ABSTRACT

CLEVEN, JODY GIBBONS. Training and mentoring childcare providers in story sharing: Effects on vocabulary and story retelling for four-year olds, and story sharing behaviors of childcare providers. (Under the direction of Barbara Fox.)

This research examined the effects of story sharing training and mentoring on receptive and expressive vocabulary, and story retelling of 121 four-year old participants. Also examined were the effects of a 6-week intervention on story sharing behaviors of 18 childcare providers. Under investigation was the Motheread model of story sharing training and mentoring. This model includes on-the-job mentoring with modeling and feedback.

Four dependent variables were examined (a) receptive vocabulary test scores of children, as measured by the Peabody Picture Vocabulary Test—Revised (PPVT-R, Dunn & Dunn, 1981), (b) expressive vocabulary test scores of children, as measured by the Expressive One-Word Picture Vocabulary Test (EOWPVT, Gardner, 1990), (c) story retelling scores of children, as measured by a retelling rubric, and (d) story reading behaviors of childcare providers, as measured by the Teacher Literacy Behavior Observational Checklist (TLBOC, Motheread, Inc., 2003). The independent variable was the training and mentoring intervention for childcare provider participants.

Data were analyzed to examine differences between training and mentoring (TM) and no training and no mentoring (NTM) groups, for each outcome measure.

Analysis of covariance (ANCOVA) showed that the TM group significantly outperformed the NTM on expressive vocabulary. Data submitted to a *t*-test showed a highly significant difference among gain scores for children in the TM and NTM groups on the retelling rubric. Analysis of variance (ANOVA) revealed a highly significant difference between the groups on the posttest measure for story reading behaviors of childcare providers. No significant difference was found between groups for receptive vocabulary. Implications for instruction and further research are discussed.

TRAINING AND MENTORING CHILDCARE PROVIDERS IN STORY SHARING: EFFECTS ON VOCABULARY AND STORY RETELLING FOR FOUR-YEAR OLDS, AND STORY SHARING BEHAVIORS OF CHILDCARE PROVIDERS

by

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Dedication

To my husband, Randy, who literally nudged me down the hall to my first college class, when I was too afraid to make my feet go on their own. Thank you, Randy for your encouragement with those first steps on this marvelous journey.

To my parents, William and Kathleen Gibbons. If I had a nickel for every time you told me how pleased you were, I'd be the richest woman on earth. I'm glad I could make you proud.

Personal Biography

Jody Cleven was raised in the northwest suburbs of Chicago, by loving parents, and with a small pack of siblings. When she was nine, she opened a Bazooka Bubblegum wrapper. The fortune below the comic promised that she would become a school teacher. She saved that gum wrapper, and with it, the dream of becoming a teacher.

However, as with many high schools, hers had two tracks. She was sent down the vocational track, while fellow classmates traveled the other, bound for college. Deep in a scrapbook, she buried the gum wrapper along with the dream.

Seven years later, Jody married her husband, and through his persistent support and encouragement, realized her dream of becoming a school teacher. She attended Indiana University where she received a bachelor's degree in elementary education. Following years in the classroom, and with the goal of improving practice, she was once again drawn to the university. She received a master's degree in reading from North Carolina State University, followed by a Ph.D. in Curriculum and Instruction.

Jody continues to enjoy teaching children. In private practice, she serves as a tutor and educational coach. She is truly indebted to those who supported her, as she chased her dream that started with a bubblegum wrapper.

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To my husband, Randy, of 19 years. I treasure your unending support. Your humor, when I was all too serious was refreshing. Your calm, in the midst of my storm, was a relief. Thanks for always bringing me warm cups of coffee “to keep me fueled”, and for taking over “munchkin duty” when the fuel ran out. How you knew when to hover, when to smother, and even when to take cover, I’ll never know, but your insight was perfect. Thanks, too for your prayers. I know you prayed earnestly for me, because I felt the Lord’s presence throughout this work. I am truly blessed to have you as my best friend.

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To the staff at Motheread. Thanks for your support, and for sharing with me your knowledge about story sharing. Your insights were invaluable. To Lisa Hon, my friend-turned-data-collector. Thanks for the days, that turned into weeks, that turned into months. I couldn’t have done it without you.

Above all, thank you Jesus, my Lord and Savior. You never fail me. When I needed more hours in a day, You gave them. When I needed fewer distractions, You took them away. It is You who sustains me. In this work, and in all that I do, let it always glorify Your name.

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CHAPTER I

INTRODUCTION

Purpose of the Study

This research will examine story sharing with four-year olds in a childcare setting. Investigated will be the effects of the Motheread model of training and mentoring childcare providers on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training and no mentoring.

Rationale

The National Institute of Child Health and Human Development (2000) reported that at least twenty percent of children are unable to learn to read without special assistance. In 1985, Anderson, Hiebert, Scott, and Wilkerson of the National Academy of Education Commission on Reading stated, "The single most important activity for building knowledge required for eventual success in reading is reading aloud to children" (p. 23). Juel (1988) found that students who develop literacy skills early tended to be better readers throughout the elementary years, as compared to students who initially demonstrated weaker literacy achievement. Scarborough and Dobrich (1994) considered early reading development to be an appropriate measure for evaluating the effectiveness of adult-child story sharing. Since Scarborough and Dobrich's (1994) review of the literature, reading aloud to children continues to be a widespread practice in the United States. Public service announcements continually recommended that parents should,

"Read to kids, so kids can read" (Davis, UNC/TV, 2003). Worn and dog-eared books dot waiting rooms in pediatrician offices across countless cities. In 2002 Barnes and Noble, one of the nation's largest book sellers, reported that despite a drop in overall book sales, the children's book market continues to soar (Barnes & Noble, 2002 Annual Report). Despite the popularity of children's books, and successful interventions with reading aloud (Dale, Crain-Thoreson, Notari-Syverson, & Cole, 1996; Hargrave & Senechal, 2000; Whitehurst et al., 1988), Whitehurst and Lonigan (1998) stated, "It is difficult to implement and maintain an intensive program of shared reading in child-care settings" (p. 860). Valdez-Menchaca and Whitehurst (1992) stated that the issue of implementing interactive reading "within the organizational and resource constraints of a typical day care or preschool classroom is…the most important applied question for further research" (p. 1113).

Scarborough and Dobrich (1994) stated:

> It is now abundantly clear that children differ widely in their acquired knowledge about books and reading at the time of school entry and that these differences are predictive of their subsequent academic achievement in the early school years and beyond. Identifying the sources of these differences in preparedness is thus necessary for arriving at a full understanding of the process of learning to read from its inception during the preschool years and is crucial to enable us to provide accurate guidelines to parents and preschool educators regarding the conditions that best foster such preparedness (p. 246).

Bus and colleagues (1995) agreed with this position, suggesting that more research is

necessary “to determine the conditions under which storybook reading is most beneficial” (p. 17).

The National Institute of Child Health and Human Development (2000) addressed the issue of training and professional development for teachers of reading in grades K-12. The National Reading Panel concluded, “In-service and professional development produced significantly higher student achievement” (p. 17). According to the United States Department of Labor, Bureau of Labor Statistics, all public school teachers are required to have at least a bachelor’s degree. However, requirements for preschool teachers vary by state (U.S. Department of Labor, Bureau of Labor Statistics). Therefore, standards are in place for certified teachers working with children in formal educational settings. However, guidelines for teachers of children enrolled in programs prior to formal schooling are less standardized. According to Scarr and McCartney (1988), there are significant differences in the quality of daycare facilities regarding language and verbal interaction. The crucial role that early literacy plays in future reading success underscores the importance of more professional support for childcare providers to receive continued professional support.

Programs that emphasize early literacy skills and that include ongoing professional support are paramount in light of concerns over improved early literacy. The Motheread mentoring model for story sharing addresses these issues. The model provides childcare providers with a systematic process for story sharing and on-the-job mentoring. The present study will investigate the effects of the Motheread model of training and mentoring childcare providers in story sharing on the receptive and

expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training or mentoring.

Significance of the Study

The study will contribute to the research literature by providing information on the effects of training childcare providers in story sharing on receptive vocabulary, expressive vocabulary, and story retelling for four-year olds, and story sharing behaviors of childcare providers. The research will add to the understanding of how to train and support childcare providers in reading aloud with children. It will also provide insight into best practices for training childcare providers in story sharing.

Research Questions

The research questions under investigation are:

1) What are the effects of the Motheread story sharing training and mentoring model on receptive vocabulary of four-year olds in a childcare setting?

2) What are the effects of the Motheread story sharing training and mentoring model on expressive vocabulary of four-year olds in a childcare setting?

3) What are the effects of the Motheread story sharing training and mentoring model on story retelling of four-year olds in a childcare setting?

4) What are the effects of the Motheread story sharing training and mentoring model on story sharing behaviors of child care providers as measured by the Teacher Literacy Behavior Observational Checklist (Motheread, Inc., 2003).

CHAPTER II.

REVIEW OF THE LITERATURE

Much in the literature has been written about story sharing and its effects on vocabulary development in children at various ages. Absent from the literature are studies examining the effects of story sharing on story retell. These observations motivated the present study to expand the research on the effects of story sharing on expressive and receptive vocabulary, and extend the research to include the effects of story sharing on story retelling.

Prior to beginning the present study, a thorough search of the literature was conducted. First, an electronic search of the Educational Resource Information Center (ERIC) database was carried out. Key words used in the initial electronic search included story sharing, read aloud, book sharing, expressive vocabulary, receptive vocabulary, story retell, and mentoring. Various combinations of key words were used to yield results. Titles and abstracts of the studies uncovered in the search were read. If the study appeared to meet the criteria for inclusion, the entire article was located and analyzed. A secondary hand search was conducted using reference lists from studies uncovered in the initial electronic search. Qualifying studies were coded and recorded in a grid that included citation, summary, research questions, participants, setting, method, intervention, measures, and results.

A number of criteria were used to determine inclusion of studies in the literature review. Generally, studies no older than fifteen years were included. However, in the case of topics with limited information, less recent studies were included. The studies

included appeared in peer-reviewed journals. The majority of the studies included were quantitative research however some qualitative case-studies were also included. The literature review focused on studies that linked outcome measures to practice as determined by a standardized or researcher-designed measure. Research studies involving children from the age of two to children in elementary school were included. Studies involving infants, middle and high school students, and adults were excluded. Research involving participants in a variety of settings such as home, school, and daycare were included as well as participants with differing ethnicity and socioeconomic status. Sources that did not meet the criteria were excluded, or used to provide relevant background information.

Early Language and Literacy Development

In 1998 the United States Department of Health and Human Services appointed the Committee on the Prevention of Reading Difficulties to compile a report on evidence-based practices that prevent or ameliorate reading difficulties in young children. The report indicated that literacy development begins in infancy and depends on the support offered in the home or childcare environment (Snow, Burns, & Griffin, 1998).

These authors stated that, “Optimal development occurs through interactions that are physically, emotionally, socially, and cognitively suited to the changing needs of the infant through toddler years” (p. 57). According to the report, children as young as eight months show interest in literacy-related activities when read to by an adult. Toddlers respond to books through both spoken and written means, and recite words or phrases

from their story sharing experiences. Children as young as two years of age label, make comments, and ask questions about items depicted in books. Between the ages of two and five, children begin to write letter strings, and identify sounds within words. The report concluded that early childhood experiences with language are important for success in learning to read in that they provide children with opportunities to understand the nature and structure of language.

Children's ability to use and understand words grows rapidly during the preschool years. By age six, the typical child has a vocabulary of approximately 8,000 words. According to Schickendanz (1999), "[Preschoolers] begin to infer the meanings of new words from hearing them used in context" (p. 44). Further, they initiate games of rhyme and alliteration following exposure to books written in verse. Such exposure contributes to an awareness of the sounds in language, an understanding that is necessary for success learning to read. Weitzman (1992) noted that toddlers between the ages of three and five begin to link ideas in complex sentences using words such as *and, then,* and *because.* Further, the grammar of children between the ages of three and five increases in complexity to include pronouns, questions, linking verbs, and negatives.

Language develops in stages (Weitzman, 1992). Beginning from birth to thirteen months, children enjoy chewing on and handling books and also respond positively to listening to the rhythm of books read aloud. By twelve to eighteen months, toddlers start to use words, and realize that pictures in books represent objects. They point to and ask adults to label pictures in books, attempt to label pictures of known objects, and enjoy conversations about books. By eighteen to twenty-four months, children begin making

predictions and can relate text to their personal experience. Children between the ages of three and five begin to understand both fiction and non-fiction, and use language to understand their world. Further, they begin to understand story structure, which consists of an introduction to the story with setting and characters, a problem and solution, and a conclusion describing reactions of the main characters.

In a U.S. Department of Education document published by the Early Childhood-Head Start Task Force, Armbruster, Lehr, and Osborn (2002) emphasize the importance of cognitive development in children from birth through age five. According to the report, by age two or three children begin to develop important skills for success in learning to read, including an awareness of letters and words in print. The report indicated the importance of development during the early years for becoming successful readers. After analyzing the research on preschool literacy environments, Snow, Burns, and Griffin (1999) concluded that exposure to language and literacy experiences helped to prevent subsequent reading difficulties. Following a meta-analysis of the research on story sharing, Scarborough and Dobrich (1994) stated, “Preschoolers who are already ahead in language or literacy proficiency tend to maintain their position relative to other children” (p.292).

Students who are read to frequently tend to look at books independently, and make more requests for story sharing. Furthermore, the number of children’s books in the home has been shown to be related to the frequency of read aloud episodes, and child interest in books (Senechal, LeFevre, Hudson, & Lawson, 1996). The Committee on the Prevention of Reading Difficulties in Young Children (Snow, et al., 1998) reported that

interest and motivation make a significant contribution to learning to read. They concluded that motivation comes from early exposure to reading that includes varied literacy experiences. Without such experiences children are at risk for difficulties learning to read. The report further observed that although much federal attention has been focused on early childhood education, often such programs fall short of their goals because they do not have targeted plans that address early literacy needs.

In light of the importance of early literacy development on future academic success, Armbruster, Lehr, and Osborn (2002) concluded that it is necessary for childcare and preschool programs to emphasize emergent literacy skills. According to these authors, "literacy begins at birth and is encouraged through participation with adults in meaningful literacy-related activities" (p. 35). Sulzby (1885) defined emergent literacy as the behaviors of children that precede conventional literacy. Likewise, Whitehurst and Lonigan (1998) said that emergent literacy consists of the "skills, knowledge, and attitudes that are developmental precursors to reading and writing" (p. 848). These authors concluded that it is vital to expose preschool children to many and varied literacy experiences, and to encourage literacy-related behaviors in the preschool period.

