RELATION OF HOME LITERACY, PARENTAL SUPPORT, AND CHILD INITIATION OF READING TO EMERGENT LITERACY IN HEAD START PRESCHOOL CHILDREN

By

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RELATION OF HOME LITERACY, PARENTAL SUPPORT, AND CHILD INITIATION OF READING TO EMERGENT LITERACY IN HEAD START PRESCHOOL CHILDREN

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CHAPTER I
INTRODUCTION

*Emergent literacy in young children.*

Reading is all about words. Word knowledge comes from being exposed to an environment filled with letters and words. For most preschool children, their day is divided between their home and school environment. Parents who spend time engaging in literacy activities with their child, such as reading, promote higher vocabulary knowledge in their child (Senechal, LeFevre, Hudson, & Lawson, 1996). Vocabulary awareness is essential for young children in the emergent literacy process because the more words that children know and understand, the more books they will likely be able to read.

The impact of the home literacy environment, parental emotional support, and child initiation of book reading on emergent literacy is extensively supported by the research literature. One important aspect of emergent literacy is the home literacy environment. Much research (Frijters, Barron, & Bruello, 2000; Haney & Hill, 2004; Roberts, Jurgens, & Burchinal, 2005; Senechal, LeFevre, Hudson, & Lawson, 1996; Senechal, LeFevre, Thomas, & Daley, 1998) has been done on emergent literacy with preschoolers and the positive effects that home literacy practices, such as shared book reading between parents and children, have on children’s emergent reading ability.

A second very important aspect of emergent literacy is parental emotional support. Researchers have examined the effects of parental emotional support on young children (Coolahan, McWayne, Fantuzzo, & Grim, 2002; Hubbs-Tait, Culp, Culp, &
Miller, 2002; Roggman, Langlois, & Hubbs-Tait, 1987). Parents who are warm and nurturing toward their children tend to produce children who are secure and confident, and parents who exhibit low levels of warmth tend to produce children who are insecure (Tracy & Ainsworth, 1981). In the literature that addresses emergent literacy and preschoolers, there has been a moderate amount of research done on parental emotional support linked with emergent literacy.

A third very important aspect of emergent literacy is child book reading. Most times credit is given to either the parents or teachers when it comes to the success of a child’s emergent literacy. Children are rarely credited with having played a part in the emergent literacy process. However, children who initiate book reading tend to have more emergent literacy skills (Frijters, Barron, & Brunello, 2000; Laakso, Poikkeus, Eklund & Lyytinen, 2004; Senechal et al., 1996). Few studies have examined the role that children play in their own emergent literacy through the initiation of book reading.

Vast literature exists on the links between the home literacy environment and emergent reading ability, several studies exist on the links between parental emotional support and emergent reading ability, and few studies which support child initiation of book reading and emergent reading ability. Due to these findings in the literature, it can be hypothesized that child initiation of book reading will be a significant mediator variable on the relations of the home literacy environment and parental emotional support to the child’s emergent literacy.
Definitions

Operational definitions are ones that allow specific measurement and are referred to as variables. For this study, the home literacy environment is defined as both the interactional environment, which includes how often a parent teaches their child to read words in a typical week, and the physical home literacy environment, which includes the number of children’s books in the home. Positive parental emotional support is defined as parental warmth and affect. It is parents giving praise, showing sympathy, or responding to their child’s feelings or needs, such as explaining the consequences of the child’s behavior to the child. This is demonstrated by parents using phrases such as “I’m proud of you”, by hugging, kissing, and holding their child, or by explaining how their child’s behavior can affect someone else. Not demonstrating these items would be showing a lack of parental emotional support.

Child initiation of book reading is defined as how often the child asks to be read to. This is the mediator variable. A mediator links a predictor and an outcome. The independent variable influences the mediator which then influences the outcome (Holmbeck, 1997, p. 599). This association is analogous to a triangle diagram because each variable would be located at the apex of the triangle shape. The independent variable and the mediator variable both work to influence the outcome, or dependent variable. Before testing for mediation, however, there must also be a significant association between the independent and dependent variables. Child initiation of book reading is the mediator linking the home literacy environment, parental emotional support, and emergent literacy. As noted in the literature review below, this thesis proposes partial mediation. Partial mediation suggests that the effect of the independent
variable on the dependent variable decreases (due to the introduction of the mediator), yet the direct path from the independent variable to the dependent variable still remains statistically significant (Cowman, Ferrari, & Liao-Troth, 2004; Sacco & Murray, 2003).

The final variable in this study is emergent literacy. It is the dependent, or outcome variable. Emergent literacy consists of the skills and knowledge that are developmental precursors to reading and writing (Whitehurst & Lonigan, 1998). In this study, emergent literacy is primarily defined by the child’s receptive and expressive vocabulary. Vocabulary awareness is a crucial part of the emergent literacy process for young children. Additional emergent literacy skills will include memory for sentences and stories, verbal reasoning, and conceptual knowledge.

Theoretical Framework

When looking at emergent literacy in young children, Vygotsky’s sociocultural theory of child development is one theoretical framework that helps to explain the cognitive processes of a child during the pre-reading stages of development (Goldhaber, 2000). Vygotsky’s theory states that a child’s development is a result of his or her culture and that the single most important sign system is speech (Crain, 2005). There is a shared understanding even prior to speech that is social, and it is this social feature that gives meaning to language. Vygotsky believed that speech and thinking were integrated during the course of development (Vygotsky, 1978).

Vygotsky also believed in elementary and higher mental functioning. An individual must be able to conceive something or he or she cannot form a word for it. In elementary mental functioning, from birth until approximately age two, words begin to have a symbolic function (Crain, 2005). Speech and thought begin to overlap and
influence each other. Thought and language produce verbal or conceptual thought. In higher mental functioning, the child develops voluntary cognitive processes. The child does not just respond to things in the environment, but his or her response is influenced by his or her own sign systems like language and diagrams (Crain, 2005). Speech is very important to a growing child because it allows the child to facilitate his or her own individual thinking.

Vygotsky also identified the zone of proximal development. This refers to the distance between a child’s ability in independent problem solving and the higher level of potential development of problem solving under adult guidance (Crain, 2005; Goldhaber, 2000; Vygotsky, 1978). The zone of proximal development is everything that the child can achieve when given the right support and help by an adult.

Vygotsky’s sociocultural theory of child development applies to this research study because this study is looking at emergent literacy ability as influenced by either the child (through child initiation of book reading) or by the child’s parents (through the home literacy environment). The child is able to look at books on his or her own and pick out the pictures or letters or words that he or she already knows. According to Vygotsky’s zone of proximal development, there is a point when the child will reach a peak with independent learning (Vygotsky, 1978). The parent can then step in and begin reading to the child. The child is then able to discover more letters, words, and pictures with the parent’s help. This will enhance the child’s emergent literacy ability and it will help to bring him or her to a higher thinking ability. In this study, children whose parents elevate learning by stepping in and reading to their child should demonstrate an increase in
emergent reading ability because more letters and words are identified and added to the child’s repertoire.

Figure 1. Conceptual Model.

Research Hypotheses

The overall purpose of this study is to examine the links among the home literacy environment, parental emotional support, child initiation of book reading, and emergent literacy (see Figure 1). Given that there is little research on the relation of child initiation of book reading to emergent reading ability, the purpose is to determine if child initiation of book reading is a partial mediator linking home literacy and parental emotional support to emergent literacy. The two main hypotheses that this study will attempt to answer are depicted in Figure 1. Hypothesis 1 proposes that child initiation of book reading partially mediates the relation between the home literacy environment and child emergent literacy. Hypothesis 2 proposes that child initiation of book reading partially
mediates the relation between parental emotional support and child emergent literacy.

