
- Turner, J. (1997). Starting right: Strategies for engaging young literacy learners. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (pp. 183-204). Newark, DE: International Reading Association.
- Ukrainetz, T. A., Cooney, M. H., Dyer, S. K., Kysar, A. J., & Harris, T. J. (2000). An investigation into teaching phonemic awareness through shared reading and writing. *Early Childhood Research Quarterly*, 15, 331-355.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher mental psychological processes*. Cambridge, MA: Harvard University Press.

- Wasik, B. A. (1998). Volunteer tutoring programs in reading: A review. *Reading Research Quarterly, 33*, 266-291.
- Wasik, B. A., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology, 1993*, 243-250.
- Watkins, M. W., & Coffey, D. Y. (2004). Reading motivation: Multidimensional and indeterminate. *Journal of Educational Psychology, 96*, 110-118.
- Wells, D. (1987). The learning of literacy. In B. Fillion, H. C. & E. Dimartino (Eds.), *Home and school: Early language and reading* (pp. 27-46). Norwood, NJ: Ablex.
- Wells, G. (1985). Preschool literacy-related activities and success in school. In D. R. Olson, N. Torrance & A. Hildyard (Eds.), *Literacy, language, and learning: The nature and consequences of reading and writing* (pp. 229-255). Cambridge, UK: Cambridge University Press.
- Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.
- Whitehurst, G., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development, 69*, 848-872.
- Wigfield, A. (1997). Children's motivations for reading and reading engagement. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (pp. 14-33). Newark, DE: International Reading Association.
- Wigfield, A., & Guthrie, J. T. (1995). *Dimensions of children's motivations for reading: An initial study* (No. 34). Athens, GA: National Reading Research Center.

- Wigfield, A., Guthrie, J. T., & McGough, K. (1996). *A questionnaire measure of children's motivations for reading* (No. 22): National Reading Research Center.
- Wigfield, A., Guthrie, J. T., Tonks, S., & Perencevich, K. C. (2004). Children's motivation for reading: Domain-specificity and instructional influences. *Journal of Educational Research, 97*, 299-309.
- Wood, M., & Salvetti, E. P. (2001). Project Story Boost: Read-alouds for students at risk. *The Reading Teacher, 55*, 76-83.

APPENDIX A
SAMPLE READING LOG

Reading Record

Name _____ Teacher _____

Week of September 8-14, 2006

| Day | Title of Reading Material |
|-----------------|---------------------------|
| Friday, 9/8 | |
| Saturday, 9/9 | |
| Sunday, 9/10 | |
| Monday, 9/11 | |
| Tuesday, 9/12 | |
| Wednesday, 9/13 | |
| Thursday, 9/14 | |

Parent/Guardian Signature

IMPORTANT-RETURN COMPLETED READING LOG ON FRIDAY!

(backside of the reading log)

Help your child enjoy reading and build a recreational reading habit by reading to your child. Every time you read to your child and record the books you have read together, you help our students get closer to the goal of developing lifelong readers.

Resolutions for Becoming a Member of the XX Readers

1. The child will be read to by someone, like mom, dad relative or caregiver.
2. Books read will be recorded on the **Reading Log**. Write down the title of the book(s). Keep the **Reading Log** in a folder, binder, or on the child's bedside table.
3. If the same book is read again, just record it again on the day it was read.
4. Return the complete **Reading Log** on Friday. Every Friday, a new **Reading Log** will go home with your child so you can begin reading over the weekend.
5. Both parent and child must sign the contract.

Tips for sharing books with your child

- Read together daily. Set aside a special time and place to read together.
- Discuss the interesting parts of the story with your child.
- Give characters special voices and put in sound effects. It helps your child's listening skills.
- Ask your child to connect with the text by following along from left to right as you read. Point out the pictures and talk about what you see.
- Talk about the story when you finish reading. Ask your child open-ended questions, like "What do you think will happen next?" or "What would you do?"
- Read the story over again. Children need to hear favorite stories over and over. It helps them recognize words and remember them. It also helps predict what will come next.

Read as many days as you can for as long as your child maintains interest and enthusiasm. Never mind if you skip a day or two. KEEP IT FUN. DO WHATEVER WORKS FOR YOU!

Our goal for is for each child to have at least 25 books read to him or her each 9 week grading period.

CONTRACT

I wish to become a lifelong reader and a member of the XX Readers by reading books as often as I am able. I will strive to read at least 25 books every 9 weeks.

student's signature

parent's signature

APPENDIX B
STUDENT PERMISSION FORM

CONSENT FORM

| | | |
|---------------------------------|--|---|
| Title of Research | The Relationship Between Books Read Aloud to Young Children and their Beginning Reading Development | |
| Name of Researchers | T. Lee Williams , Principal Investigator | James F. Baumann , Faculty Advisor/Co-researcher |
| Phone Number & Email | (706) 542- 7866 / tlw @uga.edu | (706) 542-3811 / jbaumann@uga.edu |
| School Address | University of Georgia, Department of Language and Literacy, Aderhold Hall , Athens GA 30606 | |

My name is Lee Williams. I am a graduate student at the University of Georgia and I am conducting a research study about how reading aloud may impact beginning reading development. I am asking you to take part in this research study because you initiated the program of interest, XX Readers, as part of your library programming for kindergarten students.