Story Sharing and Early Literacy Development

The frequency of story sharing during the preschool years predicts later reading achievement (Snow, et al., 1998). The Commission on Reading of the National Academy of Education (Anderson, et al., 1985) concluded that reading aloud to children has a significant effect on success in learning to read. After a thorough review of the literature,

Bus, van IJzendoorn, and Pellegrini (1995) concluded that storybook reading is a crucial activity for young children who participate in a literate society. Consistent with this view, the National Association for the Education of Young Children and the International Reading Association (1998) recommended that parents read to their children at home.

Scarborough and Dobrich (1994) found that story sharing influenced literacy development through promoting emergent literacy skills. They suggested that adult-child reading may contribute to children's interest in books, resulting in positive literacy development. According to Hammett, Van Kleeck, and Huberty (2003), adult-child book sharing is a "routine for many families during which an adult supports a preschool child's ability to understand a book by discussing the content of the story and the pictures, and focusing the child's attention on the print" (p. 442).

Whitehurst and Lonigan (1998) suggested that an environment that supports the emergent literacy development must include adult-child story sharing. The task force on Early Childhood-Head Start (Armbruster, et al., 2002) recommended that preschool children be exposed to a variety of books representing different interests, subjects, and cultures, including traditional literature such as folk and fairy tales that explore different cultures and traditions. Literacy programs that include adult-child story sharing prepare children for early reading instruction (Bus, et al., 1995) and positively influence children's desire to read in later years (Scarborough & Dobrich, 1994).

Ezell and Justice (2000) found that referring to print while reading to children increases print awareness, and increases children's understanding of the connection between oral and written language. However, they found that prior to training in story

sharing techniques, few adults made spontaneous print references while reading aloud to children. When adults did refer to print they made more non-verbal references than verbal references. In talking with children about books, adults made comments about stories rather than asking children questions. This finding was particularly surprising given that the adult readers in the study were advanced graduate students experienced in working with children and with children's literature (Ezell & Justice, 2000). Other research showed similar findings regarding the frequency of spontaneous references to print during parent-child read aloud sessions (van Kleeck, Gillam, Hamilton, & McGrath, 1997).

Developing awareness of print (Snow & Goldfield, 1983) and concepts of print (Armbruster, et al., 2002) facilitates early literacy acquisition. Armbruster and colleagues considered concepts of print to include the knowledge that print follows specific directionality, the understanding that books have a title, author, and illustrator, insight into the correct handling of books, and that print conveys meaning. However, studies reveal that childcare providers rarely emphasize print concepts. Instead they focus on illustrations, and story events (Dickinson & Smith, 1994; Dickinson & Keebler, 1989; Ezell & Justice, 2000). The Head Start Task Force (Armbruster, et al., 2002) recommended several research-based practices for teaching children concepts about print. First, an ample supply of books should be available in childcare centers and in homes. Second, preschool caregivers should provide props containing words for drama activities, and allow students to experiment with writing. And last, caregivers should point to text as they read aloud, and emphasize the directionality of print.

In addition to the importance of teaching concepts about print, Armbruster and colleagues (2002) concluded that story retelling contributes to language development. These authors emphasized the importance of giving children opportunities to retell stories in their own words because story retelling enhances children's understanding of story sequence and creates opportunities to develop language skills. Additionally, the task force concluded that repeated reading of books, and discussions of vocabulary have a positive effect on the development of language skills.

Story Sharing and Language Development

There is converging evidence that storybook reading facilitates language development (Bus et al., 1995; Dale, et al., 1996; Elley, 1989; Scarborough & Dobrich, 1994; Senechal, Thomas, & Monker, 1995; Senechal & Cornell, 1993; Senechal, et al., 1996; Whitehurst et al., 1988). Research conducted in daycare and home environments on interactive book reading showed that oral language skills are predicted by parents' participation in storybook reading in the home (Whitehurst, et al., 1994). Senechal and colleagues (1996) conducted a study in which they assessed children's knowledge of storybooks directly, and used the measure to predict receptive and expressive vocabulary performance. They concluded that story sharing "provides a rich source of linguistic stimulation for …children" (p. 520). These findings are consistent with other research that showed story sharing to be an effective technique for aiding oral language development (Snow & Goldfield, 1983).

Whitehurst and Lonigan (1988) observed that, "Shared book reading provides an

extremely rich source of information and opportunity for children to learn language in a developmentally sensitive context" (p. 855). The age of children who listen to read aloud stories is a significant factor, with younger ages exclusively associated with outcomes related to language development (DeBaryshe, 1993; Scarborough & Dobrich, 1994). The authors of a report on reading difficulties in young children commissioned by the National Research Council (Snow, et al., 1998) emphasize the importance of story sharing stating that, "Adult-child shared book reading…stimulates verbal interactions to enhance language (especially vocabulary) development and knowledge about print concepts" (p. 321).

Shared reading supports the development of language by offering children opportunities to engage in conversations with adults at a higher level of verbal sophistication (Crain-Thoreson & Dale, 1999). According to Snow (1983), scaffolding during story sharing facilitates literacy by providing support of increasingly more sophisticated language tasks. Kaderavek and Sulzby (1998) describe scaffolding as "…the adult being responsive to what the child says and does in a way that keeps the child engaged and elicits cohesive language and behavior in response to the book and the adult's language" (p. 37).

Vygotsky (1978) hypothesized that young children construct knowledge and internalize speech through interacting with adults who model language and literacy behaviors. There is evidence that the behaviors adults model while scaffolding are adapted by children (Kaderavek & Sulzby, 1998). Hammett and colleagues (2003) concluded that scaffolding during story sharing creates a supportive context for higher

levels of comprehension and more sophisticated use of language than children would be capable of on their own.

The type of scaffolding that facilitate language development during storing sharing include labeling, dialogue, pauses, recasting, questioning, and retelling (Kaderavek & Sulzby, 1998; Bus & van IJzendoorn, 1995). Labeling is naming items pictured in storybooks (Kaderavek & Sulzby, 1998). In labeling, adult readers comment or physically react to illustrations in the text. In pausing, adult story sharers provide wait time for the child to respond through pointing, commenting, or naming items presented in the text. During questioning, adult readers expose children to a variety question types. Tag questions take the form of confirmation. For example, "He's crying, isn't he?" Direct questions require an individual response. Oral dialog occurs when verbatim reading of the text is replaced with oral paraphrasing which includes describing pictures, and adding action to the story line. Recasting expands language by adapting the child's language to more sophisticated verbal responses. In expanding language, adult story sharers often use simpler, less complicated language to rephrase stories or story-language that is too complex for children to understand. Finally, retellings are used by adult readers to develop the ability to predict story events and to further understanding.

All parental input is not equal in its affect on language development. Non-challenging input promotes successful book reading interactions, whereas input at higher levels of abstraction promotes cognitive learning (Van Kleeck et al., 1997). Bus and van IJzendoorn (1995) found these practices to be effective ways of promoting language and literacy development during story sharing. Research showed that when children engaged

in labeling during story sharing, the added practice at retrieving and using novel words contributes to vocabulary development (Senechal, Thomas, et al., 1995). Bus and van IJzendoorn (1995) note that scaffolding provides adult readers with the opportunity to steadily move children toward becoming active participants in the oral and written process of language (Bus & van IJzendoorn, 1995). Kaderavek and Sulzby (1998) stress the importance of adapting the text to fit the level of the child, in order to move the learner toward achieving deeper comprehension and linguistic accomplishment (Kaderavek & Sulzby, 1998).

Story Sharing and Holistic Instruction

The Early Childhood Head-Start Task Force (2002) emphasized the importance of using holistic teaching to present new information and extend young children's use of language. The holistic approach includes reading, writing, speaking, and listening (Armbruster, et al., 2002; Whitehurst & Lonigan, 1998). Armbruster and colleagues (2002) view speaking and listening as crucial components of literacy, and essential for later success in reading. These authors recommended that childcare providers give children ample opportunities to engage in conversation. Other research showed that talking about illustrations is positively related to the affective quality of the story sharing experience (Baker, Mackler, Sonnenschein, & Serpell, 2001).

The Early Childhood Head-Start Task Force (2002) suggested that developing language skills from a holistic teaching and learning perspective includes creating opportunities for children to write, draw, and use drama to add new knowledge to

existing knowledge. A holistic approach to story sharing involves the use of guided conversation to develop early literacy skills. Such activities extend understanding, and give students opportunities for discussion with classmates and teachers. Snow and Goldfield (1983) recommend extending topics introduced by scaffolding through extensions, questions to clarify understanding, structuring children's dialog to facilitate comprehension, and encouraging children to give the best answer possible during read aloud sessions.

Story sharing before formal schooling has been shown to increase motivation to read more challenging material in later grades. In turn, the reading of more complex texts was predictive of later reading achievement. Armbruster and colleagues (2002) called for creating environments that prompt children to talk about their experiences, and to provide children with opportunities to associate text with personal experiences and common classroom experiences. The authors also recommended that children be taught to make connections to other texts to which they were exposed. According to the report, practices such as these extended language usage, and encouraged oral language development.

Story Sharing and Active Participation

The National Institute of Child Health and Human Development (2000) suggested that an emphasis on active participation during story sharing has a positive effect on learning. Research has shown that positive social interaction during story sharing contributes to motivation to read, whereas less pleasurable read aloud interactions have

negative consequences on the desire to read in later years (Bus et al., 1995). While Hammett and colleagues (2003) found evidence that most parents offer limited comments unrelated to the text during story sharing, research has shown that a change in adult story reading practices increase active participation, and promote the development of language skills (Dale et al., 1996; Whitehurst, et al., 1988; Ezell & Justice, 2000).

Whitehurst and colleagues (1988) conducted an experimental study of parents' verbal interactions with children during story sharing. These researchers summarized their conclusions stating that, "We have shown experimentally that how parents talk to their children makes a difference in language development and have demonstrated this in the home by changing the frequencies of naturally occurring categories of stimulation" (p. 558). By encouraging children to speak more through an increased number of open-ended questions, more frequent recasting and expanding, and offering more praise and corrective feedback, parents made a difference in their children's language development.

A study involving four-year olds found that children who answered questions during story sharing used more words, and had better comprehension than children who were passive. In story sharing parents and childcare have an opportunity to use new words when talking about a read aloud book. The research showed that children benefit more from using new vocabulary than from simply hearing words repeated by an adult reader. Students in the treatment group correctly identified spoken words previously missed on a pretest more often than students in the comparison group. Further, students that were actively involved in story sharing, through labeling and pointing, showed an increased number of words learned than students that did not participate (Senechal,

Thomas, et al., 1995).

Another study showed that children exposed to reading aloud sessions that incorporated active participation used an increased number of different words than those in the comparison group (Dale et al., 1996). Further, active participation during story sharing has been shown to help children gain an understanding of concepts about print (Snow & Goldfield, 1983; Snow et al., 1998). When examining the interactions between childcare providers and children during story sharing, Dickinson and Smith (1994) found that reducing the proportion of teacher to child talk was associated with increased vocabulary and comprehension in four-year olds.

Senechal, Thomas, et al. (1995) found that preschoolers with differing background knowledge showed language gains following active participation in story sharing. These findings are consistent with other research that found active participation in storybook reading facilitated learning (Hargrave & Senechal, 2000). A longitudinal study by Crain-Thoreson and Dale (1992) examined children's engagement during story sharing. These authors found that active engagement in adult-child book reading predicted receptive vocabulary and knowledge of print concepts. However, the authors indicated that the child's interest, motivation, and responsiveness influenced the parents' style of story sharing. Morrow (1983) observed children's engagement during literacy activities, and found that children with good pre-literacy skills scored higher on reading readiness tests than children with poor pre-literacy skills.

Story Sharing and Language Gains

Storybook exposure for kindergarten students accounts for a statistically significant percentage of variance in the student's oral language measures (Senechal, LeFevre, Thomas, & Daley, 1998). In a meta-analysis on story sharing Scarborough and Dobrich (1994) found that 52% of the intervention studies showed significant language gains following immediate posttests of language skills. Bus and colleagues (1995) drew the conclusion that story sharing is effective in facilitating language gains because story sharing promotes familiarity with written language. This is consistent with research that shows that developing knowledge of print language positively influenced vocabulary development (West, Stanovich, & Mitchell, 1993).

Converging research shows a positive relationship between story sharing and vocabulary growth for young children (Bus et al., 1995; Senechal et al., 1998; Senechal et al., 1996; Valdez-Menchaca & Whitehurst, 1992; Whitehurst et al., 1988). Senechal and colleagues (1998) found that children learned new vocabulary when they participated in story sharing. While young children incidentally learn vocabulary from listening to adults read picture books, teachers' explanations of unfamiliar words results in more than double the gains in vocabulary (Elly, 1989). Research has also demonstrated that the verbal responses of four-year olds to questions, and the non-verbal responses of labeling and pointing improve vocabulary acquisition (Senechal, Cornell, & Broda, 1995).

Learning new vocabulary is at the heart of language acquisition (Senechal et al., 1996). Nagy, Anderson, and Herman (1987) suggested that direct instruction alone does not account for the full range of vocabulary acquisition during the preschool years.

According to these authors, a significant number of words learned incidentally during the early years accounts for the tremendous gains in vocabulary. Furthermore, research has revealed that frequent at-home book reading contributed to vocabulary growth over and above parental education or analytic intelligence (Senechal, Thomas et al., 1995). According to Snow and Goldfield (1983), young children infrequently encounter some of the vocabulary in storybooks. The vocabulary in children's storybooks is often more sophisticated than the spoken language typically directed at children. Additionally, the focused adult attention that is typical during story sharing experiences often allows for recasting and explanations of new words which can facilitate vocabulary acquisition, which facilitates vocabulary learning.

In an in-depth case study of a preschooler, Snow and Goldfield (1983) showed that the child learned new words when the adult first used the words and then the child repeated them. These researchers noted that because book sharing focuses discussion on the content of the book, adult comments tended to be routine, recurrent, and predictable. The authors concluded that the routine nature of book-reading allowed the child to repeat utterances heard in one situation, and transfer them to subsequent situations (Snow & Goldfield, 1983). This supports other research that found that repeated readings of storybooks creates the ideal learning environment in which to learn new vocabulary (Pellegrini, Perlmutter, Galda, & Brody, 1990), and that discussions about story content can enhance vocabulary development (Snow, et al., 1998; Whitehurst & Lonigan, 1998).