An exploratory question includes whether child initiation as a partial mediator applies to three year olds more than four year olds.

The next chapter reviews the literature on all the variables in the hypotheses. The literature review is organized in the following sequence: home literacy environment, parental emotional support, and child initiation of book reading.
CHAPTER II
REVIEW OF LITERATURE

Home Literacy Environment and Child Outcomes

The first construct to be discussed in this study is the home literacy environment and its impact on emergent literacy in preschool children. It has been well documented that a rich home literacy environment has positive effects on the child’s emergent reading ability (Baker, Scher, & Mackler, 1997; Bus, van IJzendoorn, & Pellegrini, 1995; Frijters et al., 2000; Haney & Hill, 2004; Rebello, 2001; Senechal et al., 1996; Senechal et al., 1998; Weigel, Martin & Bennett, 2005; Weigel, Martin, & Bennett, 2006). Spending time reading to a child will increase the child’s exposure to letters, words, and stories. In a longitudinal study with African American preschoolers, Roberts, Jurgens, and Burchinal (2005) found that the home environment was the strongest predictor of children’s language and early literacy skills ($r = 0.50$).

Families encourage emergent literacy when they provide literacy materials at home, interact with their children during literacy related activities, and provide a home environment that promotes literacy (Leichter, 1984, as cited in Saracho, 1997). Saracho also states that “physical environments, such as homes where books are accessible to children, promote their perception of competence with print” (p. 202). When children see that books are a part of learning letters and words, they will be able to apply that letter and word knowledge to their own emergent reading process.
Storybook exposure. Senechal et al. (1996) discussed shared book reading between parents and children and the stimulation that it provided to the children. The authors of this study found that parents’ and children’s knowledge of children’s books were very good predictors of language skills for preschoolers. Children’s knowledge of storybooks, after being read to, was a powerful predictor of receptive vocabulary ($r = 0.40$), measured by the Peabody Picture Vocabulary Test-Revised (PPVT-R), because the books helped teach alphabet sounds and word recognition. This study also discovered that the number of children’s books in the home was positively correlated with children’s receptive vocabulary scores ($r = 0.34$). The findings from this study show the impact that the home literacy environment has on children’s emergent literacy ability. In a similar study by Senechal et al. (1998), it was reported that experiences including informal interactions with print, such as storybook reading, were associated with the development of children’s oral language. The findings from this study were consistent with the meta-analysis of Bus, van Ijzendoorn and Pellegrini (1995) where a strong overall effect size was reported between storybook exposure and vocabulary in kindergarten children ($d = 0.67$). LeFevre and Senechal (1999) found that parental reports of frequency of storybook reading with their children at home predicted oral language skills in kindergarten. Rush (1999) examined Head Start preschool children and their primary caregivers and concluded that shared book reading in the home made important and significant contributions to young children’s early emergent reading ability.

Shared storybook reading between parents and children is an important part of the home literacy environment because children are being introduced to letters, sentence structure, and new vocabulary words. The children can then use these new vocabulary
words in their daily activities through conversation. From the studies mentioned above, it has been well documented that children who engage in shared book reading at home will develop a broader vocabulary than those children who do not engage in shared book reading at home.

Book availability. The number of children’s books in the home has been found to be a “stable predictor of vocabulary” \( r = 0.31 \) for Experiment 1 and \( r = 0.37 \) for Experiment 2) (Senechal et al., 1998, p. 111). This finding was consistent with Senechal et al.’s 1996 study \( r = 0.34 \) for Experiment 1 and \( r = 0.37 \) for Experiment 2). Both studies conducted two separate experiments asking parents and children about their knowledge of children’s storybooks. Both studies found that homes where children were exposed to many storybooks resulted in higher vocabulary scores than in homes where storybooks were not prevalent. Children’s familiarity with storybooks means that these storybooks are being read. Because most preschool-aged children cannot read independently yet, parents are most often the ones who read to them. Payne, Whitehurst and Angell (1994) examined preschoolers literacy and language ability and also found a significant \( r = 0.30 \) correlation between the number of picture books in the home and PPVT-R score. When Frijters et al. (2000) asked parents to report about their home literacy environment, a strong correlation was found \( r = 0.43 \) between the number of children’s books in the home and the child’s PPVT-R score. Another strong correlation \( r = 0.39 \) was found between the number of children’s books in the home and how often the child is read to. They concluded “home literacy activities directly influence pre-readers’ oral receptive vocabulary” (Frijters et al., 2000, p. 474).
The home literacy environment has many positive effects on children’s emergent reading ability. Shared storybook reading between parents and children allows children to learn new vocabulary words and to apply those words daily. With an increase in vocabulary knowledge, children are furthering their emergent literacy process. Before a child can read independently, he or she must develop a broad vocabulary base and then use that vocabulary base when learning how to put words together to form sentences and stories. Without shared reading experiences between parents and children, children will not continue to grow and develop in their understanding of written and spoken language, which are the precursors to reading. The literature has shown (Baker, Scher, & Mackler, 1997; Bus, van IJzendoorn, & Pellegrini, 1995; Frijters et al., 2000; Haney & Hill, 2004; Rebello, 2001; Senechal et al., 1996; Senechal et al., 1998; Weigel, Martin & Bennett, 2005; Weigel, Martin, & Bennett, 2006) that shared reading experiences and the number of available children’s books in the home have significant positive correlations with children’s emergent literacy development. In summary, the research literature supports the link in Figure 1 between the home literacy environment and child emergent literacy (see Figure 2).

![Figure 2. Link between Home Literacy Environment and Child Emergent Literacy.](image)

**Head Start.** When looking at the home literacy environment it is especially important to consider Head Start children. Head Start is a “national program that promotes school readiness by enhancing the social and cognitive development of children
through the provision of educational, health, nutritional, social and other services to
enrolled children and families” (U.S. Department of Health and Human Services, 2006, ¶1). Head Start serves economically disadvantaged families with the goal of providing
preschool children with the necessary school-readiness skills they need in order to be successful. The national Head Start Family and Child Experiences Survey (FACES, Administration on Children and Families [ACF], 2006) found that Head Start children’s
language and literacy scores (85.6 and 95.0, respectively) fell below the national average of 100 for each skill. The home literacy environment is vital in working with the Head
Start center for children’s reading success because the home reinforces what occurs at
school. Families who read to their children at home and have books available to their
children at home will be fostering a literacy-rich environment, proven to help children in
their emergent reading ability (Baker et al., 1997; Bus et al., 1995; Frijters et al., 2000;
Haney & Hill, 2004; Rebello, 2001; Senechal et al., 1996; Senechal et al., 1998; Weigel et al., 2005; Weigel et al., 2006).

Parental Emotional Support and Child Outcomes

The second construct discussed in this study is parental emotional support and its
impact on children’s cognitive ability. For this study, parental emotional support is
defined as parental warmth and positive affect. This is the ability to express positive
emotions such as enthusiasm or joy at proper levels and in correct contexts (Davidov &
Grusec, 2006). Throughout the literature, parental emotional support has been found to
have a significant positive impact on overall child cognitive ability (Bretherton, 1985;
Bus & van IJzendoorn, 1988; Coolahan, McWayne, Fantuzzo, & Grim, 2002; Culp,
Hubbs-Tait, Culp, & Starost, 2000; Davidov & Grusec, 2006; Estrada, Arsenio, Hess,
Holloway, 1987; Fagot & Gauvain, 1997; Landry, Smith, Swank, & Miller-Loncar, 2000; Leseman & de Jong, 1998; Neitzel & Stright, 2003). However, very limited research has been conducted when looking specifically at the link between parental warmth and affect and child emergent literacy (Bus & van IJzendoorn, 1988; Culp et al., 2000; Hubbs-Tait, Culp, Culp, & Miller, 2002; Leseman & de Jong, 1998).