If you agree take part in this research study, the following will occur:

1. You will be asked to participate in an interview about the XX Readers program. This interview will take place at a time and location that is convenient for you
2. The researchers would like to make audio recordings of the interview.

There are no direct benefits to you but the findings from this project may provide information that would benefit other kindergarten students in XX County and beyond. There are also no known risks or discomforts associated with this research.

Any information that is obtained in connection with this study that can be identified with you will remain confidential unless required by law. Any data containing individually identifying information, including the audio and video tapes, will be securely kept a locked filing cabinet or password protected computer in the researcher's office. After analysis is complete, the researcher will erase any individually identifying information from the data, remove any links between your name and results, and will erase or destroy the audio and video recordings.

Your participation is **voluntary**. You can refuse to participate and can withdraw from participation without any penalty or any loss of benefits to which you are otherwise entitled. You can request to have the results of the participation, to the extent that it can be identified with you, removed from the research records or destroyed.

The researcher can be contacted for any further **questions about the research**, now or during the course of the project. See contact information for the researcher at the top of the page. Additional questions, concerns or complaints regarding **your rights as a research participant** or in the event of a **research related injury** should be addressed to The IRB Chairperson, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address: IRB@uga.edu

I understand the study procedures described above. My questions have been answered to my satisfaction, and I agree to take part in this study. I have been given a copy of this form.

| | | |
|------------------------|-----------|------|
| <i>T. Lee Williams</i> | | |
| Name of Researcher | Signature | Date |
| Name of Participant | Signature | Date |

Please sign both copies, keep one and return one to the researcher.

APPENDIX C

CHILDREN'S MOTIVATION TO READ SURVEY

Name _____

Teacher _____

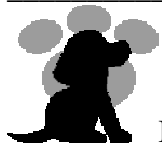
Practice:



What grade are you in?

1
Kindergarten

2
First grade



I am a

1
Girl

2
Boy

*****BEGIN*****



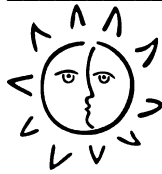
the class?

How often would you like for your teacher to read stories out loud to

1
Every day

2
Almost every day

3
Not much



Do you like to read books all by yourself?

1
No

2
It's OK

3
Yes



Does someone in your family read to you before you go to bed?

1
Almost every night

2
Sometimes

3
No



Do you read **by yourself** before you go to bed?

1
Almost every night

2
Sometimes

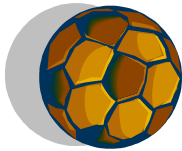
3
No



Which would you rather do?

1
Clean your room

2
Read a book



How do you feel when you are in a group talking about a story?

1
I like to talk about my ideas.

2
I do not like to talk about my ideas.



Do you take story books home from school to read?

1
Almost never

2
Sometimes

3
Almost every day



Do you read books out loud to someone in your family?

- | | | |
|------------------|-----------|-------|
| 1 | 2 | 3 |
| Almost every day | Sometimes | Never |
-



What kind of reader are you?

- | | | |
|--------------------------|--------------------|------------------------------|
| 1 | 2 | 3 |
| I am a very good reader. | I am an OK reader. | I am NOT a very good reader. |
-



Learning to read is

- | | | | |
|-------------|--------------|--------------|-------------|
| 1 | 2 | 3 | 4 |
| Really hard | Sort of hard | Sort of easy | Really easy |
-

APPENDIX D
STUDENT INTERVIEW GUIDE

Structured Student Interview Guide

Student number _____

Date _____

1. What do you like best about reading?
2. Who reads books to you?
3. How was the program different from reading in the classroom?
4. Did you learn anything by being in the program? What did you learn?
5. Do you have any favorite books that were read to you? What are they? Why are they your favorites?

Notes/other observations:

APPENDIX E
PARENT SURVEY

Parent Survey

Parents: XX Readers is a reading incentive program to help your child increase his or her recreational reading and become a reader. Please comment on how you feel about the XX Readers program.

Did you and your child have a regular reading time to read and record books? Please explain.

Did your child ask you to read to him or her? Please comment.

Did your child ask to buy books, go to the library or bookstore for books to read? Please explain.

What kinds of reading material did you and your child read?

Did your child begin to read books to you during the year? Please comment.

Should the school continue to have a reading program like XX Readers? Please comment.