Elley (1989) found that children made greater gains in vocabulary when presented with adult explanations for new vocabulary. While the research showed that students

made vocabulary gains of about 15% without adult explanation of word meanings, gains of as much as 40% were made when students were presented with teacher explanation of word meanings. Nouns tended to show the highest gain, as compared to adjectives and verbs. Elley found that the frequency of the word repetition in storybook text, presentation of the word in text illustrations, and the degree of contextual support surrounding the word predicted the likelihood that a word would be learned.

The research has revealed that the exposure to books, interest in reading, frequency of story sharing, number of books in the home, and library visits are positively correlated with vocabulary scores (Senechal et al., 1996). Other research has shown that storybook exposure predicts the variance in children's vocabulary scores independently of other parental or cognitive factors. That is, after controlling for age, analytic intelligence, education level of the parent, and parent's exposure to print, results suggested that storybook exposure had a positive impact on vocabulary. However, listening to storybooks did not affect when children began to read, how much they read, or visits to the library (Senechal et al., 1998).

Story sharing has been shown to have an effect on vocabulary learning and reading achievement (Bus et al., 1995), and serves as a reliable predictor of vocabulary size in later grades (Senechal et al., 1998; Senechal, 1997). According to Whitehurst and Lonigan (1998), when children are exposed to frequent reading aloud with adults, vocabulary and print awareness increase. In turn, increased print and vocabulary awareness is related to gains in reading achievement.

Research has examined language gains in expressive and receptive vocabulary.

Expressive vocabulary consists of the spoken words children produce (Senechal, 1997, Just & Carpenter, 1987). Receptive vocabulary consists of the words children understand, but cannot produce (Just & Carpenter, 1987). Evidence shows that story sharing affects the acquisition of expressive and receptive vocabulary differently (Senechal & Cornell, 1993).

Senechal and colleagues (1996) measured children's knowledge of storybooks, and then used that measure to predict receptive and expressive vocabulary. Receptive vocabulary was measured using the Peabody Picture Vocabulary Test—Revised (PPVT-R, Dunn & Dunn, 1981). Expressive vocabulary was measured using the Expressive One Word Picture Vocabulary Test (EOWPVT, Gardner, 1990). Results showed a significant and positive correlation between knowledge of storybooks and receptive and expressive vocabulary, and that language-rich experiences whether in the home, daycare or preschool setting, related to vocabulary development (Senechal et al., 1996).

Whitehurst and colleagues (1994) taught parents how to shift their story sharing role from reader to listener, to ask "wh" (i.e. who, what, when, where, and why) questions that require elaboration, and to encourage children to actively talk about pictures. Parents were also taught how to use feedback that expanded or extended children's comments to bridge the gap between child responses and more sophisticated adult comments. Additionally, parents learned how to adjust their expectations to their children's developing abilities, give praise and give corrective feedback, and repeat children's comments. Children were encouraged to become the storyteller, while parents were encouraged to become active listeners who ask questions, and prompt children to

describe story-related pictures or topics. Findings revealed gains of from six to 8.5 months on expressive vocabulary as measured by the EOWPVT (Gardner, 1990). Children who participated in dialogic story sharing showed higher levels of repetition, child-spoken phrases, and increased mean length of child utterances.

Crain-Thoreson and Dale (1999) found that children reading with adults trained in interactive story sharing had longer utterances, spoke more, and showed an increase in the number of different words spoken. Further, the magnitude of positive change in children's behavior was correlated with changes in adult behavior. When adults increased their acknowledgements of child utterances, the expressive language of children increased. Other research has also shown that when adults increased open-ended questions and expansions, a higher mean length of utterance (MLU) was found in students (Whitehurst et al., 1988).

Hargrave and Senechal (2000) found that asking in-depth "wh" questions provided children the opportunity to use language to structure responses, thus improving language usage, and increasing receptive vocabulary.

Dale and colleagues (1996) used a modified version of the Whitehurst et al. (1988) dialogic story reading style to train parents in enhanced story sharing. Dale and colleagues then compared a dialogic approach of story sharing to a conversational style method that included showing interest, using information talk, limiting closed questioning, indirect correction, and expanding utterances into grammatical sentences. Dialogic story sharing made a unique contribution to language development as compared to conversational story reading and a no-treatment group. Parents trained in dialogic

story sharing increased the use of “wh” questions, open-ended questions, imitations, and expansions more often than parents that received training for more traditional instruction. Middle class two-year olds in the dialogic group gained between six and eight months in receptive and expressive vocabulary, responded to questions more often, increased the variety of words used, and exhibited longer utterances. Children whose parents showed the greatest change in dialogic story reading behavior also showed the greatest gains in language engagement.

Several studies have examined the use of repeated readings during story sharing. Sulzby (1985) found that on repeated reading of a storybook, children moved from responses related to illustrations, to asking questions about word meanings and story structure. Research by Senechal (1997) demonstrated how multiple readings of storybooks and answering questions during story reading result in expressive and receptive vocabulary gains. Findings suggested that because receptive vocabulary involves comparing external and internal representations of a word, receptive vocabulary increased as a result of hearing multiple readings of a storybook. Senechal interpreted the data to mean that the added opportunity to encode, associate, and store new information facilitated increased receptive vocabulary. These findings are consistent with a study that indicated non-readers learn new word meanings by a repeated reading of the same story, regardless of explanations provided by the adult reader (Robbins & Ehri, 1994).

Senechal and Cornell (1993) examined the use of labeling, “wh” questions, recasting, building on previous child utterances, and repetition of words and phrases

during story sharing. The authors found that labeling during story sharing resulted in gains in receptive vocabulary due to repeated practice at word retrieval. Labeling also had a positive effect on expressive vocabulary because children used words from the storybook reading while answering questions about labels. Results revealed that children used words on the posttest that were in stories adults read aloud. Interestingly, the children in this study understood words regardless of whether they or the adult reader had used the words.

Several studies included delayed posttests in order to show sustained gains in language development. Significant effects for expressive vocabulary have been shown after a six-month follow-up (Whitehurst et al., 1994). Whitehurst et al. (1988) showed that language gains on measures of expressive abilities remained as large as they were at posttest nine months later (Whitehurst et al., 1988). Still another study showed improved scores on three different language tests after nine months following an adult-child reading intervention (Valdez-Menchaca & Whitehurst, 1992).

Story Sharing With At-Risk Children

A report submitted by the Committee on the Prevention of Reading Difficulties in Young Children commissioned by the U.S. Department of Education and the U.S. Department of Health and Human Services (Snow, et al., 1998) on children at high risk for reading difficulties stated, “Children from poor families, children of African American and Hispanic descent, and children attending urban schools are at much greater risk of poor reading outcomes than are middle-class” (p. 27). After reviewing the

literature on programs for children at-risk of reading difficulties, Zigler and Styfco (2001) concluded that increased intervention in the early years is essential to preventing academic failure in disadvantaged students.

A number of studies examined the effects of storybook sharing on the receptive vocabulary of children from low-income families. Several studies failed to find statistically significant gains on measures of receptive vocabulary in children from low-income or middle class families (Whitehurst et al., 1994; Whitehurst et al., 1988). This lack of effect was consistent with the hypothesis of these researchers that hypothesized that the effects would be stronger on measures of expressive vocabulary than on measures of receptive vocabulary. However, one study that employed a researcher-designed measure of receptive vocabulary showed significant gains in vocabulary when dialogic techniques were used during story sharing with children from middle class (Senechal, 1997).

Several studies examined story sharing among parents and children of various demographic groups. Research shows that parents of children from disadvantaged backgrounds read to their children less often than parents from advantaged backgrounds (Purcell-Gates, 1996). Income and ethnicity appear to be related to story sharing interactions. Middle-income parents, for example, involve their children in more discussions about story-related topics, go beyond literal discussions of story texts, and include talk that extends knowledge and thinking more often than low-income parents (Snow et al., 1998; Whitehurst & Lonigan, 1998). Research also shows that the affective quality of story sharing experiences was more positive when better educated, middle-

income mothers read to their children than when less educated lower-income mothers read aloud (Baker et al., 2001).

Research shows that the parents of children with language impairments sometimes adopt a less responsive style of interaction with their children (Mahoney, 1988). Mahoney speculated that a less responsive style was the result of frustration in communicating with language impaired children. Research shows when children with language delays are exposed to story sharing they make greater gains in language than children who participate in typical conversational story reading (Dale et al., 1996). Whitehurst et al. (1994) examined the effect of dialogic (eliciting child responses, asking open-ended questions, adding additional information) story reading sessions in both home and daycare settings on language-delayed children from low-income families attending publicly subsidized daycare. Findings indicated that children who engaged in active participation through storybook reading at home and in daycare settings had greater scores in expressive vocabulary than those without such conditions.

Crain-Thoreson and Dale (1992) found that the intelligence and responsiveness of the child influenced the story sharing behaviors of the parent. In a study involving children from a low-performing daycare, self-reports revealed that the majority of the parents in the study rarely read to their children. From this finding the researchers suggested that dialogic story sharing would be of particular importance for parents and daycare providers of children with language difficulties.

Valdez-Menchaca and Whitehurst (1992) found that low-income children seldom own books of their own. However, converging evidence shows that low-income children

in daycare settings who are exposed to dialogic reading show significant language gains compared to students in comparison groups (Valdez-Menchaca & Whitehurst, 1992, Whitehurst et al., 1994, Whitehurst & Lonigan, 1998). Senechal, Cornell et al. (1995) found that questioning during story sharing was beneficial to children with both high and low word knowledge, and that at-home book reading significantly contributed to vocabulary acquisition regardless of socioeconomic (SES) status.

Following a six-week intervention in picture book reading with children from a publicly subsidized New York daycare, Whitehurst and colleagues (1994) concluded that storybook reading is a practical means of improving the language and literacy of preschoolers from low-income families.

A study by Valdez-Menchaca and Whitehurst (1992) demonstrated the effectiveness of dialogic training with adults working with low-income Mexican children in an impoverished daycare setting. Some children participated in dialogic story reading with adults who had been trained in this method, while other children participated in one-on-one arts and crafts activities. Adults in the treatment group used "wh" and open-ended questions, such as who, where, what and when, expansions, corrections, positive feedback based on the verbal responses of the children, prompted children for additional response, and waited for children to respond. Additionally, children were prompted to "tell" the story in their own words. Children made gains in both expressive and receptive vocabulary as measured by spontaneous responses during story reading. Children who participated in storybook reading made greater gains on standardized language measures, including the number and length of verbal utterances, and showed and increase in the

number of complex sentences than children in the no-treatment group.

Hargrave and Senechal (2000) studied children with limited vocabularies who attended a daycare with adult-child ratios of eight to one. These researchers used video-taped instruction to train childcare providers in dialogic story sharing, and then discussed related story sharing behaviors. The data showed that children in the dialogic group made significantly greater gains in expressive vocabulary than children in the comparison group. In addition to finding expressive vocabulary gains, this study supported the efficacy of dialogic techniques, in that gains were made over a relatively short four-week intervention.

Story Sharing and Future Reading Success

Following a review of the literature on story sharing, Scarborough and Dobrich (1994) concluded that, "There is widespread agreement that joint parent-preschooler reading is a highly beneficial parental practice that promotes the acquisition of literacy-related knowledge and, consequently, paves the way for successful achievement" (p. 246). Storybook reading experiences before entering school is related to later school success (Snow, 1983). Research has shown that preschoolers who engage in daily book reading become better readers than those that participated in book-related activities less often (Scarborough & Dobrich, 1994). Furthermore, Scarborough (1989) showed that differences in literacy skills among children entering school are correlated with future performance on achievement measures. Baker and colleagues (2001) found that text-related talk during story sharing is related to a more positive reading environment, and

that a positive affective environment predicted the frequency with which children read more challenging books in later grades. The frequency of reading more complex texts in turn predicted comprehension. The findings of Baker et al. (2001) and Scarborough (1989) are of particular importance in light of Juel's (1988) finding that showed a high probability that a poor reader at the end of first grade would remain a poor reader by the end of fourth grade.

The task force on Early Childhood-Head Start (Armbruster, et al., 2002) and the National Council of Teachers of English both stated that reading aloud to children is critical for providing the knowledge required for later reading success. Additionally, Armbruster et al. (2002) concluded that it is important to expose children to books with rhyming language and alliteration to develop phonemic awareness which determines how quickly children learn to read when they enter formal schooling. These observations are supported by research that shows that experiences in the early years with storybooks facilitates the development of emergent literacy skills that are essential for later reading achievement (Lonigan, et al., 1999; Scarborough & Dobrich, 1994).

A meta-analysis conducted by Bus et al. (1995) revealed a positive association between the frequency of storybook reading and later reading achievement over and above socioeconomic status. Bus and colleagues concluded that story sharing prepares children for beginning reading instruction in school. These authors speculated that story reading affects later school success through its impact on language development. Language skill, in turn, is a prerequisite for learning to read and understand text. For this reason, the authors suggested that students be exposed to books that emphasize rhyming,

sounds, and alliteration during book-related activities.

Training and Mentoring

The National Reading Panel (National Institute of Child Health and Human Development, 2000) emphasized the importance of training teachers because training produces higher achievement in students. A number of professional development studies have focused on improving pedagogy at the early childhood and primary grade level (Baker & Smith, 1999; Bos, Mather, Friedman Narr, & Babur, 1999; Dickson & Bursuck, 1999; O'Connor, 1999). Research findings on early literacy staff development show that teachers lack knowledge in the most effective methods for teaching early literacy concepts (Baker & Smith, 1999; Bos et al., 1999). However, teacher knowledge of literacy instruction increases significantly following professional development (Bos et al., 1999).

Teachers were more likely to continue using effective practices learned in mentoring when provided classroom support by staff developers. Thistlethwaite, Barclay, Castle, and Lewis (1991) examined the effectiveness of reading inservice sessions for elementary teachers. These researchers showed that teachers exposed to inservice which included additional practice and feedback had increased understanding of strategies taught during training. Bos et al. (1999) examined professional development models used with primary grade teachers. Findings revealed that when teachers were provided with ongoing support as part of their professional development, they were more likely to apply new knowledge to current practice. A study involving kindergarten

teachers showed that sustainability of practice increased when opportunities for collaboration with others were presented (Baker & Smith, 1999).