A positive affective relationship between parents and preschool children can provide a secure emotional base from which children are then able to explore (Estrada et al., 1987). This idea is similar to attachment theory (Ainsworth & Bell, 1970), which says that securely attached infants will more freely explore their world because of the secure positive bond formed between them and their primary caregiver. Positive parent/child relationships may enable children to reach further in their thinking and to question and explore. Because children know that their parents are sources of support and trust, children may be able to enhance their cognitive abilities through exploration.

Child cognitive competence. Bretherton (1985) concluded that parent-child affective relationships have an effect on preschool children’s cognitive competence. Children of emotionally supportive parents demonstrated better problem-solving skills and more persistence, and they utilized adult direction. Estrada et al. (1987) and Fagot and Gauvain (1997) also found that the affective relationship allows parents to support children’s cognition in solving problems. Bretherton (1985) determined that children of emotionally supportive parents interacted more competently with their teachers in school. When children are able to have effective and meaningful adult direction, their level of thinking rises. As children continue to strive forward in their thinking, greater cognitive ability is achieved (Crain, 2005; John-Steiner & Mahn, 1996). Parents can provide the
necessary structure and support for their children, allowing them to develop problem-solving skills through parental modeling and influence. Positive emotional support is a key component for children’s cognitive development (Hubbs-Tait, et al., 2002) because problem-solving skills are achieved through modeling and influence by parents. As children become more autonomous and begin to internalize their thinking, the guidance provided by parents diminishes and children begin to take on the responsibility for their own learning (John-Steiner & Mahn, 1996).

The importance of parental emotional support is evident very early in children’s lives. Landry et al. (2000) determined that maintaining by mothers was significantly related to cognitive language skills in children from one year of age to four and one-half years of age. Maintaining was a certain type of parental support where parents regarded their children’s interests and supported their children’s thinking and ideas through problem-solving. Because of the longitudinal design, this study also was able to determine that children’s cognitive abilities were directly influenced by the mother’s maintaining. Further, this relation was not bidirectional. This shows that mothers can have a direct influence on their children’s cognitive abilities and that these abilities can be enhanced through positive parental affect.

Further evidence for the importance of parental emotional support comes from research by Neitzel and Stright (2003) who observed mothers with their preschool children while they completed several difficult problem-solving tasks. The tasks were structured so that the mothers would need to cognitively and emotionally support their children during potentially stressful situations. The children were then observed in their kindergarten classrooms. The authors discovered that mothers’ emotional support
significantly predicted children’s help-seeking in the kindergarten classroom setting. This is important because young children most often initially learn to seek help from their parents. Children can then transfer this help-seeking to other adults. Parents are most often the ones who can cognitively motivate and support their young children. This motivation and support can allow children to elevate their current level of thinking through adult help-seeking. Children who do not receive this help-seeking motivation and support by their parents may learn not to use adults as learning resources. This lack of adult help-seeking may hinder children’s cognitive abilities. Therefore, parental emotional support is central to enhancing children’s cognition.

Parental positive affect and child emergent literacy. When it comes to parents as a source of emotional support for their child and emergent literacy skills, it has been discovered that “children whose vocabulary and verbal reasoning scores were highest were children whose parents provided the highest proportions of emotional support” (Hubbs-Tait et al., 2002, p.126). Culp et al., (2000) tested Head Start children in pre-kindergarten and then again in kindergarten using the PPVT-R. Mothers of these children also completed a computer-presented measure of parenting. The authors discovered that high maternal warmth predicted child cognitive competence in both pre-kindergarten and kindergarten ($r = 0.23$ and $r = 0.19$, respectively). Hubbs-Tait et al. (2002) reported that the importance of positive parental emotional support has been associated with children’s communication skills. Both non-verbal and verbal ability comprise communication skills. The ability to be verbally expressive comes in part from positive parental emotional support. “Responding positively to the distress of a crying child or infant (e.g., Bell & Ainsworth, 1972) supports the child’s emotional needs, endorses the child’s efforts to
communicate those needs, and is associated with later communicative competence” (Hubbs-Tait et al., 2002, p. 126). This communicative competence is the foundation for children’s emergent literacy.

Leseman and de Jong (1998) examined social-emotional quality as a facet of the home literacy environment. A multi-ethnic sample of parents and their 4-year old children were observed while engaging in joint book reading. They discovered socio-emotional quality to be significantly related ($r = 0.46$) to child vocabulary at age four. This study shows that parents who are more emotionally supportive have children with better verbal skills. Fuligni, Han, and Brooks-Gunn (2004) evaluated Early Head Start children using the Infant-Toddler Home Observation for Measuring the Environment Measure (IT-HOME) at 14 months of age and again at 24 months of age. Outcome cognitive data were then gathered when the children were 36 months of age using the PPVT. The authors discovered that parental warmth (measured using the IT-HOME) was associated with cognitive and language development outcomes. Bus and van IJzendoorn (1988) found that parents of early readers demonstrated a large amount of support and involvement. They discovered that when a child has a secure and supportive relationship with their mother, the child is better able to pay attention to written language and reading instruction. This allows the child to develop the emergent literacy skills necessary for reading achievement. In summary, the research literature supports the link in Figure 1 between parental emotional support and child emergent literacy (see Figure 3).
Figure 3. *Link between Parental Emotional Support and Child Emergent Literacy.*

*Head Start.* When looking at parental emotional support it is especially important to consider Head Start children. Children from economically disadvantaged homes are more likely to have parents who demonstrate lower parental emotional support (Hubbs-Tait et al., 2006; Klebanov, Brooks-Gunn, McCarton, & McCormick, 1998). This could be due to the larger number of single parent homes, parents working more and not having as much time to spend with their children, or the impact of parental education. Because parental emotional support has proven to predict children’s emergent literacy (Bus & van Ijzendoorn, 1988; Culp et al., 2000; Hubbs-Tait et al., 2002; Leseman & de Jong, 1998) it is vital to educate parents on the direct role they have in promoting their children’s literacy development simply through the amount of warmth and positive affect they show their children.

*Child Initiation of Book Reading and Child Outcomes*

The third construct discussed in this study is child initiation of book reading and its impact on emergent literacy in preschool children. The literature on child initiation of book reading is very limited. Not many studies include this construct when looking at emergent literacy, although it is important because it focuses on the child as the initiator and not on parents or teachers.