APPENDIX F
MEDIA SPECIALIST INTERVIEW GUIDE

Semi-Structured Interview Guide for the Media Specialist

1. What was your motivation behind establishing the XX Readers Program? In your opinion, is it successful? Why?
2. Tell me about the program.
3. What type of support do you receive from the teachers? Challenges?
4. What about administrators?
5. What about parents?
6. How long have you been working as a media specialist?

APPENDIX G
STUDENT READING MATERIAL RECALL

| Student Response | Times Mentioned | Fiction | Nonfiction | Media Character | Author Only | Child as Author | Book Series | Magazines |
|-------------------------------|-----------------|---------|------------|-----------------|-------------|-----------------|-------------|-----------|
| 20 Leagues Under the Sea | | ■ | | | | | | |
| 3 Bears | | ■ | | | | | | |
| 3 Billy Goats Gruff | | ■ | | | | | | |
| 5 Little Penguins | | ■ | | | | | | |
| animal books (nonspecific) | 3 | | ■ | | | | | |
| A-Z Mystery Series | | ■ | | | | | ■ | |
| Backyard magazines | | ■ | ■ | | | | | ■ |
| Barbie | 2 | ■ | | ■ | | | | |
| bats | | | ■ | | | | | |
| Berenstein Bears | | ■ | | | | | ■ | |
| Best Mudpie | | ■ | | | | | | |
| books I write | 2 | | | | | ■ | | |
| Bratz/Baby Bratz | 2 | ■ | | ■ | | | | |
| Brown Bear | | ■ | | | | | | |
| Carebears | | ■ | | ■ | | | ■ | |
| Cat in the Hat | | ■ | | | | | | |
| Chicka Chicka Boom Boom | 2 | ■ | | | | | | |
| Chicken Pops | | ■ | | | | | | |
| Cinderella | 4 | ■ | | ■ | | | | |
| Clifford the Big Red Dog | 4 | ■ | | ■ | | | ■ | |
| Cookie Mystery | | ■ | | | | | | |
| Curious George | | ■ | | ■ | | | ■ | |
| dinosaurs | | | ■ | | | | | |
| Dora | | ■ | | ■ | | | ■ | |
| Dr. Seuss | 2 | ■ | | | ■ | | ■ | |
| Duck on a Bike | | ■ | | | | | | |
| Eric Hill | | ■ | | | ■ | | | |
| Fantastic Frogs | | | ■ | | | | | |
| Go Dog Go | | ■ | | | | | | |
| Goosebumps | | ■ | | ■ | | | ■ | |
| Green Eggs and Ham | 2 | ■ | | | | | | |
| horsey book | | | ■ | | | | | |
| hot wheels | | | ■ | | | | | |
| Hungry Ladybug | | ■ | | | | | | |
| If You Give a Pig a Pancake | | ■ | | | | | | |
| If You Take a Mouse to School | | ■ | | | | | | |

| Student Response | Times Mentioned | Fiction | Nonfiction | Media Character | Author Only | Child as Author | Book Series | Magazines |
|-------------------------------|-----------------|---------|------------|-----------------|-------------|-----------------|-------------|-----------|
| Junie B. Jones | | ■ | | | | | ■ | |
| Kissy Fox Hand | | ■ | | | | | | |
| learning how to take care of | | | ■ | | | | | |
| Magic Tree House | 2 | ■ | | | | | ■ | |
| Midkey Mouse | | ■ | | ■ | | | | |
| Monster House | | ■ | | | | | | |
| My Secret Unicorns | | ■ | | | | | | |
| Nemo | | ■ | | ■ | | | | |
| New Hat/Old Hat | | ■ | | | | | | |
| night, night story | | ■ | | | | | | |
| No David | 2 | ■ | | | | | ■ | |
| One Fish | | ■ | | | | | | |
| Pirate Girl | | ■ | | | | | | |
| Pizza Pack | | ■ | | | | | | |
| Purple is Best | | | ■ | | | | | |
| Sam I Am | | ■ | | | | | | |
| Scaryland | | ■ | | | | | | |
| Sleeping Beauty | | ■ | | ■ | | | | |
| Smiley Shark | | ■ | | | | | ■ | |
| Spiderman | | ■ | | ■ | | | ■ | |
| Sponge Bob | 3 | ■ | | ■ | | | ■ | |
| Strawberry Shortcake | 3 | ■ | | ■ | | | | |
| superheroes | | ■ | | | | | ■ | |
| Superman | | ■ | | ■ | | | ■ | |
| Swiper, (No Swiping!) a Dora | | ■ | | | | | | |
| The Baby | | ■ | | | | | | |
| The Dinosaurs Waterhouse | | ■ | | | | | | |
| The Fish That Got No Friends | | ■ | | | | | | |
| The Lion King | 3 | ■ | | ■ | | | | |
| The Walrus Who Didn't Want to | | ■ | | | | | | |
| train track | | | ■ | | | | | |
| vampires | | ■ | | | | | | |
| Very Hungry Caterpillar | | ■ | | | | | | |
| Where is My Cat? | | ■ | | | | | | |