Included in the research conducted by Bos and colleagues (1999) was a component of feedback that utilized videotaped instruction. The researchers found that teachers in kindergarten through grade three considered the taping of sessions to be helpful in providing opportunities to analyze effective instruction. Wang and Odell (2002) found that a collaborative inquiry model of mentoring allowed for context-based practice that facilitated the development of student-centered teaching in which teachers allow students to play an active role in discovery of important ideas. The authors found that the model engaged mentors, novices, and mentoring program directors in critical inquiry based on actual practice. They concluded that this method was effective in offering all individuals in the mentoring process insight into teaching-related knowledge.

Clair (2000) concluded from a review of the literature that short-term staff development is inadequate, and that effective teacher mentoring must include theoretical presentation, collaboration, and practical application. Thistlethwaite et al. (1991) investigated the effectiveness of ongoing, sustained staff development for elementary teachers as compared to single-session training. The data showed that longer mentoring programs resulted in a deeper level of understanding for the methods presented. These researchers concluded that increased understanding was a consequence of the additional practice and feedback component added to the longer training sessions.

Several studies found that teaching theory in connection with the technical aspects of pre-reading instruction increases the likelihood of lasting change in teaching practice,

provided that professional development occurs over multiple sessions (Baker & Smith, 1999; Bos et al., 1999). Research shows that elementary teachers who participate in single session training place less value on theoretical presentation than those involved in multiple-training sessions (Thistlethwaite et al., 1991).

The research in professional development shows that teachers are more likely to implement programmatic changes when they learn strategies that supplement existing programs rather than replaced them (Bos et al., 1999; Dickson & Bursuck, 1999). Furthermore, professional development that emphasizes researched-based instruction, collaboration, and conceptual presentation has been found to result in increased literacy skills for students (Baker & Smith, 1999; Bos et al., 1999; Dickson & Bursuck, 1999).

Training Childcare Providers and Parents in Story Sharing

Research shows that parents do not naturally use dialogic story sharing techniques while reading aloud. Marvin and Wright (1997) found that less than half of mothers reading aloud to their children asked predictive questions during reading aloud. Hargrave and Senechal (2000) found that childcare providers who were not trained in dialogic reading techniques prompted children to simply point to specified items in text which required no spoken responses from the children. An investigation by Crowe (2000) revealed that none of the mothers in the study pointed to text, asked complex questions, or asked children to retell the story after reading aloud. Furthermore, the mothers in the study talked more than their children during story sharing. Nevertheless, when the mothers were trained to use dialogic story sharing their children improved in the type of

literacy behaviors that are important for learning to read in school (Crowe, Norris, & Hoffman, 2000; Dale et al., 1996; Whitehurst & Lonigan, 1998)

Recent research has focused on training parents, teachers, and childcare providers in shared book reading using specific styles of story sharing. Findings show that changes in adult story reading behavior result in notable positive changes in expressive vocabulary and sentence construction of children (Valdez-Menchaca & Whitehurst, 1992; Whitehurst & Lonigan, 1998; Whitehurst et al., 1994; Whitehurst et al., 1988) and facilitate language development (Dale et al., 1996). Scarborough and Dobrich (1994) concluded from a meta-analysis of the literature on story sharing training that changes in either the quantity or quality of parental story sharing has the potential to improve children's language skills. Hargrave and Senechal (2000) showed that while childcare providers did not use dialogic story sharing before training, the childcare providers successfully used this technique after training. Ezell and Justice (2000) found that adult's references to print increased following training, and that the verbal interactions of the preschoolers also increased.

Senechal, Cornell, et al. (1995) found that parents trained to use "wh" questioning during story sharing reinforced known information in their children. Use of "wh" questions extended children's knowledge, facilitated the acquisition of new information, contributed to an increase in frequency and length of child utterances, and resulted in children producing a greater number of complex sentences (Senechal, 1997; Valdez-Menchaca & Whitehurst, 1992).

Other research has shown that children learned more when the adult was trained

to engage in active participation (Senechal & Cornell, 1993). Whitehurst and colleagues (1994) specifically examined the effects of interactive story sharing following training of less-educated daycare providers working within the constraints of a typical daycare setting. Children in the treatment group approximately doubled the number of words on a measure of expressive vocabulary between pretest and posttest. Further, gains in expressive vocabulary were also maintained in a six-month follow-up. Crain-Thoreson and Dale (1999) focused their research on training both parents and childcare providers in story sharing to promote language growth. It was found that both parents and staff benefited from the story sharing training.

Summary of Review of the Literature

According to Snow et al. (1998), literacy development that begins before formal schooling depends on the support offered in the home or childcare environment. These authors concluded that children's interest in literacy activities was related to adult-child story sharing. Armbruster and colleagues (2002) indicated the importance of language development during the early years for becoming successful readers. Interest and motivation generated from early exposure to reading contributes significantly to learning to read. Whitehurst and Lonigan (1998) concluded that it is vital to expose preschool children to many and varied literacy experiences, and to encourage literacy-related behaviors in the preschool period.

Snow et al. (1998) concluded that story sharing during the preschool years predicts later reading achievement. Research suggested that an environment that supports

the emergent literacy development must include adult-child story sharing (Whitehurst & Lonigan, 1998). Armbruster and colleagues (2002) concluded that story retelling contributes to language development. Research conducted in daycare and home environments on interactive book reading showed that oral language skills are predicted by parents' participation in storybook reading in the home (Whitehurst, et al., 1994).

Armbruster and colleagues (2002) recommended that childcare providers give children opportunities to engage in conversation. According to these authors, practices such as these extended language usage, and encouraged oral language development. The National Institute of Child Health and Human Development (2000) suggested that an emphasis on active participation during adult-child storybook reading has a positive effect on learning. Research found that children learned new vocabulary when they participated in story sharing (Senechal et al., 1998). Research has also revealed that adult-child storybook reading contributed to receptive and expressive vocabulary growth in childcare and at-home settings (Senechal, Thomas et al., 1995).

Purcell-Gates (1996) found that parents of children from disadvantaged backgrounds read to their children less often than parents from advantaged backgrounds. Research shows that low-income children in daycare settings who are exposed to dialogic reading show significant language gains compared to students in comparison groups (Valdez-Menchaca & Whitehurst, 1992, Whitehurst et al., 1994, Whitehurst & Lonigan, 1998). Zigler and Styfco (2001) concluded that increased intervention in the early years is essential to preventing academic failure in disadvantaged students.

Research shows that parents do not typically use dialogic story sharing techniques

while reading aloud (Marvin & Wright 1997). When mothers were trained to use dialogic story sharing their children improved in literacy behaviors important for learning to read in school (Crowe, Norris, & Hoffman, 2000; Dale et al., 1996; Whitehurst & Lonigan, 1998). Recent research has focused on training parents, teachers, and childcare providers in storybook reading using specific styles of story sharing. Findings show that changes in adult story reading behavior result in positive changes in vocabulary of children (Valdez-Menchaca & Whitehurst, 1992; Whitehurst & Lonigan, 1998; Whitehurst et al., 1994; Whitehurst et al., 1988).

The literature on story sharing supports the need for research that focuses on the effects of training and mentoring childcare providers in story sharing on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers. The research shows that literacy development that leads to future reading success begins prior to formal schooling, and depends on the affective quality of the literacy-related activities in the home or childcare environment (Snow et al. 1998). The research also suggests that an emphasis on active participation during adult-child storybook reading has a positive effect on language development (Armbruster et al., 2002) and on learning new vocabulary (Senechal et al., 1998). The present study extends the research by focuses on the training and mentoring of childcare providers in reading aloud with children.

CHAPTER III

METHODOLOGY

Research Design

This study was designed to investigate the effects of the Motheread story sharing training and mentoring model on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training and no mentoring. The study was approved for research by the Institutional Review Board for the Protection of Human Subjects in Research (IRB).

The study used a pretest-posttest comparison group design. There was one treatment group and one comparison group. The groups consisted of classes of four-year olds in which their childcare providers received (a) training and mentoring (TM), or (b) no training and no mentoring (NTM). The dependent variables were standardized receptive and expressive vocabulary test scores of children, story retelling scores of children, and story reading behaviors of childcare providers. The independent variables were the training and mentoring intervention for childcare provider participants.

Research Questions

The study addressed the following research questions:

1) What are the effects of the Motheread story sharing training and mentoring model on receptive vocabulary of four-year olds in a childcare setting?

2) What are the effects of the Motheread story sharing training and mentoring model on

expressive vocabulary of four-year olds in a childcare setting?

3) What are the effects of the Motheread story sharing training and mentoring model on story retelling of four-year olds in a childcare setting?

4) What are the effects of the Motheread story sharing training and mentoring model on story sharing behaviors of child care providers as measured by the TLBOC (Motheread, Inc., 2003).

Research Participants

One hundred thirty-nine participants were included in this study (N = 139). Of the 139 participants, 18 were childcare providers (n = 18), and 121 were children (n = 121). One childcare provider participant did not complete the study because she left the employ of the childcare center before data collection was completed. Twelve child participants did not complete the study because they moved to different childcare centers before data collection was completed.

Childcare Provider Participants

Eighteen childcare providers (n = 18) were obtained from the population of the childcare centers in two neighboring counties in North Carolina in which Motheread training contracts existed, and similar childcare centers for comparison. All childcare centers had a three or four star rating on the North Carolina Star Rated License system,

with the exception of one. One center in the treatment group had a one-star rating. In the Star Rated License system, points are earned toward stars in the areas of program standards, staff education, and compliance history with childcare education. The number of stars possible for childcare centers ranges from a high of five, and a low of one. Childcare provider participants were recruited through letters sent to their childcare center directors (Appendix A).

To qualify for participation in the study, childcare provider participants were required to (a) work in a center in which the childcare director agreed to allow participation, (b) serve children who were four years of age, (c) have no previous story sharing training and/or mentoring, (d) give consent (Appendix B) and complete a participant data sheet (Appendix C). Years of teaching experience and education level was obtained from each of the childcare provider participants. The years of teaching experience for the childcare provider participants ranged from 0 - 5 years to > 20 years, with a mean of 6 - 10 years. Childcare provider participants ranged in education level from high school completion to a bachelor's degree, with the average having "some college". Tables 1 and 2 show the demographic information for childcare providers. Table 1 shows the years of experience of childcare providers by group. Table 2 shows the education level of childcare providers by group.

The childcare provider participants received a gift certificate for their participation in the study. The childcare centers received a collection of books.

Table 1

Years of Experience of Childcare Providers by Group

Group	0-5	6-10	11-15	16-20	> 20
Treatment[a]	2	5	0	2	0
Comparison[b]	2	0	5	1	1

[a]n = 9, [b]n = 9

Table 2

Education Level of Childcare Providers by Group

Group	< HS	HS/GED	SC	AA	BA/BS	MA/MS	> MA/MS
Treatment[a]	0	1	7	0	1	0	0
Comparison[b]	0	1	5	3	0	0	0

Note. HS = high school, HS/GED = GED high school equivalent, SC = some college, AA = associate's degree, BA/BS = bachelor's degree, MA/MS = master's degree.

[a]n = 9, [b]n = 9

Child Participants

One hundred twenty-one child participants (n = 121) who were four years of age were obtained from the population of the childcare centers in North Carolina in which Motheread training contracts existed, or similar centers for comparison, and from which childcare providers agreed to participate in the study. Child participants were recruited through letters sent to parents from their childcare centers (Appendix D). To qualify for participation in the study, child participants were required to (a) be enrolled in classrooms with participating childcare providers, (b) be four years of age, (c) speak English as their first language, and (d) have parental consent (Appendix E), including a completed

participant data sheet (Appendix F).

The age, race, gender, and mother's education was obtained for each of the child participants. The child participants ranged in age from 48 to 59 months, with a mean of 52.6 months (SD = 3.5), or 4 years, 4 months. The mean age of children in the treatment group was 53.3 months (SD = 3.6). The mean age of children in the comparison group was 52.0 (SD = 3.3). There were 91 white and 30 non-white child participants. The treatment group consisted of 55% white and 45% non-white. The comparison group had 90% white and 10% non-white. Statistical analysis reported later indicated a significant difference with regard to race between the treatment and comparison groups, with the treatment group having more minority children (x^2 (1, n = 121) = 18.85, p = < .001. There were 55 (45%) male, and 66 (55%) female child participants. The treatment group consisted of 39% male, and 61% female child participants. The comparison group consisted of 50% male, and 50% female child participants. Data analysis reported later indicated no significant differences with regard to gender between groups. The comparison group was larger, and was significantly different from the treatment group with regard to race, but not gender. Mother's education was also obtained from child participants. All of the child participants in the study, with the exception of one in the treatment group, had mother's education listed as high school or beyond. Statistical analysis confirmed no significant difference for mother's education between groups. Tables 3, 4, and 5 show the demographic information of child participants by group. Table 3 shows the race of child participants by group, Table 4 shows the gender, and Table 5 shows mother's education.

Table 3

Race of Child Participants by Group

Group	White	Non-white	% White	% Non-white
Treatment[a]	28	23	55	45
Comparison[b]	63	7	90	10

[a]$n = 51$, [b]$n = 70$

Table 4

Gender of Child Participants by Group

Group	Male	Female	% Male	% Female
Treatment[a]	20	31	39	61
Comparison[b]	35	35	50	50

[a]$n = 51$, [b]$n = 70$

Table 5

Mother's Education of Child Participants by Group

Group	Less Than High School	High School or Above
Treatment[a]	1	50
Comparison[b]	0	70

[a]$n = 51$, [b]$n = 70$

Group Assignment

Seven childcare centers from neighboring counties in northeastern North Carolina were involved in this research. Four of the seven were centers in which Motheread training contracts existed, and therefore served as the treatment centers. The remaining three centers were similar, based on the state's star rating system, to the majority of the treatment centers, and served as the comparison centers. Following written permission from the childcare center directors to conduct the research in the center, thirteen classrooms from the seven centers were considered eligible, based on age of the children. Six of the classrooms were in treatment centers, and seven were in comparison centers. From the six treatment center classrooms, all nine childcare providers ($n = 9$) gave consent to participate, and completed a data sheet. Three of the treatment classrooms had one childcare provider, and three of them had two childcare providers. From the seven comparison classrooms, all ten childcare providers gave consent to participate, and

completed a data sheet. However, one childcare provider did not complete the study because she left the employ of the center before data collection was complete[1]. Therefore, there remained nine childcare providers in the comparison group (n = 9). Three of the comparison classrooms had one childcare provider, and three of them had two childcare providers. The remaining comparison classroom had one teacher that did not complete the study. After obtaining written consent from the 18 childcare providers, all eligible children from the 13 classes were invited to participate in the study. One hundred thirty-three returned signed consent forms, along with the required data sheet. However, 12 children did not complete the study because they moved to different childcare centers before data collection was complete. Therefore, there remained 121 (n = 121) child participants in the study. Of the 121 children, 51 were from the treatment group (n = 51), and 70 were in the comparison group (n = 70). One hundred thirty-nine was the total number of participants, both childcare providers and children (N = 139). Table 6 shows a categorization of participants.