*Child literacy interest defined.* Child interest is defined differently throughout the literature, although the construct is prevalent. “Intrinsic motivation is said to be present..."
when individuals engage in an activity for its own sake, not for some external reason; the only reward for participation is the activity itself” (Csikszentmihalyi, 1991; Deci & Ryan, 1987, as cited in Baker, Scher & Mackler, 1997, p. 70). Child interest is operationally defined by Senechal et al. (1996) as asking parents to rate on an ordinal scale the degree to which their child showed interest in book reading. Both Laakso et al. (2004), and Deckner, Adamson, and Bakeman (2006) operationally define child interest as the duration of engagement and participation by the child during shared reading interactions between the parent and the child. Baker and Scher (2002) operationally define child interest as asking parents about how much their child asks about words, pretends to read alone, or is already reading. Reading interest is operationally defined by Weigel et al. (2006) as parental reports of how often their child looked at books alone, how often their child asked to be read to, and how long their child looked at books independently. Frijters et al. (2000) operationally define child interest by child reports of his or her feelings towards literacy-related activities. This was one of the only studies to gather the individual child’s level of interest in literacy. Parental reports are most frequently used for rating child interest because preschool children are not yet able to read and therefore they cannot fill out a questionnaire asking about their own level of interest in literacy activities. Parents tend to report that their children are interested in literacy-related activities (Baker, Scher & Mackler, 1997; Baker & Scher, 2002). These parental reports can create research bias because parents may report that their child has high literacy interest when the child may actually not be very interested in literacy-related activities.

*Shared book reading between parents and children.* When looking at the literature on child interest in book reading and emergent literacy, there were four different studies
(Deckner et al., 2006; Laakso et al., 2004; Senechal et al., 1996; Payne, et al., 1994) that found a significant correlation. Only one study (Frijters et al., 2000) was discovered that did not find an overall significant correlation between child interest in book reading and emergent literacy.

Because child interest is defined so differently among studies, several potential problems arise. As noted above, one of the most prevalent issues when trying to determine child interest in books is the potential bias of parental reports. Most studies that used parental reports in defining child interest had parents who reported that their child was very interested in books (Baker et al., 1997; Baker & Scher, 2002; Laasko et al., 2004; Senechal et al., 1996). How a parent views their child’s interest in books and how the child views their own interest in books could be very different.

Along with the potential bias with parental reports of child interest in book reading comes the difficulty in separating the constructs of child interest in reading from parent interest in reading. Several studies found child literacy interest to be linked with parental literacy interest (Baker & Scher, 2002; Weigel et al., 2005; Weigel et al., 2006). Parents may assume that since they enjoy reading and literacy-related activities that their child also enjoys literacy-related activities. Three of the four studies that found a significant correlation between child literacy interest and emergent literacy used parental reports (Laakso et al., 2004; Senechal et al., 1996; Payne, et al., 1994). One study by Deckner et al. (2006) used research observations to record child interest in books and found significant correlations between child interest and expressive language but not between child interest and receptive language. Only the Frijters et al., (2000) study used child reports of literacy interest and they did not find a significant correlation. More child
reports of literacy interest need to be utilized in order to more accurately report how child interest in book reading is related to emergent literacy. The Deckner et al. (2006) study used examiner observation to code child interest on a Likert-type scale. This study did not use parental reports or child reports of interest in books. They found a significant ($r = 0.40$) correlation between child interest and expressive language in children who were 30 months of age. However, by 42 months of age the significance was only $r = 0.27$ for expressive language. This study did not find a significant correlation between child interest and receptive language at either 30 months ($r = 0.04$) or 42 months ($r = 0.16$) of age.

Frijters et al. (2000) used child reports of interest in books instead of parental reports of child interest or observational assessment of child interest by a researcher. They found that “literacy interest and PPVT-R vocabulary were not significantly correlated ($r = 0.07$)” (p. 473). One reason for this finding could be that the children themselves were asked how they felt about literacy. There were no parental reports given which could incorporate positive bias toward their child’s literacy interest. However, these researchers discovered that children’s literacy interest had a small but statistically reliable relation to two other measures of emergent literacy: child’s letter-name and letter-sound knowledge. In this study shared book reading experiences were observed between children and parents. A significant correlation ($r = 0.24$) was found between these shared book reading experiences and children’s success in learning how to read. These findings support the importance of the home literacy environment, specifically shared book reading experiences between adults and children. These authors emphasized
that it is the home literacy environment, and not child interest in book reading, that makes the largest impact on a child’s oral receptive vocabulary.

In contrast to the findings of Frijters et al. (2000), several studies did find a positive significant correlation between child interest in books and vocabulary. Shared reading experiences between a parent and child may allow the child to see that the parent values and enjoys reading because the parent is choosing to read to their child. Parents who enjoy reading are “the most powerful predictor of children’s motivation to read for enjoyment” (Baker & Scher, 2002, p. 258). Parents who are interested in literacy activities are more likely to engage in shared book reading with their child. Weigel et al. (2006) found that parents who have an overall positive attitude regarding reading and who take an active role in sharing literacy-rich activities with their children are creating an environment of eagerness for reading. Reading interest was found to be “significantly correlated with parental literacy habits, parental reading beliefs, and parent-child activities” (Weigel et al., 2006, p. 365). The more interest that parents have in literacy activities, the more interest their children will develop in literacy activities. Weigel et al.’s finding shows the impact that parents have on their children’s literacy interest and development. Frijters et al. (2000) found that literacy activities done by parents, such as shared book reading, have a direct influence on pre-readers’ oral vocabulary development. Dialogue most likely increases between parents and children during shared book reading due to children’s natural curiosity with new topics offered by storybooks. Children are exposed to new ideas, new story plots, and new words, which give opportunity for vocabulary development. Parents are showing their children that they feel literacy is important, and therefore their child is more likely to value and engage in those
same literacy activities as he or she grows and develops because the activities were introduced at a young age.

Laakso, Poikkeus, Eklund and Lyytinen (2004) found that interest in shared reading before two years of age was linked with later language and letter knowledge skills. Their study concluded that “early shared reading interest predicted both global language and letter knowledge skills” (Laakso et al., 2004, p. 339). Children who show interest in literacy-related activities at a young age are likely to gain more language skills than children who show no interest in literacy-related activities. Children who are eager to learn letters, sounds, and words tend to naturally develop a broader vocabulary because they are exposed to more literacy-based activities. Senechal et al. (1996) examined whether variations in knowledge of storybooks were related to vocabulary scores in preschool children. Children’s knowledge of storybooks was found to be a powerful predictor of both receptive and expressive vocabulary. The authors determined that parents’ and children’s knowledge of children’s books were very good predictors of language skills for preschoolers, measured by the PPVT-R (Senechal et al., 1996). Children’s storybook knowledge was based upon the experimenter showing children illustrations from storybooks and then having the children identify various items such as the title, the characters, and the story plot. These measures of storybook knowledge were strong predictors of language skills ($r = 0.40$). Furthermore, they did not require parents to make possible biased assumptions about the degree of interest their child may have had in the storybooks or if their child liked the book or not. These measures were assessed objectively by the researcher. In this study, the child’s vocabulary base most likely increased due to the vast number of stories read to him or her.
Children’s books cover a wide range of topics, therefore granting a child exposure to many more words and sentences than he or she may be hearing on a daily conversational basis with parents, other family members, teachers, or other children. This increase in vocabulary exposure allows the child to begin using the new words in everyday conversation, which ultimately increases the child’s overall vocabulary knowledge. In summary, the research literature supports the link in Figure 1 between child initiation of book reading and child emergent literacy (see Figure 4).

Figure 4. Link between Child Initiation of Book Reading and Child Emergent Literacy.

*Head Start*. When looking at child initiation of book reading it is especially important to consider Head Start children. Children asking to be read to appear to be initiating the literacy process. This literacy progression is an integral aspect of school readiness skills. Head Start children are mostly from lower-income homes with fewer resources available such as children’s books. Because child initiation of book reading predicts emergent literacy (Deckner et al., 2006; Laakso et al., 2004; Senechal et al., 1996; Payne, et al., 1994), Head Start centers and parents must work together to provide as many literacy opportunities as possible for their children.