[1] This childcare provider left the childcare center the day before the posttesting. Therefore, the classroom was in tact with a participating childcare provider and children the entire six weeks between pretest and posttest.

Table 6

Categorization of Participants

Group	Centers	Classes	Childcare Providers	Children
TM	4	6	9	51
NTM	3	7	9	70
Total	7	13	18	121

Note. TM = training mentoring group, NTM = no training and no mentoring.

Materials

The TLBOC (Motheread, Inc., 2003) was used to conduct pretest and posttest observations for the 18 childcare provider participants (Appendix G). The TLBOC (Motheread, Inc., 2003) is a behavioral checklist that documents childcare provider behavior during story sharing such as “teacher sits at preschooler’s eye level” and “teacher uses voice expressively”. Additionally, a story sharing guide was given to childcare participants in the training and mentoring group, along with a collection of books to be used in the childcare center.

All 121 child participants were given the PPVT-R (Dunn & Dunn, 1981) and the EOWPVT (Gardner, 1990) as a pretest for receptive and expressive vocabulary, respectively. The PPVT-R (Dunn & Dunn, 1981) is a nationally normed measure of receptive vocabulary. It requires that the child examine a plate of four pictured objects,

and point to the item named by the examiner. Median reliabilities were reported as .94. The mean for the PPVT-R is *M* = 104.2 (*SD* = 19.4) (Williams & Wang, 1997). The EOWPVT (Brownell, 2000) is a nationally norm-referenced test that assesses English speaking vocabulary. It requires that the child state the name of a pictured item. Median reliabilities are reported at .98. The mean for the EOWPVT is *M* = 127.51 (*SD* = 15.67).

Two books entitled *Grandpa's Surprise* (Beardshaw, 2004), and *Tiny's Big Adventure* (Waddell, 2004) were used to assess story retelling of child participants. Both books had 18 pages on which text appeared. *Grandpa's Surprise* (Beardshaw, 2004) contained 246 words in 39 sentences, with an average of 6.3 words per sentence. *Tiny's Big Adventure* (Waddell, 2004) contained 343 words in 50 sentences, with an average of 6.8 words per sentence. Based on similar number of pages, number of words per sentence, and straightforwardness of story elements, the books were deemed equivalent for story retelling. Additionally, both books were newly published, increasing the likelihood that the children had not previously encountered the books. Readability calculations were performed for both books. A Powers-Sumner-Kear grade level was determined. Powers-Sumner-Kear was used because it has been deemed appropriate for primary through early elementary level materials (Micro Power & Light Co.). The Powers grade levels for *Grandpa's Surprise* (Beardshaw, 2004) and *Tiny's Big Adventure* (Waddell, 2004) were 3.8 and 3.9, respectively.

A retelling rubric was constructed using categories of story structure consistent with those reported in the literature (Gillam & Carlile, 1997; Popplewell & Doty, 2001). Retelling categories similar to those used by Koskinen, Gambrell, and Kapinus (1993)

and Gambrell, Koskinen, and Kapinus (1991) were used to document child story recall (Appendixes H and I). This instrument was chosen because it was found to be successful in eliciting positive elaborations and story structure elements with less-proficient readers. It was adapted from its original form to ensure appropriateness for the age group under investigation.

Procedures

The study used a pretest-posttest comparison group design. There was one treatment group and one comparison group. The groups consisted of classes of four-year olds in which their childcare providers received (a) training and mentoring (TM), or (b) no training or mentoring (NTM). Story sharing behaviors for childcare providers were documented using the TLBOC (Motheread, Inc., 2003). Three instruments were used to assess vocabulary and story recall for child participants. Receptive vocabulary was assessed using the PPVPT-R (Dunn & Dunn, 1981). Expressive vocabulary was assessed using the EOWPVT (Gardner, 1990). A retelling rubric was used to assess story recall. As the PPVT-R (Dunn & Dunn, 1981) did not require verbal responses, it was administered first, followed by the EOWPVT (Gardner, 1990). The retelling rubric was administered last. The assessments were conducted in one or two sessions, depending on the attention span and restlessness of the child. In some cases, three sessions were required when class schedules prevented the necessary time to complete the tasks. The majority of the testing occurred in the morning, with the exception of a few children that were assessed following afternoon nap time.

Pretesting occurred in the childcare centers. Each site visit was scheduled with the childcare provider prior to the day of observation. The story sharing behaviors for childcare provider participants were determined through completion of the TLBOC (Motheread, Inc., 2003). The childcare provider was asked to engage the class in story sharing. The childcare provider was given the option to select a book from the classroom, or chose one provided by the researcher. All 18 of the childcare providers selected a classroom book. The researcher was positioned in an unobtrusive area of the classroom, and completed the TLBOC (Motheread, Inc., 2003) while observing the childcare provider. The childcare provider was not provided with a copy of the TLBOC (Motheread, Inc., 2003) prior to the observation. Story sharing sessions generally lasted approximately 15 to 30 minutes. One exception was the case in which a fire drill occurred during the story sharing. In this case, story sharing resumed following the drill.

Receptive vocabulary for child participants was determined. Receptive vocabulary was assessed using the PPVPT-R (Dunn & Dunn, 1981). The PPVPT-R (Dunn & Dunn, 1981) is a standardized test in which the child selects one picture out of four that represents a spoken word. The researcher and a data collector administered the PPVT-R (Dunn & Dunn, 1981) on an individual basis in a quiet area at the childcare center. Before testing, rapport was established between examiner and child though brief conversation. When it was determined that the child was comfortable with the examiner, the testing began. Standard testing procedure was followed, according to the testing manual. The testing session lasted approximately 15 to 30 minutes, depending on the extent of the vocabulary of the individual child.

Expressive vocabulary for child participants was determined using the EOWPVT (Gardner, 1990). The EOWPVT (Gardner, 1990) is a standardized test which requires the test-taker to name pictured items following a prompt such as "What's that?" given by the test administrator. The researcher and a data collector administered the EOWPVT (Gardner, 1990) on an individual basis in a quiet area at the childcare center. Standard testing procedure was followed, according to the testing manual. The testing session lasted approximately 15 to 30 minutes, depending on the extent of the vocabulary of the individual child.

Story retelling was assessed using a rubric that measures the recall of story structure and story coherence. The researcher read a story to the children in small groups of no more than three. The researcher consistently read the story to each group of children with similar expression and commentary. Although the story was read with expression and commentary, the researcher did not follow the complete story sharing process outlined in the Motheread story sharing model. The storybook reading lasted about 10 to 15 minutes.

Immediately following the story sharing, the retelling rubric was administered to children individually in a quiet area at the childcare center. During the individual retellings, the other children from the small group waited in an area away from the retelling. They were given small toys or blocks to play with while they waited. The retelling session for each child lasted approximately five minutes. A counter-balanced approach was used. Half of the children heard Book 1, *Grandpa's Surprise* (Beardshaw, 2004). The other half heard Book 2, *Tiny's Big Adventure* (Waddell, 2004). Initially, an

"unassisted" retell was requested. The child was asked to tell what they remembered about the story. Following the initial unassisted retell, the researcher prompted the child with statements such as, "Tell me more about where the story happens." and "Tell me about the problem in the story." Details recalled by children were recorded on the retelling rubric while the children retold the story. Children were given a sticker, and returned to class following the retelling.

Following pretesting, the experimental group received the prescribed treatment. The childcare providers in the training and mentoring group received a six-week training and mentoring intervention. Childcare providers received onsite training in story sharing. The training consisted of an initial two-hour session offered at the childcare center during non-child hours, or during childcare provider release-time. During the training session, childcare providers were introduced to the Motheread story sharing process. The five major parts of the story sharing process presented during training are: (a) introduce the story, (b) read the book, (c) review the book, (d) story sharing activity, and (e) close. Modeling of the story sharing process followed the detailed introduction of the story sharing model. Childcare providers were encouraged to read daily with their children, and apply the strategies presented in training. Books and curriculum guides were reviewed, and distributed for use in the classrooms.

Follow-up visits during child-hours were made to the childcare centers on a weekly basis. During subsequent site visits, and as part of the mentoring process, childcare providers received feedback on their story sharing behaviors, and were given suggestions for effective ways to deliver story sharing. The initial TLBOC was used to

guide feedback, and up to five subsequent TLBOC (Motheread, Inc., 2003) observations were made to show growth and provide further support. The initial and final TLBOC (Motheread, Inc., 2003) were included in the study.

Modeling was used during the mentoring process to guide childcare providers in using the Motheread story sharing process with their children. Activities that were modeled included using drama or discussion to introduce a book, reading with expression, responding appropriately to student responses, and reinforcing the main idea of the story. Childcare providers were given opportunities for practice and collaboration following modeling presented in training. Support and encouragement was provided, as needed. Additional resources such as books, CDs, and flannel story board kits were supplied when requested by the childcare provider. Books, materials, and a curriculum guide introduced during training became the property of the center, and remained in the center for childcare provider use.

The comparison group received no training and no mentoring. These childcare providers were told to continue reading to their children as they normally would.

Posttesting occurred at the childcare centers after six weeks. In some cases, due to teacher absences or holiday schedules, the posttesting was delayed by up to two weeks. Testing procedures identical to those used in pretesting were followed. The posttest site visit was scheduled in advance with the childcare center and the childcare provider. The story sharing behaviors for childcare provider participants were documented using the TLBOC (Motheread, Inc., 2003). Each child was given a test of receptive vocabulary, expressive vocabulary, and asked to retell a story. Receptive vocabulary was assessed

using an alternate form of the PPVPT-R (Dunn & Dunn, 1981). The same test as in the pretest was used to assess expressive vocabulary, as the EOWPVT (Gardner, 1990) has no alternative form. Story retelling for child participants was assessed using the same retelling rubric as in pretesting. A counter balanced approach was used for reading storybooks. That is, the children that heard Book 1 during pretesting, heard Book 2 during posttesting, and vice-versa.

In addition to the primary researcher, a trained data collector with preschool teaching experience administered the PPVT-R (Dunn & Dunn, 1981) and EOWPVT (Gardner, 1990) pretests and posttests to child participants. The data collector was trained by the primary researcher in administering the standardized tests. The training sessions included modeling and ample opportunity for practice. The data collector administered only the standardized assessments. Therefore, no measures were required to ensure inter-rater reliability. The primary researcher administered all of the retelling rubrics for child participants. Additionally, the primary researcher administered all of the TLBOC (Motheread, Inc., 2003) measures. The researcher was trained to administer the TLBOC by a developer of the instrument. Inter-rater reliability from .89 to .95 was established. To ensure accuracy in scoring the standardized assessments, the trained data collector randomly scored approximately 25% of the assessments. A 97% match in scoring of the standardized assessments was obtained.

After the study was completed, childcare provider participants and parents of child participants were invited to a meeting in which information about the study results was given. At the request of parents, individual scores for children were provided

confidentially. The meeting lasted from 15 to 30 minutes. Participation incentives were distributed at the conclusion of the study.

CHAPTER IV

RESULTS

Demographic Statistics

Chi-square analyses were conducted on demographic variables for participants in the training and mentoring group and the no training and no mentoring group. For childcare provider participants, chi-square analyses were used to determine whether differences existed between groups regarding education and years of experience. For child participants, chi-square analyses were used to determine whether differences existed between groups regarding race, gender, and mother's education.

Childcare Provider Participants

Analyses revealed no difference with regard to education between the treatment group and comparison group of childcare providers. The x^2 test revealed statistical significance between groups for years of experience x^2 (1, n = 121) = 5.56, p = .018. These results indicated that the childcare providers in the treatment group had less experience than those in the comparison group.

Child Participants

Analyses revealed no differences with regard to gender and mother's education for the treatment group and comparison group of child participants. Regarding gender,

there was statistically about the same number of male and female children in both groups. As shown earlier in Table 4, the comparison group had 35 males, and 35 females. The treatment group had 20 males, and 32 females. Regarding mother's education, the majority of families in the study had mothers that were educated at the high school level or beyond. In fact, as shown earlier in Table 5, only one mother of a student in the treatment group had less than high school level of education. The x^2 test revealed statistical significance between the groups with regard to race x^2 (1, n = 121) = 18.85, p = < .001. These results indicated that there were more minority children in the treatment group than in the comparison group.

Test Statistics

Hoyt's Analysis was conducted to determine internal consistency of the TLBOC (Motheread, Inc., 2003), and the retelling rubric. Hoyt's analysis provides a reliability coefficient which gives an indication of the internal consistency of an instrument containing categorical data. The reliability coefficient for the retelling rubric was r = .68. Internal consistency for the TLBOC (Motheread, Inc., 2003) was determined using previously collected data (N = 59). The reliability coefficient for the TLBOC (Motheread, Inc., 2003) was r = .85.

Outcome Statistics

Mean pretest and posttest scores for the TLBOC (Motheread, Inc., 2003) were determined for childcare providers in both the treatment and comparison groups. Mean

pretest and posttest scores, and gain scores for the PPVT-R (Dunn & Dunn, 1981), EOWPVT (Gardner, 1990), and retelling rubrics were determined for children in both the treatment and comparison groups. Analysis of covariance and *t*-tests were conducted to determine significance of outcome measures for participants in the training and mentoring group and the no training and no mentoring group.

Childcare Provider Participants

A single factor ANOVA was conducted to determine whether a significant difference existed among childcare providers in the treatment and comparison groups on the pretest for the TLBOC (Motheread, Inc., 2003). The analysis revealed no significant difference between the groups on the pretest measure. The mean scores and standard deviations on the pretest for the treatment group and the comparison group were M = 46.2 (SD = 3.3) and M = 56.3 (SD = 11.6), respectively.