*Summary*

To review, the two hypotheses guiding this research proposal are depicted in Figure 1. Hypothesis 1 proposes that child initiation of book reading partially mediates the relation between the home literacy environment and child emergent literacy.
Hypothesis 2 proposes that child initiation of book reading partially mediates the relation between parental emotional support and child emergent literacy. The exploratory question includes whether child initiation of book reading as a partial mediator applies to three year olds more than four year olds.

Child initiated book reading as a partial mediator is explored because without it in the model, the home literacy environment and parental emotional support remain predictive of child emergent literacy. Home literacy environment predicts child emergent literacy (Baker et al., 1997; Bus, et al., 1995; Frijters et al., 2000; Haney & Hill, 2004; Rebello, 2001; Senechal et al., 1996; Senechal et al., 1998; Weigel, et al., 2005; Weigel, et al., 2006), as does parental emotional support (Bus & van Ijzendoorn, 1988; Culp et al., 2000; Hubbs-Tait et al., 2002; Leseman & de Jong, 1998), and child initiation of book reading (Frijters et al., 2000; Laakso, et al., 2004; Senechal et al., 1996). When child initiation of book reading is included in the model as a mediator, it is expected to only partially mediate the connection between each predictor and child emergent literacy. Full mediation suggests that the path from the mediator to the outcome shows statistical significance, while the significance of the direct path from the predictor to the outcome decreases and approaches zero (Le & Stockdale, 2005; Sacco & Murray, 2003; Schultz & Shaw, 2003) when both the mediator and the predictor are both included in the same equation predicting the outcome. Partial mediation suggests that the effect of the independent variable on the dependent variable decreases (due to the introduction of the mediator), yet the direct path from the independent variable to the dependent variable still remains statistically significant (Cowman, et al., 2004; Sacco & Murray, 2003). Because both the home literacy environment and parental emotional support are already directly
and strongly linked to child emergent literacy, adding child initiation of book reading as a third variable is expected to only partially mediate.

The next chapter discusses research methodology used in this study. The methodology is organized in the following sequence: participants, procedure, instruments, and proposed data analysis plan.
CHAPTER III
METHODOLOGY

Research methodology

The data for this study are part of a multi-year longitudinal Head Start study. Data used for this study were gathered and analyzed from fall 2003 to spring 2006. The research methods and procedures for collecting data were the same for each year.

Participants. Two hundred forty-five 3- to 4-year-old preschool children (131 boys, 114 girls) who attended Head Start in rural central and north-central Oklahoma participated in the study. Descriptive statistics for participant demographic data are depicted in Table 1. The average age of each child was 4.04 years. The median household income was between $1000-$1499 per month. Relationship to the child was as follows: 86% were mothers, 6% were fathers, 1% were grandparents, 3% were foster parents/guardians/other, and 4% were unspecified. The majority (65.1% mothers, 58.4% fathers) were white, followed next by African American (11.8% mothers, 14.2% fathers) and then by Native American (10.8% mothers, 10.3% fathers). First-time married parents were the most prevalent (36.8%), yet over a quarter of all participants (25.6%) were single, never-married parents. A combined 37.8% of the mothers either had a high school diploma or never graduated from high school. Over a quarter (26.6%) had some college courses, 16.2% were vo-tech graduates, and 12.4% were college graduates.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (± SD), Median (interquartile range), Percent&lt;sup&gt;a&lt;/sup&gt;</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child age in years</td>
<td>4.04 (± .55)</td>
<td>245</td>
</tr>
<tr>
<td>Household income&lt;sup&gt;b&lt;/sup&gt;</td>
<td>$1000-$1499 ($500-$999 to $1500-$1999)</td>
<td>232</td>
</tr>
<tr>
<td>Maternal ethnicity</td>
<td></td>
<td>238</td>
</tr>
<tr>
<td>White</td>
<td>65.1%</td>
<td>155</td>
</tr>
<tr>
<td>African</td>
<td>11.8%</td>
<td>28</td>
</tr>
<tr>
<td>Native</td>
<td>10.5%</td>
<td>25</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5.9%</td>
<td>14</td>
</tr>
<tr>
<td>Asian</td>
<td>2.9%</td>
<td>7</td>
</tr>
<tr>
<td>Multi-ethnic</td>
<td>2.9%</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>0.8%</td>
<td>2</td>
</tr>
<tr>
<td>Father ethnicity</td>
<td></td>
<td>233</td>
</tr>
<tr>
<td>White</td>
<td>58.4%</td>
<td>136</td>
</tr>
<tr>
<td>African</td>
<td>14.2%</td>
<td>33</td>
</tr>
<tr>
<td>Native</td>
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<td>24</td>
</tr>
<tr>
<td>Hispanic</td>
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</tr>
<tr>
<td>Asian</td>
<td>2.6%</td>
<td>6</td>
</tr>
<tr>
<td>Multi-ethnic</td>
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<td>6</td>
</tr>
<tr>
<td>Other</td>
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<tr>
<td>Marital Status</td>
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<tr>
<td>First-time</td>
<td>36.8%</td>
<td>89</td>
</tr>
<tr>
<td>Variable</td>
<td>Mean (± SD), Median (interquartile range), Percent&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Single never</td>
<td>25.6%</td>
<td>62</td>
</tr>
<tr>
<td>Single separated</td>
<td>5.4%</td>
<td>13</td>
</tr>
<tr>
<td>Single divorced</td>
<td>16.5%</td>
<td>40</td>
</tr>
<tr>
<td>Single widowed</td>
<td>0.8%</td>
<td>2</td>
</tr>
<tr>
<td>Remarried</td>
<td>10.7%</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>4.1%</td>
<td>10</td>
</tr>
<tr>
<td>Maternal Education</td>
<td></td>
<td>241</td>
</tr>
<tr>
<td>Less than 12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>18.3%</td>
<td>44</td>
</tr>
<tr>
<td>High school</td>
<td>19.5%</td>
<td>47</td>
</tr>
<tr>
<td>Some vo-tech</td>
<td>7.1%</td>
<td>17</td>
</tr>
<tr>
<td>Some college</td>
<td>26.6%</td>
<td>64</td>
</tr>
<tr>
<td>Vo-tech</td>
<td>16.2%</td>
<td>39</td>
</tr>
<tr>
<td>College</td>
<td>12.4%</td>
<td>30</td>
</tr>
</tbody>
</table>

<sup>a</sup>Values are mean ± SD, median with interquartile range in parentheses, or percent.

<sup>b</sup>Household income refers to monthly income.

*Procedure.* Parents/guardians were recruited in the fall of their child’s pre-kindergarten year in Head Start. A letter explaining the research project was sent home to the parents at each Head Start site several days before consent was obtained. The research team was then sent to each site to obtain written permission to test each child in the participating three-and four-year old Head Start classrooms by having the parent/guardian sign a consent form. Research team members talked to each parent/guardian in person.
either in the morning as the parent/guardian was dropping off his or her child or in the
afternoon as the parent/guardian was picking up his or her child. The research project was
fully explained to each parent/guardian before the consent form was signed. A copy of
the consent form was given to each parent/guardian along with a brief parent
demographic questionnaire and a modified version of the Parenting Behavior
Questionnaire-Head Start (PBQ-HS) (Coolahan, et al., 2002). Parents/guardians could
either fill out the demographic sheet at that time or they could take it home to be filled
out and returned to their respective Head Start site. In order for information to remain
confidential on the parent questionnaire, the parents could return the questionnaire to the
Head Start site in a sealed envelope either supplied by the research team or by the parents
themselves. The questionnaires were kept at the front desk area at each site and were not
kept in any of the children’s classrooms. If the demographic questionnaire was not
returned within a few weeks, a second questionnaire was then sent home to be filled out
and returned. This was done to ensure a higher rate of participation and a more accurate
description of findings.

After consent was given, the research team began testing each child individually
at each Head Start site. The data for each child’s test were collected over a span of
approximately six weeks. The actual testing room or area was determined by the site
director and the times for testing were also determined by the site director. The children
were tested individually by a research team member in a room with minimal distraction.
Each research team member would begin testing children one at a time at each site,
alternating between form A or form B on the PPVT-III (Dunn & Dunn, 1997) so that
approximately equal numbers of children were tested on each form (with the alternate
from administered in Spring) and then by administering the McCarthy Scales of Children’s Abilities (McCarthy, 1972). Alternate forms of the PPVT-III were used to reduce inflation in children’s scores from fall to spring. Both form A and form B are parallel with regard to content. Consent was obtained for all children who were eligible to participate and then child assent was obtained. Testing was not completed for a few children because they refused to go with a research team member.

The children were tested twice over the course of a school year. They were tested in the fall and then again in the spring, six months later. Some children may have been tested in previous years if they had been involved with Head Start as a three year old. Some children were tested again as a four year old. In order to meet the assumption of data independence, only the first year of data for each child are included in the data set for this thesis.

**Instruments.** Children’s emergent literacy ability was measured by the PPVT-III (Dunn & Dunn, 1997) and the McCarthy Scales of Children’s Abilities (McCarthy, 1972). For this study, only the verbal sections of the McCarthy Scales of Children’s Abilities were used. These sections included Pictorial Memory, a test of short-term memory for the names of pictures and objects; Word Knowledge, a test of listening vocabulary, expressive vocabulary, and word meaning; Verbal Memory, a two-part test of memory for words and sentences (part 1), and a short story (part 2); Verbal Fluency, a test of both expressive vocabulary and verbal classification skills; Opposite Analogies, a test of verbal reasoning and relational thinking.

The home literacy environment was measured through items used by Senechal et al., 1996. The first question included “Please estimate the number of children’s books in
“How often do you teach your child to read words in a typical week?” The parent circled a number on a Likert-type ordinal scale ranging from 1-5, where 1 = never, 2 = not often, 3 = sometimes, 4 = often, 5 = very often.

Parental emotional support was measured by looking at seven items from the Parenting Behavior Questionnaire-Head Start (PBQ-HS) (Coolahan et al., 2002). Four statements involved verbal support, “I tell my child I’m proud when they try to be good,” “I give praise when my child is good,” “I respond to my child’s feelings or needs,” and “I apologize to my child when I make a mistake.” Internal consistency of the 4-item scale measuring verbal support was $\alpha = 0.60$ (six parents answered only one or two of these questions and were excluded). Two statements involved encouraging/explaining consequences, “I explain consequences of behavior to my child,” and “I encourage my child to think about the consequences of their behavior.” Internal consistency of the 2-item scale measuring encouraging/explaining consequences was $\alpha = 0.70$ (with one parent excluded due to answering only one of these questions). Each of these statements above was measured on a Likert-type ordinal scale ranging from 1-4, where 1 = almost never, 2 = sometimes, 3 = often, and 4 = almost always. The parent checked the most appropriate response.

The child initiated book reading was measured through a question from the Home Practice Questionnaire, which was created for this study. The parent was asked, “During a typical week, how often does your child ask to be read to?” The parent circled a number.
on a Likert-type ordinal scale ranging from 1-5, where 1 = never, 2 = not often, 3 = sometimes, 4 = often, 5 = very often.

*Proposed data analysis plan.*

Data analysis was conducted according to the following steps. First, I analyzed relations among all variables with Pearson product-moment correlations and reported them in a matrix. Next, I tested the hypotheses using regression analysis. I used subscales or items depicted in Figure 1. The assumptions that were met before I tested mediation were as follows: predictor and mediator had to be significantly related; predictor and outcome had to be significantly related; mediator and outcome had to be significantly related.

The next chapter discusses the results from this study. The results section is organized into the following sequence: correlations among all variables, regressions for both hypotheses, and regressions for the exploratory question.
CHAPTER IV
RESULTS

First, correlations were run to examine relations among all variables. Second, regression analysis was conducted for each hypothesis. Finally, regression analysis was conducted for the exploratory question.

Correlations

Correlations were run among the variables to examine significant relations (see Table 2). Of the two literacy outcomes, McCarthy verbal scores were related to child initiation of book reading, number of children’s books in the home, how often the parent teaches the child to read words, encouraging/explaining consequences, and PPVT-III scores. PPVT-III scores were related to child initiation of book reading, number of children’s books in the home, and McCarthy verbal scores. Recall that there were two categories of parental predictors, home literacy and parental emotional support, as well as one mediator, child initiation. Home literacy environment included both the number of children’s books in the home and how often the parent teaches their child to read words. Number of children’s books in the home was related to child initiation of book reading, McCarthy verbal scores, and PPVT-III scores. How often the parent teaches their child to read words was related to child initiation of book reading, encouraging/explaining consequences, and McCarthy verbal scores. Parental emotional support included both encouraging/explaining consequences and verbal support. Encouraging/explaining consequences was related to child initiation of book reading, how often the parent teaches
their child to read words, verbal support, and McCarthy verbal scores. Verbal support was related to encouraging/explaining consequences. The mediator, child initiation of book reading, was related to number of children’s books in the home, how often the parent teaches their child to read words, encouraging/explaining consequences, McCarthy verbal scores, and PPVT-III scores.

**TABLE 2.**

*Correlations of Parental Predictors, Child Initiation, and Emergent Literacy.*

<table>
<thead>
<tr>
<th>Variables a</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Child initiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Books in the home</td>
<td>.331***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Teach reading</td>
<td>.342***</td>
<td>.074</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Encourage/Explain</td>
<td>.134*</td>
<td>.094</td>
<td>.160*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Verbal support</td>
<td>.105</td>
<td>.025</td>
<td>.062</td>
<td>.351***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) McCarthy verbal</td>
<td>.212***</td>
<td>.263***</td>
<td>.200**</td>
<td>.143*</td>
<td>067</td>
<td></td>
</tr>
<tr>
<td>(7) PPVT-III</td>
<td>.158*</td>
<td>.326***</td>
<td>.064</td>
<td>.092</td>
<td>.083</td>
<td>.522***</td>
</tr>
</tbody>
</table>

aSample size (N) for correlations is equal to 245.

* p < 0.05; ** p < 0.01; *** p < .001.
Regressions

Hypothesis 1. Recall that hypothesis 1 stated that child initiation of book reading would partially mediate the relation between the home literacy environment and child emergent literacy. As noted above, partial mediation suggests that the effect of the independent variable on the dependent variable decreases due to the introduction of the mediator, yet the direct path from the independent variable to the dependent variable still remains statistically significant (Cowman, et al., 2004; Sacco & Murray, 2003). The analysis of hypothesis one began with conducting correlations among the home literacy environment, child initiation of book reading, and emergent literacy. As shown in the correlation matrix in Table 2, the number of children’s books in the home was significantly correlated with child initiation of book reading, McCarthy verbal score, and PPVT-III score. Child initiation of book reading was significantly correlated with how often a parent teaches their child to read words, books in the home, McCarthy verbal score, and PPVT-III score.