A single factor ANOVA was conducted to determine whether a significant difference existed among the childcare providers in the treatment and comparison groups on the posttest of the TLBOC (Motheread, Inc., 2003). The analysis indicated a highly significant difference between the groups on the posttest measure F (1,16) = 9.05, p = < .01, as shown in Figure 1. The mean scores and standard deviations on the posttest for the treatment and comparison groups were M = 75.4 (SD = 6.7) and M = 50.1 (SD = 19.0), respectively. Means and standard deviations on the TLBOC (Motheread, Inc., 2003) are presented in Table 7. Analysis of variance for TLBOC posttest (Motheread, Inc., 2003) are presented in Table 8.

Table 7

Means, Standard Deviations on TLBOC

	Pretest		Posttest	
Group	*M*	*SD*	*M*	*SD*
Treatment[a]	46.2	13.3	75.4	16.7
Comparison[b]	56.3	11.6	50.1	19.0

[a]$n = 9$, [b]$n = 9$

Table 8

Analysis of Variance for TLBOC Posttest

Source of Variation	*df*	*F*	*p*
Between Groups	1	9.06	.008
Within Groups	16		
Total	17		

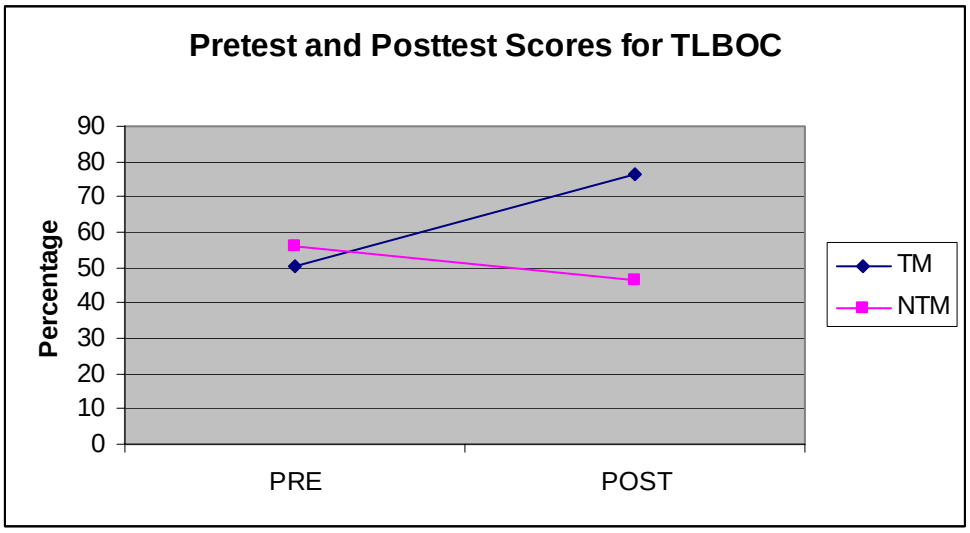


Figure 1. Pretest and posttest scores for TLBOC for training and mentoring and no training and no mentoring groups.

Child Participants

Measure for Receptive Vocabulary (PPVT-R).

A single factor ANOVA was conducted to determine whether a significant difference existed between pretest and posttest scores for children in the treatment and comparison groups on the PPVT-R (Dunn & Dunn, 1981). The analysis revealed with an alpha level of .05 no significant difference between pretest and posttest scores for either group on the PPVT-R (Dunn & Dunn, 1981). The mean scores and standard deviations on the pretest for the treatment and comparison groups were M = 99.7 (SD = 10.2) and M = 106.3 (SD = 11.9), respectively. The mean scores standard deviations on the posttest for the treatment and comparison groups were M = 99.0 (SD = 10.2) and M = 105.1 (SD = 9.5), respectively. Means and standard deviations on the PPVT-R (Dunn & Dunn, 1981) are presented in Table 9.

Table 9

Means, Standard Deviations on PPVT-R

Group	Pretest		Posttest	
	M	*SD*	*M*	*SD*
Treatment[a]	99.7	10.2	99.0	10.2
Comparison[b]	106.3	11.9	105.1	9.5

[a]$n = 51$, [b]$n = 70$

Measure for Expressive Vocabulary (EOWPVT).

Analysis of covariance was used to test the null hypothesis that no difference existed between the posttest scores for children in the treatment and comparison groups on the EOWPVT (Gardner, 1990). After controlling for pretest scores using the pretest as a covariate, and comparing the differences in posttest scores, ANCOVA revealed with an alpha level of .05 significant differences between posttest means, as shown in Figure 2. ANCOVA results were $F(1,118) = 9.28$, $p = < .0029$. Therefore, the decision was to reject the null hypothesis. The mean scores and standard deviations on the pretest for the treatment and comparison groups were $M = 92.9$ ($SD = 12.0$) and $M = 99.8$ ($SD = 12.7$), respectively. The mean scores and standard deviations on the posttest for the treatment and comparison groups were $M = 97.9$ ($SD = 13.6$) and $M = 99.8$ ($SD = 14.0$), respectively. Means and standard deviations on EOWPVT (Gardner, 1990) are presented

in Table 10. Analysis of covariance for EOWPVT (Gardner, 1990) are presented in Table 11.

Table 10

Means, Standard Deviations on EOWPVT

Group	Pretest		Posttest	
	M	*SD*	*M*	*SD*
Treatment[a]	92.9	12.0	97.9	13.6
Comparison[b]	99.8	12.7	99.8	14.0

[a]$n = 51$, [b]$n = 70$

Table 11

Analysis of Covariance for EOWPVT

Source of Variation	*df*	*F*	*p*
Between Groups	1	9.28	.0029
Within Groups	117		
Total	118		

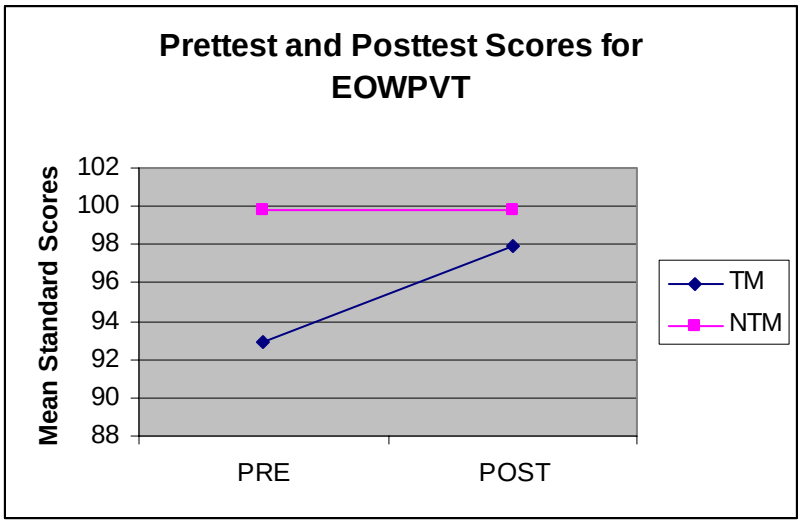


Figure 2. Pretest and posttest scores for EOWPVT for training and mentoring and no training and no mentoring groups.

Measure for Story Retelling.

A *t*-test was conducted to determine whether a significant difference existed among gain scores for children in the treatment and comparison groups on the retelling rubric. The analysis indicated a highly significant difference between the groups on the gain scores $t(116) = -6.131$, $p = < .001$(two-tailed). Pretest and posttest scores are shown in Figure 3. The analysis resulted in a negative *t* score due to a negative gain score for the comparison group mean. The mean scores and standard deviations on the gain scores for the treatment and comparison groups were $M = 12.92$ ($SD = 13.7$) and $M = -2.43$ ($SD = 13.3$), respectively. Means and standard deviations on retelling gain scores are presented in Table 12. Analysis of *t*-test for retelling is presented in Table 13.

Table 12

Means, Standard Deviations on Retelling

Group	*M*	*SD*
Treatment[a]	12.92	13.7
Comparison[b]	-2.14	13.1

[a]*n* = 51, [b]*n* = 70

Table 13

Analysis of t-test for Retelling

M	*SE*	*t*	*df*	*p*	*Lower*	*Upper*
					95%	95%
-15.35	2.505	-6.131	116	.000	-20.31	-10.39

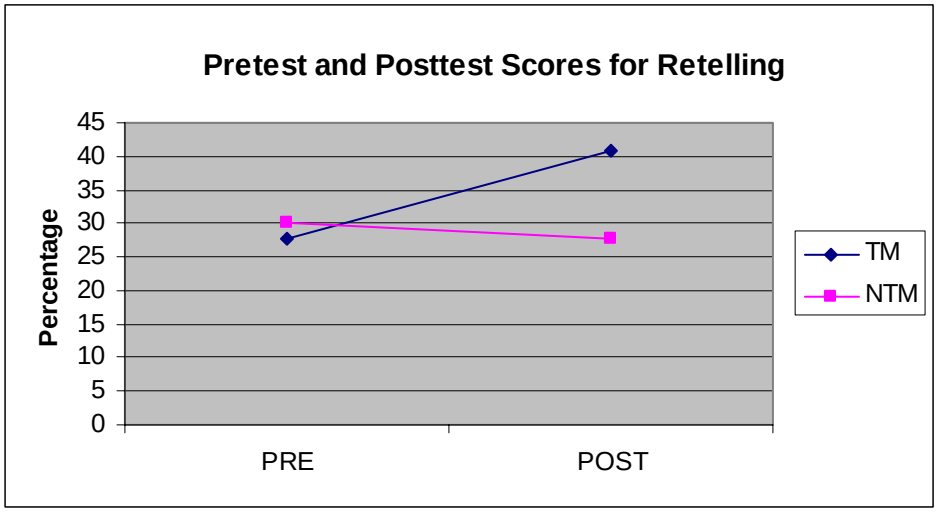


Figure 3. The pretest and posttest scores for Retelling for training and mentoring and no training and no mentoring groups.

CHAPTER V

DISCUSSION

Connection to the Research

Anderson and colleagues (1985) emphasized the critical impact that reading aloud to children has on future reading success. It is not surprising then, that there are a number of reported intervention studies involving reading aloud with children (Dale et al., 1996; Hargrave & Senechal, 2000; Whitehurst et al., 1988). What is surprising is the modest number and limited nature of reported read aloud interventions in childcare settings (Valdez-Menchaca & Whitehurst, 1992). In light of the predictive nature of early acquired knowledge about books and reading on future academic success (Scarborough & Dobrich, 1994), it is critical that the issue of enhanced story sharing in childcare settings remain at the forefront of emergent literacy discussions.

Scarborough and Dobrich (1994) analyzed the research on storybook reading. They found that preschool children differed considerably in the way in which they were prepared for learning to read. Bus and colleagues (1995) also explored the research that examined the benefits of storybook reading. They found that story sharing provided children with knowledge about books and reading. In view of the importance that early knowledge about reading has on subsequent reading achievement (Scarborough & Dobrich, 1994), the researchers agreed about the importance for determining the conditions under which story sharing is most beneficial.

The issue of training reading teachers in grades K-12 was addressed by the

National Institute of Child Health and Human Development (2000). The panel found that professional development resulted in higher student achievement. Considering the importance of teacher training and the crucial role that early literacy plays in future reading success (Juel, 1988), the need for effective teacher training programs for teachers of preschoolers is critical. The model under investigation in this study has been shown to provide effective training with positive results.

This goal of this research was to examine story sharing with children in a childcare setting. This study was designed to investigate the effects of the Motheread model of training and mentoring on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training and no mentoring.

Research Questions Addressed

The first research question addressed by this study was whether the Motheread story sharing training and mentoring model had an effect on receptive vocabulary of four-year olds in a childcare setting. Analysis of variance revealed no significant difference between pretest and posttest scores for children in the treatment and comparison groups on the PPVT-R (Dunn & Dunn, 1981).

The lack of impact of the story sharing model intervention on receptive vocabulary as measured by the PPVT-R (Dunn & Dunn, 1981) is of particular interest. A possible explanation for this finding is the design of the Motheread model of story sharing and the nature of receptive vocabulary. The model encourages the active

participation of both the reader and the listener in the story sharing experience. It focuses on conversations and dialog, and underscores the importance of language as a first step to becoming a reader (Motheread, Inc., 2000).

Receptive vocabulary includes words children can understand but do not necessarily produce. On the other hand, expressive vocabulary consists of words children understand, and produce in spoken language (Just & Carpenter, 1987). The fact that the results indicated a change in expressive vocabulary, but not receptive, suggests that the intervention was more effective at impacting speech-produced vocabulary, given the duration and intensity of the intervention. This finding was consistent with a study conducted by Hargrave & Senechal (2000). These researchers found no significance effect for gains in receptive vocabulary following an intervention focusing on active participation. However, these findings are inconsistent with a study conducted by Valdez-Menchaca and Whitehurst (1992). Findings from this research showed a significant effect for receptive vocabulary following a story sharing intervention. The inconsistency may be explained by the difference in age of participants. In the investigation conducted by Valdez-Menchaca and Whitehurst, the participants were two-year olds. Further research is needed to fully examine the effects story sharing has on children of different ages.

Duration of the present study is another possible explanation for the lack of impact of the intervention on receptive vocabulary. There were six weeks between the pretest and the posttest measures. It may be that an intervention of this length is too short to produce significant results in the area of receptive vocabulary. This is consistent with

findings from Whitehurst and colleagues (1994; 1988). The researchers did not find a significant effect on receptive vocabulary following a story sharing intervention of six weeks (1994), or in an earlier study (1988) with an intervention of four weeks. These findings are inconsistent with research that involved younger students (Valdez-Menchaca & Whitehurst, 1992). The researchers in this study found significant effects for receptive vocabulary following a six-week intervention. The age difference of the participants may explain the inconsistency of the findings. Further research is needed to examine intervention length in relation to age.

The second research questioned posed in this study was whether the Motheread story sharing training and mentoring model had an effect on the expressive vocabulary of four-year olds in a childcare setting. Results showed a significant gain in expressive vocabulary for the treatment group. That is, the children that received the intervention outperformed children in the comparison group on a measure of vocabulary that requires the production of spoken language. This finding is noteworthy as it suggests that an emphasis on conversation and dialog, as in the Motheread model of story sharing, may contribute to increased expressive vocabulary.

Examining the effects of the Motheread story sharing training and mentoring model on story retelling of four-year olds in a childcare setting was the third research question posed in this study. Results indicated that a highly significant difference existed among gain scores for children in the treatment and comparison groups on the retelling rubric. Of particular interest regarding retelling scores was the dramatic change in pretest and posttest scores for the treatment group, as compared to the comparison group. Not

only did the comparison group fail to show an increase in scores, the group mean actually showed a negative gain score. The fact that the treatment group showed such marked change as compared to the negative gain score for the comparison group is noteworthy. Retelling is primarily a language-based practice. It requires that a child verbally reconstruct events and concepts in the text, and make inferences to fill in the gaps in the detail recalled. Research shows a positive correlation between story retelling and comprehension (Hansen, 1978). In the current study, the children in the treatment group significantly outperformed the children in the comparison group in story retelling, a measure that requires a verbal reconstruction of story events. This suggests that an emphasis on conversation and dialog may contribute to improved story retelling. This finding is important in light of Hansen's (1978) finding that shows a link between story retelling and comprehension.

The final research question posed in this study asked whether the Motheread story sharing training and mentoring model had an effect on story sharing behaviors of childcare providers as measured by the TLBOC (Motheread, Inc., 2003). Results showed that at baseline there were no significant differences between childcare providers in the comparison group and childcare providers in the treatment group with regard to story sharing behaviors. Following the intervention, results indicated that a highly significant difference existed among the groups of childcare providers on the posttest measure. This finding suggests that the childcare providers responded positively to the training and mentoring, and implemented elements of the training and mentoring in their teaching practices. The children in classes in which childcare providers received training and

mentoring outperformed the children in the comparison group in the areas of expressive vocabulary and story retelling. These findings suggest that the training and mentoring produced positive results on measures of vocabulary and story recall four-year olds in a childcare setting.

Consideration of Contributing Factors

Childcare Provider Participants

Demographic variables for childcare providers in both the training and mentoring group and the no training and no mentoring group were examined. For childcare provider participants, demographic data was analyzed to determine whether differences existed between groups regarding education and years of experience.

Data Analyses revealed no difference with regard to education between the treatment group and comparison group of childcare providers. However, the educational background of the childcare providers, as a whole, was of particular interest. As previously shown in Table 2, the education of the childcare providers ranged from high school or GED to bachelor's degree. Of the 18 childcare providers, only three had college degrees. Of those, only one held a bachelor's degree. The majority of the childcare provider participants in the study had "some college" listed as their educational level. It was noteworthy that childcare providers with or without a college degree responded positively to the training and mentoring program, and appeared to have changed practice as a result. This finding is significant in light of the wide range educational levels found in the childcare industry (U.S. Department of Labor, Bureau of

Labor Statistics). It is encouraging that a straight forward and relatively brief training and mentoring model has been shown to be successful with childcare providers having modest levels of education. Further research is necessary to determine whether similar findings would result with childcare providers at differing levels of education.

Unlike education level, analysis revealed a significant difference between childcare providers in the treatment and comparison groups regarding years of experience. The childcare providers in the treatment group had less experience than those in the comparison group. As previously shown in Table 1, the years of experience for childcare providers in both groups ranged from 0-5 to > 20 years. Of the nine childcare providers in the comparison group, seven had 11 or more years of experience, as compared to two of nine in the treatment group. This is of particular interest in that, although the treatment group was significantly less experienced, analysis revealed a positive change from pretest to posttest scores on the TLBOC (Motheread, Inc., 2003) measure, whereas no significant change was found for the comparison group.

Child Participants

The treatment and comparison groups of children were similar in the demographics considered, with the exception of race. Analyses revealed no difference with regard to gender and mother's education between the groups. However, analysis revealed a statistical significance between the groups with regard to race. As previously shown in Table 3, the treatment group had 45% non-white, whereas the comparison group had 10% minority. This is of particular interest. There is a growing body of

empirical evidence to suggest that minority children lag behind their white counterparts in the area of academics (Navarro & Natalicio, 1999). However, despite the documented achievement gap, the treatment group with significantly more minority children showed positive changes from pretest to posttest on the expressive vocabulary and retelling measures, whereas no significant change was found for the predominately white comparison group.

Implications for the Training of Childcare Providers

This research was designed to add to the understanding of how to train and support childcare providers in reading aloud with children. Another goal of the study was to provide insight into best practices for training childcare providers in story sharing. The findings suggest the Motheread story sharing training model positively impacted expressive vocabulary and story retelling, and has significant instructional implications for the training of childcare providers.

Certification requirements for childcare providers are often less than that for teachers in formal education settings (U.S. Department of Labor, Bureau of Labor Statistics). As a result, childcare providers can range in education from minimal amounts to advanced levels. Juel (1988) emphasized the importance of early literacy skills on future reading achievement. Therefore, it is critical that those working with children in childcare settings, particularly providers with limited education, have access to training aimed at improving vocabulary and reading comprehension through a typical childcare activity such as story sharing.

The findings from this study showed that childcare providers with or without a college degree responded positively to story sharing training and mentoring. Further, the childcare providers in this study appeared to have changed practice as a result of the training, and subsequent gains in child outcomes were the result. Childcare providers in the comparison group shared stories with their classes, and yet their children made no significant improvements on measures of expressive vocabulary and story retelling. This suggests that reading aloud to children may not be sufficient in and of itself. The present investigation brings to light the importance of training minimally educated childcare providers in enhanced story sharing, as a way of improving expressive vocabulary and story recall in their children. Further, it provides a model that has proven successful with childcare providers with limited education. However, as previously mentioned, further research is needed to determine whether frequency of reading aloud is increased as a result of story sharing training, and if so, its impact on child outcome measures.

In addition to highlighting a story sharing training model that has been shown to be successful with childcare providers with limited education, this research also adds to the understanding of how to train and support childcare providers in reading aloud to children. The training and mentoring under investigation in this study included modeling, practice, and feedback. Additionally, the mentoring provided ongoing emotional and technical support, with opportunities for collaboration. Results from this study suggest that this type of training and mentoring contributed to a change in childcare provider practice, and improved child outcomes. These findings are supported by research investigating the effect of professional development related on early literacy

(Thistlethwaite et al., 1991). These researchers have shown that teachers are more likely to continue using effective practices when inservice includes mentoring with classroom support from staff developers, and that additional practice and feedback increases teacher understanding of the strategies taught during training. Other research suggested that sustainability of practice increases when opportunities for collaboration with others are presented (Baker & Smith, 1999).

Another implication involves the length of time necessary for training childcare providers in enhanced story sharing. The current study examined the effects of a story sharing training model after a six-week intervention. Following this brief period of training and mentoring, the treatment group showed significant improvements in expressive vocabulary and story retelling. These findings suggest that childcare providers can be trained in a short period of time to deliver story sharing in a way that positively impacts vocabulary and story retelling for children. This finding is significant, given the limited time and opportunities for professional development afforded many childcare providers.

This study added to the research on the benefits of enhanced story sharing. The findings suggested that enhanced story sharing not only has a significant effect on expressive vocabulary, but also on story retelling. In light of the reported connection between story retelling and reading comprehension, (Hansen, 1978), it is important that childcare providers working with pre-readers be aware of the link between retelling and future reading success. Story sharing is a common childcare activity. The findings of this study highlight the importance of training childcare providers in enhanced story

sharing as a way to improve the story recall of their children. As one childcare provider participant from the current study remarked, “The kids are able to focus and re-tell me the story. They no longer dread sitting for story time. I feel they look forward to it.”

Limitations

Recent literature suggests that changes in adult’s behavior when reading aloud to children contributes to language gains (Crain-Thoreson & Dale, 1999; Whitehurst et al., 1988). This study was designed to investigate whether changes in vocabulary and story retelling would occur in four-year old children in childcare settings following training and mentoring for their childcare providers.

To investigate the effects of training and mentoring on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers required that the research occur in natural childcare settings. This necessitated the use of children in intact childcare classrooms. As a result, treatment and comparison groups were not randomly assigned. Therefore, generalizations of the findings related to changes in child vocabulary and story retell are limited.

Childcare provider participants for the treatment group were selected from the population of the childcare centers in North Carolina in which Motheread training contracts existed, and in similar childcare centers for the comparison group. Childcare provider participants were recruited through letters sent to their childcare center directors. Qualification to participate in the study required that childcare providers worked in a childcare center in which the childcare director agreed to allow participation. As a result,

childcare providers in the treatment and comparison groups were not randomly assigned. Therefore, generalizations of the findings related to changes in childcare provider behaviors are limited.

An additional limitation was that childcare provider participants were aware that they were involved in the research study. Further, they were aware whether they were receiving training and mentoring or no training and no mentoring. Knowledge of study involvement and an awareness of observations by the researcher may have influenced the behavior of some childcare provider participants, and produced changes not related to the treatment.

The instrument used to measure story retelling also posed a limitation. It was determined that the internal consistency of the retelling rubric was $r = .68$. Although .68 is not as high as the other instruments used to measure child outcomes in this study, it is still considered acceptable indication of internal consistency.

A final limitation of this study involves the duration of the intervention. The time between the pretest and the posttest measures was six weeks. It may be that an intervention of this length is not long enough to produce significant results in the area of receptive vocabulary. This is consistent with findings from Whitehurst and colleagues (1994) that found no significant effect on receptive vocabulary for three-year olds following a six-week story sharing intervention. These results are inconsistent, however, with results from a study conducted by Valdez-Menchaca and Whitehurst (1992) that found significant differences on measures of receptive vocabulary following a six- to seven-week intervention. In this case, however, the study participants were younger than

those in the current study, ranging in age from 27-36 months. Further research is needed to examine the effects of story sharing on children of differing ages.

Questions for Further Research

Research on story sharing has shown that a change in adult practices results in an increase in active participation, and promotes the development of language skills in children (Bus, et al., 1995; Scarborough & Dobrich, 1994). Much of the research focused primarily on vocabulary (Hargrave & Senechal, 2000; Senechal & Cornell, 1993; Senechal, 1997; Senechal, et al, 1996; Senechal, et al., 1998). The present study added to the research by not only investigating the effects of enhanced story sharing on vocabulary, but also on story retelling.

Story retelling includes many components such as awareness of story structure and story coherence. This investigation examined retelling as a whole, rather than examining each part individually. While results indicated that the children in the treatment group showed significant improvement in the area of story retelling, it was not determined which parts of the retelling showed change, and for which subgroups of children. Further research that examines story retelling in its individual components might provide further insight into story retelling, and the effects that story sharing can have on its individual parts. Additionally, further research is needed to explore what effect specific components of retelling have on reading comprehension. According to Hansen (1978), story retelling leads to improved comprehension. Further research might show which components of story retelling contribute most to comprehension.

Additionally, research is warranted that examines the retelling responses of various subgroups of children, and that investigates the effect that enhanced story sharing has on their responses during story sharing. Further research might investigate whether children from different cultures and backgrounds respond in different ways to story sharing and retelling. Such findings would have important instructional implications for childcare providers working with children from diverse perspectives.

In the current study, gender for child participants was not considered separately in data analysis. Gender was examined only to determine that both the treatment and comparison groups did not differ significantly in terms of gender. Further research is needed to determine if differences exist on outcome measures following enhanced story sharing with respect to gender. Information on responses to story sharing or retelling based on gender would have significant implications for childcare providers.

This study provided insight into the training of childcare providers who have education at or only slightly beyond high school. The majority of childcare provider participants in the current study did not have a college degree. Further research is necessary to examine the effects of story sharing training and mentoring for childcare providers at differing levels of education. Such information would add to the understanding of how best to train and support childcare providers in reading aloud to children.

The findings of this study that suggest that enhanced story sharing contributes to improved expressive vocabulary and story retelling for four-year olds is encouraging. While these findings suggest that the Motheread model of story sharing had a positive

impact on child outcomes, the question of frequency of reading aloud is also raised. It was not determined to what extent, if any, frequency of reading aloud increased as a result of the training. Further research is needed to determine whether frequency of reading aloud is increased as a result of story sharing training, and if so, its impact on child outcome measures.

The current study examined effects of a story sharing training model after a six-week intervention. Although it was found that significant differences in expressive vocabulary and story retelling resulted after the brief intervention, no significant differences were found for receptive vocabulary. Further research that includes a longer intervention might find positive results in the area of receptive vocabulary. Also, the current study did not determine whether the results would be sustained over time. A study that includes a follow-up measure would provide information as to the lasting effects of story sharing training and mentoring.

Summary

A goal of this study was to contribute to the research literature by providing information on the effects of training childcare providers in story sharing on receptive vocabulary, expressive vocabulary, story retelling for children, and on the story sharing behaviors of childcare providers. A further aim of this research was to add to the understanding of how to train and support childcare providers in reading aloud to children, and to provide insight into best practices for training childcare providers.

This study investigated the effects of the Motheread model of training and

mentoring on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training and no mentoring. Further, the study aimed to provide insight and information on training childcare providers in story sharing. The study used a pretest-posttest comparison group design. The treatment group consisted of training and mentoring (TM). The comparison group consisted of no training and no mentoring (NTM). Pretest, posttest, and gain scores were analyzed to determine whether changes occurred in vocabulary and retelling of children based on whether childcare providers received training and mentoring or no training and no mentoring. Data analysis showed that the treatment group significantly out-performed the comparison group on expressive vocabulary, story retelling, and story reading behaviors of childcare providers. No significant difference was found between groups for receptive vocabulary.

Anecdotal evidence suggests that the childcare providers and children in this study were positively impacted by the training. One childcare provider stated, "The kids are more engaged when we read books. I can hold their attention longer." In commenting on a student's reaction to story time, another childcare provider remarked,

> I always had to separate Tony[2] from the rest of the group because he was so disruptive. Now, because of the program, Tony sits quietly and can answer questions about the story. Tony even asked his mother to wait until after the story was finished to leave.

This anecdotal evidence, together with the quantitative results indicating positive

[2] Name changed to protect identity of child participant

child outcomes, suggest that the story sharing training and one-on-one mentoring may benefit both childcare providers and children on several fronts. In response to the research questions posed at the onset of the study, the findings revealed that the model under investigation had an effect on the story sharing behaviors of child care providers as measured by the TLBOC (Motheread, Inc., 2003), and positively affected the expressive vocabulary and story retelling of four-year olds in a childcare setting.

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Appendix A: Childcare Center Director Informational Letter

Dear Childcare Center Director,

We are offering your childcare center an opportunity to participate with a research study to examine the effects of story sharing on language. This letter is to ask for your permission to allow your teachers and their students to help with this study should they agree. This study will help us understand how to best help teachers provide specific literacy experiences that will encourage language development.