Regressions for hypothesis 1 were carried out in order to examine changes in beta weights for the relation of predictor to outcome from the first equation with only the predictor entered to the last equation with the mediator also included. Separate regressions were run for each of the two home literacy predictors, teaching reading and books in the home, to assess whether child initiation of reading mediated between each of the home literacy predictors and each outcome. The reason for separating outcomes was because McCarthy verbal scores and PPVT-III scores were different measures of emergent literacy. The first analysis tested mediation by child initiation of the relation between books in the home and McCarthy verbal score and produced changes in all beta
weights (see Table 3). Tests of significance of mediation were conducted following the procedures outlined by Holmbeck (2002). The ratio of the beta weight for the indirect effect to the standard error of the indirect effect yielded a z-score >1.96, \( p < .05 \) As a result, it appears that child initiation of reading does partially mediate between books in the home and McCarthy verbal scores.

**TABLE 3.**


<table>
<thead>
<tr>
<th>Outcome</th>
<th>Model Summary</th>
<th>Coefficients*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( R^2 )</td>
</tr>
<tr>
<td><strong>McCarthy Verbal Score</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Literacy</td>
<td></td>
<td>.07</td>
</tr>
<tr>
<td>Books in home</td>
<td></td>
<td>.263</td>
</tr>
<tr>
<td><strong>Child Initiation</strong></td>
<td></td>
<td>.11</td>
</tr>
<tr>
<td>Home Literacy</td>
<td></td>
<td>.331</td>
</tr>
<tr>
<td>Books in home</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>McCarthy Verbal Score</strong></td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td><strong>McCarthy Verbal Score</strong></td>
<td></td>
<td>.09</td>
</tr>
<tr>
<td>Test of Mediation</td>
<td></td>
<td>.140</td>
</tr>
</tbody>
</table>

\( ^* \beta \) is the standardized and B is the non-standardized regression coefficient. SE is the standard error of B.

The second analysis tested mediation by child initiation of the relation between teach reading and McCarthy verbal score and also yielded changes in all beta weights (see Table 4). Tests of significance of mediation were also carried out following the
procedures specified by Holmbeck (2002). The ratio of the beta weight for the indirect effect to the standard error of the indirect effect yielded a z-score > 1.96, \( p < .05 \).

Therefore, it appears that child initiation of reading does partially mediate between teach reading and McCarthy verbal scores.

**TABLE 4.**

*Regressions Testing Mediation by Child Initiation of the Relation between Teach Reading and McCarthy Verbal Scores.*

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Model Summary</th>
<th>Coefficients(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Block and Predictors</td>
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<tr>
<td></td>
<td></td>
<td>( R^2 )</td>
</tr>
<tr>
<td><strong>McCarthy Verbal Score</strong></td>
<td></td>
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</tr>
<tr>
<td>Home Literacy</td>
<td>.04 1, 243 .002</td>
<td>.200</td>
</tr>
<tr>
<td>Teach Reading</td>
<td></td>
<td>.200</td>
</tr>
<tr>
<td><strong>Child Initiation</strong></td>
<td></td>
<td>.342</td>
</tr>
<tr>
<td>Home Literacy</td>
<td>.12 1, 243 .000</td>
<td>.212</td>
</tr>
<tr>
<td>Teach Reading</td>
<td></td>
<td>.212</td>
</tr>
<tr>
<td><strong>McCarthy Verbal Score</strong></td>
<td></td>
<td>.163</td>
</tr>
<tr>
<td>Child Initiation</td>
<td>.04 1, 243 .001</td>
<td>.144</td>
</tr>
<tr>
<td>Test of Mediation</td>
<td>.06 2, 242 .000</td>
<td>.163</td>
</tr>
</tbody>
</table>

\(^a\) \( \beta \) is the standardized and B is the non-standardized regression coefficient. SE is the standard error of B.

The analysis testing mediation by child initiation of the relation between books in the home and PPVT-III score also yielded changes in beta weights (see Table 5). Recall that teach reading was not correlated with PPVT-III score, therefore a regression analysis was not conducted for this predictor. The beta weight for child initiation of book reading
decreased to non-significance in contrast to books in the home, which remained
significant in the final analysis. As a result, child initiation of book reading does not
appear to mediate between books in the home and PPVT-III scores.

TABLE 5.

Regressions Testing Mediation by Child Initiation of the Relation between Books in
Home and PPVT-III Score.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Model Summary</th>
<th>Coefficients*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$R^2$ df $p$</td>
<td>$\beta$ B SE $p$</td>
</tr>
<tr>
<td>PPVT-III Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Literacy</td>
<td>$0.326$</td>
<td>$1.312$</td>
</tr>
<tr>
<td>Books in home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Initiation</td>
<td>$0.331$</td>
<td>$0.253$</td>
</tr>
<tr>
<td>Test of Mediation</td>
<td>$0.158$</td>
<td>$1.985$</td>
</tr>
</tbody>
</table>

*$\beta$ is the standardized and B is the non-standardized regression coefficient. SE is the standard
error of B.

Figures 5 and 6 summarize the results of the tests of hypothesis 1 for McCarthy
verbal scores (see also Tables 3 and 4). In support of hypothesis 1, the relations of
McCarthy verbal scores to the two home literacy predictors were partially mediated by
child initiation of book reading. The figures follow the convention that dashed lines show
that the direct effects are mediated significantly by the mediator.
Figure 5. *Final Model of Books in Home and McCarthy Verbal Scores*

Note. Text above the path refers to beta weights for tests of direct effects whereas text below the path refers to beta weights for the test of mediation.

Figure 6. *Final Model of Teach Reading and McCarthy Verbal Scores*

Note. Text above the path refers to beta weights for tests of direct effects whereas text below the path refers to beta weights for the test of mediation.

Figure 7 shows that, contrary to hypothesis 1, the number of books in the home explains more variance in PPVT-III score than does child initiation of book reading (see also Table 5). The magnitude of the final beta weight for child initiation of book reading decreased more than half of the original beta weight. In Figure 7 the thicker line style is used to indicate that the direct effect of the predictor is not mediated.
Figure 7. Final Model of Books in Home and PPVT-III Score

Note. Text above the path refers to beta weights for tests of direct effects whereas text below the path refers to beta weights for the test of mediation.

Hypothesis 2. Recall that hypothesis 2 stated that child initiation of book reading would partially mediate the relation between parental emotional support and child emergent literacy. The analysis of hypothesis 2 began with computing correlations among parental emotional support, child initiation of book reading, and emergent literacy. As shown in the correlation matrix in Table 2, encouraging/explaining consequences was significantly correlated with child initiation of book reading, parental verbal support, and McCarthy verbal scores. Verbal support was significantly correlated with child initiation of book reading and parental encouraging/explaining consequences.

Regressions for hypothesis 2 were also calculated in order to examine the changes in beta weights for the relation of predictor to the outcome from the first equation with only the predictor entered to the last equation with the mediator also included. Because parental verbal support was not correlated with either PPVT-III scores or McCarthy verbal scores, it was removed from the regression analyses (see Table 2). Encouraging and explaining consequences was also not related to PPVT-III scores (see Table 2) so only one regression was calculated for hypothesis 2 testing mediation of the relation between encouraging/explaining and McCarthy verbal scores. The regression testing mediation by child initiation of book reading revealed decreases in beta weights for the
predictor and the mediator (see Table 6). There was a decrease of 18% in the beta weight for encouraging and explaining consequences from the first to the last regression equation. There was a decrease of only 8% in the beta weight for child initiation from the first to the last regression equation. However, the z-score testing the ratio of the indirect effect to the standard error for the indirect effect was not significant. Thus, it appears as if child initiation is not a partial mediator of the relation between encouraging and explaining consequences, on the one hand, and McCarthy verbal scores, on the other hand.