We will visit your childcare center several times during the study. We will observe your teachers sharing a story with their students. Also, we will meet with children individually to assess their vocabulary and story recall. Your teachers may also be involved in additional story sharing training. All books or materials introduced during training will become the property of your center.

Participating centers will receive a collection of books. Teachers will receive a $50 gift certificate to Crabtree Valley Mall. Children will receive a book. Also, after the study has been completed, you will be invited to a meeting in which information about the study results will be given.

The information we collect will be kept private. This study has been approved by the Institutional Review Board (IRB) at North Carolina State University. Any questions you have about this study may be addressed to the NCSU IRB at (919) 513-1834.

A brochure providing additional information on this study is enclosed. Please sign below and return this form indicating whether or not your center will participate.

Thank you for your help. If you have any questions directly related to this study, please call Jody Cleven collect at (919) 639-7206.

Sincerely,

Jody L. Cleven

_____ Yes, I give permission for my center's teachers and their students to participate in the story sharing study should they agree.

_____ No, I do not give permission for my center's teachers and their students to participate in the story sharing study.

_____ _____

Name Date

Name of Childcare Center _____

Appendix B: Informed Consent for Childcare Providers

INFORMED CONSENT
FOR CHILDCARE PROVIDERS

We are asking you to participate in a research study. The purpose of this study is to investigate the effects of the Motheread model of training and mentoring on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training or mentoring. If you agree to participate in this study, you will be asked to provide your educational background, and your years of teaching experience. Also, you will be asked to allow researchers to observe and record observations of you during story sharing with your class. A minimum of two observations will occur, requiring a total of 30 minutes each. Additionally, at the conclusion of the study, you will be invited to a meeting that will provide you with study results. This optional meeting will last about 30 minutes.

You may also be involved in a six-week training and mentoring program on story sharing. The training and mentoring program will involve several 30 minute classroom visits from a trainer or researcher. The visits will include observations, demonstrations, and opportunities for feedback and technical support in story sharing.

Additionally, you will be asked to distribute and collect parental consent forms regarding your student's participation in the study. The researcher will visit your childcare center to assist with recruitment, and to answer any questions regarding participation in the study. Participation in the study would involve a minimum of 120 minutes, to a maximum of 390 minutes.

There are no known significant risks involved with this study. However, as with any observational situation, anxiety can result. Measures will be in place to minimize potential anxiety resulting from classroom observation. The observations will be scheduled in advance so that you can prepare for the on-site visit of the researchers and trainers. Further, follow-up discussions regarding the results of the observations will be presented in a positive and supportive manner.

Study participants will benefit indirectly through a greater understanding of story sharing and reading aloud with students.

The information in the study records will be kept strictly confidential. Data will be stored securely in locked area with access limited to the researchers. No reference will be made in oral or written reports which could link you to the study.

For participating in this study you will receive a $50 gift certificate to Crabtree Valley Mall. Your students that participate will receive a book.

If you have any questions about the study or the procedures, you may contact the researcher, Jody Cleven at 418 September Lane Willow Spring, North Carolina 27592 or (919) 639-7206. If you feel you have not been treated according to the description in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148).

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed at your request.

"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may withdraw at any time."

Subject's signature _____Date _____

Investigator's signature _____ Date _____

Childcare Center _____

Appendix C: Participant Data Sheet For Childcare Provider Participants

Participant Data Sheet
For Childcare Provider Participant

Study: Training and Mentoring Childcare Providers in Story Sharing: Effects on vocabulary and story retelling for four-year olds, and story sharing behaviors of childcare providers.

Purpose: To investigate the effects of the Motheread model of training and mentoring on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training or mentoring.

Name: _____

Childcare Center: _____

Please provide us with the following information. This information will be kept strictly confidential.

Years of Teaching Experience:
Check the number of years of childcare experience. Years of experience should include all experience, not limited to years of service at this center.

_____ 0-5 years
_____ 6-10 years
_____ 11-15 years
_____ 16-20 years
_____ Over 20 years

Education Level
Check highest education level completed.

_____ Less than High School
_____ High School or GED
_____ Some college
_____ Associates degree
_____ Bachelors degree
_____ Masters degree
_____ Beyond Masters degree

Signed _____ Date _____

Thank you for your participation.

Appendix D: Parent Informational Letter

Dear Parent,

Your child's preschool teacher is helping in a research study to examine the effects of story sharing on language. This letter is to ask for your help with this study. Early literacy skills are important for future success in learning to read. This study will help us understand how to best help teachers provide specific literacy experiences that will encourage language development.

We will be visiting your child's daycare center several times. First, we will meet with your child individually to assess his/her vocabulary. Then, your child's teacher will read a story to the class, and we will observe how your child interacts during story sharing. The assessments will involve pointing to pictures and telling about stories. Children generally enjoy these tasks, and take pleasure in the individual attention received while performing them.

These sessions will last about 30 minutes, and will take place first in the early fall, next after six weeks, and again one month later. These visits will be arranged in advance, so your child's teacher will be able to schedule them around other classroom events.

As a thank-you for your child's participation, we will give your child a book. Also, after the study has been completed, you will be invited to a meeting in which information about the study results will be given. At your request individual scores for your child will be provided confidentially.

We request your permission to include your child in this study. You will find two copies of a parental consent form, and a data participant sheet enclosed. Please complete and sign the first copy of each, and return them to your child's teacher if you will allow your child to be part of this study.

The information we collect will be kept private. Only the project members will have access to the information. Your child's participation in this study is completely voluntary. Your decision of whether or not to allow your child to participate will in no way affect the services your child will receive in your childcare program. This study has been approved by the Institutional Review Board (IRB) at North Carolina State University. Any questions you have about this study may be addressed to the NCSU IRB at (919) 513-1834.

Thank you for your help. If you have any questions directly related to this study, please call Jody Cleven collect at (919) 639-7206.

Sincerely,

Jody L. Cleven
Principal Investigator

Appendix E: Parental Consent for Parents of Child Participants

PARENTAL CONSENT
FOR PARENTS OF STUDENT PARTICIPANTS

We are asking your child to participate in a research study. The purpose of this study is to investigate the effects of the Motheread model of training and mentoring on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training or mentoring.

If you agree to allow your child to participate in this study, your child will be assessed using standardized tests of vocabulary, and a story retelling activity. These assessments will last about fifteen minutes each. Your child's teacher will be observed for about 30 minutes on several occasions.

Your child may also receive some enhanced story sharing sessions with his/her classroom teacher throughout a six week period. You will be asked to provide your child's date of birth, race, gender, first language, and mother's education.

At the conclusion of the study, you will be invited to a meeting that will provide you with study results. This optional meeting will last about 30 minutes. Including your attendance at this optional meeting, participation in this study will involve a maximum of around 165 minutes.

There are no known significant risks involved with this study. However, as with any observational and testing situation, anxiety can result. Measures will be taken to minimize the stress or anxiety that might arise from the testing and observational situations. Further, the assessments are procedures are thought to be entertaining for children. They involve pointing to pictures and telling about stories. Children generally enjoy these tasks, and take pleasure in the individual attention received while performing them

Study participants will benefit indirectly through a greater understanding of how to train and support childcare providers in reading aloud with students.

The information in the study records will be kept strictly confidential. Data will be stored securely in locked area with access limited to the researchers. No reference will be made in oral or written reports which could link your child to the study. For participating in this study your child will receive a book.

If you have any questions about the study or the procedures, you may contact the

researcher, Jody Cleven at 418 September Lane Willow Spring, North Carolina 27592 or (919) 639-7206. If you feel you have not been treated according to the description in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148).

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed at your request.

"I have read and understand the above information. I have received a copy of this form. I agree to allow my child to participate in this study with the understanding that I may withdraw at any time."

Parent's/Guardian's signature _____ Date _____

Investigator's signature _____ Date _____

Child's Name _____

Childcare Center _____

Appendix F: Participant Data Sheet For Child Participant

Participant Data Sheet
For Student Participant

Study: Training and Mentoring Childcare Providers in Story Sharing: Effects on vocabulary and story retelling for four-year olds, and story sharing behaviors of childcare providers.

Purpose: To investigate the effects of the Motheread model of training and mentoring on the receptive and expressive vocabulary and story recall of four-year olds, and story reading behaviors of childcare providers as compared to no training or mentoring.

Please provide us with the following information. This information will be kept strictly confidential.

Child's Name: _____

Child's Date of Birth: _____

Childcare Center _____

Child's Race:

_____ Asian
_____ Black
_____ Hispanic
_____ Native
_____ White
_____ Other (please specify)

Child's Gender:

_____ Male
_____ Female

Is the child's first language English?

_____ Yes
_____ No

Mother's Education Level
Check highest education level completed by mother.

_____ Less than High School
_____ High School or GED

_____ Some college
_____ Associates degree
_____ Bachelors degree
_____ Masters degree
_____ Beyond Masters degree

Signed _____ Date _____

Thank you for your participation.

Appendix G: TLBOC (Motheread, Inc., 2003)

Teacher Literacy Behavior Observational Checklist
Preschoolers (3-5 years)

Teacher _____ Motheread® Staff _____

Center _____

Dates/Book Titles

_____/_____/_____/_____/_____/_____/_____

1. Introduce the story

a. __	___	___	____	_____	____	Sits at preschoolers' eye level
b. __	___	___	____	_____	____	Leads an introductory activity which may include the use of props, book cover, dramatization, discussion, or music
c. __	___	___	____	_____	____	Says the title of the book
d. __	___	___	____	_____	____	Says author's and illustrator's name(s)
e. __	___	___	____	_____	____	Explains vocabulary found in the title or key words children will encounter in the story
f. __	___	___	____	_____	____	Introduces the main idea of the story

2. Read the book

a. __	___	___	____	_____	____	Keeps a good pace – reading is not so fast children can't appreciate the pictures, not so slow that children lose attention
b. __	___	___	____	_____	____	Uses voice expressively (volume, sound effects, characterizations, emotions)
c. __	___	___	____	_____	____	Displays physical dramatization
d. __	___	___	____	_____	____	Responds to verbal and non–verbal reactions (comments, smiles, laughs) to the story in a positive and timely manner

e. __ | ___ ___ ____ _____ ____ Gives preschoolers the opportunity to participate during story using either physical dramatization or by asking prediction questions

f. __ | ___ ___ ____ _____ ____ Demonstrates vocabulary in the story by paraphrasing, renaming, modeling the word, or pointing to illustration

3. Review the book

a. __ | ___ ___ ____ _____ ____ Leads a review of the book

b. __ | ___ ___ ____ _____ ____ Responds to verbal and non-verbal reactions preschoolers have to the story

c. __ | ___ ___ ____ _____ ____ Asks open-ended questions (to develop comprehension and critical thinking skills)

d. __ | ___ ___ ____ _____ ____ Uses children's responses to extend the discussion of the story

e. __ | ___ ___ ____ _____ ____ Reinforces the main idea of the story

4. Storysharing activity

a. __ | ___ ___ ____ _____ ____ Leads a Storysharing activity

b. __ | ___ ___ ____ _____ ____ Talks with children individually during the activity (asking open-ended questions, making comments, affirming)

c. __ | ___ ___ ____ _____ ____ Provides an activity that includes opportunities for children to participate actively and make choices (create original artwork, choose character to dramatize, engage in musical activity)

5. Closing

a. __ | ___ ___ ____ _____ ____ Leads a closing activity

b. __ | ___ ___ ____ _____ ____ Reinforces preschool-appropriate main idea

2=yes
1=no
0=n/a

TLBOC Preschool © Motheread, Inc. Rev. 12/03

Appendix H: Story Retelling Rubric Book 1

Story Retelling Rubric

Score each item according to the following:
0 points = No Evidence (Student gives no information)
1 point for each = Evidence (Student gives accurate information)

Book: Grandpa's Surprise by Rosalind Beardshaw

Unassist		Assisted	
	Awareness of Story Structure		
	1. Identifies setting (time/place) Stanley's/Grandpa's house, Stanley's/Grandpa's shed, outside, during the day.	Tell me more about where/when the story happens.	
	2. Identifies characters Stanley, Grandpa, Bert the Dog, Jack	Tell me more about who was in the story.	
	Major Plot Episodes		
	3. States problem Stanley is sad that Jack won't let him ride his tricycle.	Tell me about the problem in the story.	
	4. States problem resolution Grandpa cheers Stanley up by making him a go-kart.	Tell me about how the problem was fixed.	
	Coherence		
	5. States major events a) Grandpa, Stanley, and Bert see Jack riding his tricycle b) Stanley asks if he can try it c) Jack says no d) Grandpa takes Stanley to the shed to build him a go-kart	Tell me more about the things that happened in the story.	

	e) Jack asks if Stanley wants to try his tricycle now f) Stanley says no g) Stanley says Jack can try his go-kart		
Total Unassist		Total Assisted	Total (17)

Appendix I: Story Retelling Rubric Book 2

Story Retelling Rubric

Book: Tiny's Big Adventure by Martin Waddell

Unassist		Assisted	
	Awareness of Story Structure		
	1. Identifies setting (time/place) barn, wheat field, during the day	Tell me more about where/when the story happens.	
	2. Identifies characters Tiny, Katy (Tiny's sister)	Tell me more about who was in the story.	
	Major Plot Episodes		
	3. States problem Tiny goes too far playing hide-and-seek and Katy couldn't find him. Tiny is scared as he sees scary things (snail, spider, boot).	Tell me about the problem in the story.	
	4. States problem resolution Katy finds Tiny and tells him what the things are. They play in the boot.	Tell me about how the problem was fixed.	
	Coherence		
	5. States major events a) Tiny wants to go to the wheat field b) Katy takes Tiny to the wheat field c) They go through grass/stream/tree/gate/post to the field d) They play games (climb, catch) e) They see a rabbit f) They play more games (climb tractor, sit) g) They see a pheasant h) They play hide-and-seek i) Katy can't find Tiny j) Tiny sees things that scare him (snail, spider, boot) k)Tiny calls Katy and Katy comes	Tell me more about the things that happened in the story.	

	l) Katy tells Tiny what the scary things are m)They play mouse house in the boot n)They go home and plan to do the adventure again		
Total Unassist		Total Assisted	Total (23)

Score each item according to the following:
0 points = No Evidence (Student gives no information)
1 point for each = Evidence (Student gives accurate information)