TABLE 6.


<table>
<thead>
<tr>
<th>Outcome</th>
<th>Model Summary</th>
<th>Coefficients*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Block and Predictors</td>
<td>$R^2$</td>
</tr>
<tr>
<td>McCarthy Verbal Score</td>
<td>Encourage/Explain</td>
<td>.02</td>
</tr>
<tr>
<td>Child Initiation</td>
<td>Encourage/Explain</td>
<td>.02</td>
</tr>
<tr>
<td>McCarthy Verbal Score</td>
<td>Child Initiation</td>
<td>.04</td>
</tr>
<tr>
<td>McCarthy Verbal Score</td>
<td>Test of Mediation</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Encourage/Explain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Child Initiation</td>
<td></td>
</tr>
</tbody>
</table>

* $\beta$ is the standardized and B is the non-standardized regression coefficient. SE is the standard error of B.
Figure 8 summarizes the results of the test of hypothesis 2. Figure 8 shows that, in contrast of hypothesis 2, it appears that child initiation is not a partial mediator of the relation between the predictor, encouraging and explaining consequences, and the outcome, McCarthy verbal scores.

Figure 8. Final Model of Encourage/Explain Consequences and McCarthy Verbal Scores

Note. Text above the path refers to beta weights for tests of direct effects whereas text below the path refers to beta weights for the test of mediation.

Exploratory question

Recall that the exploratory question to be investigated was whether child initiation as a partial mediator applies to three year olds more than four year olds. Also recall that separate regressions were run because McCarthy verbal score and PPVT-III score were different measures of emergent literacy. First, a regression analysis was run testing mediation of child initiation between books in the home and McCarthy verbal scores for three year olds only. The results for three year olds paralleled those in Table 3, except that the mediator was not significant in the test of mediation. This suggests that child initiation does not function as a mediator between books in the home and McCarthy verbal scores. The second regression analysis testing mediation of child initiation between teaching children to read words and McCarthy verbal scores for three year olds also paralleled those in Table 4, except that the mediator was also not significant in the
test of mediation. Therefore, this suggests that child initiation does not function as a mediator between teaching children to read words and McCarthy verbal scores. Third, a regression analysis was run testing mediation of child initiation between books in the home and PPVT-III score for three year olds only. The results for this analysis showed that three-year-old children’s initiation of book reading was not significantly related to PPVT-III scores. As a result, mediation could not be tested. Finally, a regression analysis was run testing mediation of child initiation between encouraging/explaining consequences and McCarthy verbal scores for three year olds only. Recall that encouraging and explaining consequences was not related to PPVT-III scores (see Table 2) so only McCarthy verbal scores were used in the regression. The results for this analysis showed that for three year olds, encouraging/explaining consequences was not significantly related to McCarthy verbal scores ($R^2 = .01, p = .203$). For that reason, the test for mediation could not be run.

The next chapter focuses on the discussion. The discussion section is organized into the following sequence: overview of findings, discussion of results for both hypotheses, limitations of the current study, implications for future research, and final conclusions.
CHAPTER V
DISCUSSION

Introduction

This study investigated the links among home literacy environment, parental emotional support, child initiation of reading, and emergent literacy in Head Start preschool children. Recall that previous research has shown that there are many positive effects of home literacy practices, such as shared book reading between parents and children, on children’s emergent reading abilities such as receptive and expressive vocabulary. Families also encourage emergent literacy when they provide literacy materials at home. Recall that parental emotional support was defined as parental warmth and affect. Parent-child affective relationships have been found to positively affect preschool children’s cognitive competence. With regard to child initiation of book reading, there have been very few studies showing any relation of child initiation to emergent literacy in preschool children.

The hypotheses stated that the home literacy environment, parental emotional support, and child initiation of book reading would be significantly related to child emergent literacy. Child initiation of book reading was the proposed partial mediator in this study. Partial mediation suggests that the effect of the independent variable on the dependent variable decreases (due to the introduction of the mediator), yet the direct path from the independent variable to the dependent variable still remains statistically significant (Cowman, Ferrari, & Liao-Troth, 2004; Sacco & Murray, 2003). Specifically,
hypothesis 1 stated that child initiation of book reading would partially mediate the relation between the home literacy environment and child emergent literacy. Hypothesis 2 stated that child initiation of book reading would partially mediate the relation between parental emotional support and child emergent literacy.

Overview of findings

The results of the current investigation provided support for the partial mediation hypotheses, particularly hypothesis 1. Child initiation of book reading appeared to partially mediate between the home literacy predictors, books in the home and teaching reading, and McCarthy verbal scores. In contrast to hypothesis 2, the results indicated that encouraging/explaining consequences was more predictive of child emergent literacy than child initiation of book reading. Child initiation of book reading did not appear to partially mediate between encouraging/explaining consequences and child emergent literacy.

Discussion of results

Hypothesis 1. Because the results for hypothesis 1 indicated that one parental home literacy practice, specifically teaching the child to read words, was significantly related to child emergent literacy, it can be assumed that parents do have influence when it comes to their child’s emergent literacy. Consistent with previous research, parents who teach their children to read words have children with greater receptive and expressive vocabularies (Farver, Xu, Eppe, & Lonigan, 2006; Haney & Hill, 2004; Senechal & LeFevre, 2002). This finding also supports Vygotsky’s zone of proximal development. Alone, a child can only read the words that he or she already knows. The parent can then step in and begin teaching more words to the child. The child is then able
to learn more letters and words with parental guidance. This practice of parents teaching words to their child enhances the child’s emergent literacy ability. Parents who teach their child to read words are modeling important future reading skills for their child. They are showing their child that words are important and that words are the building blocks to reading.

The second aspect of home literacy measured in the current study, books in the home, also significantly predicted emergent literacy. Having children’s books in the home can demonstrate the importance of reading. Children are able to look at books on their own and pick out pictures or words that they already know. As shown in previous studies, the actual number of children’s books in the home is positively related to children’s receptive vocabulary scores (Senechal, 1996). Additional research has found that books in the home promote children’s competence with print (Leichter, 1984, as cited in Saracho, 1997). Only when children have access to books, will they be able to apply that letter and word knowledge to their own emergent reading process.

Children who ask to be read to are initiating a verbal interaction between themselves and their parents. Recall that shared storybook reading has a direct influence on pre-readers’ oral vocabulary development (Frijters et al., 2000). It is likely that dialogue increases between parents and children during shared book reading due to children’s natural curiosity with new situations offered by storybooks. Children are exposed to new ideas and new words, which open possibilities for vocabulary enrichment. Therefore, child initiation of book reading is an important link, specifically a significant partial mediator, between the home literacy environment and child emergent literacy.
Hypothesis 2. Parents who verbally encourage their children to think about the consequences of behavior and who verbally explain behavioral consequences have children with higher receptive and expressive vocabularies. When parents encourage their children to think about behavioral consequences, they also encourage children to begin understanding the reasoning process themselves (Gest, Freeman, Domitrovich, & Welsh, 2004; Kochanska & Murray, 2000). Instead of simply telling children what to do or how to act, parents who encourage their children think for themselves are instilling cognitive skills necessary for reasoning. These reasoning skills are directly related to emergent literacy, specifically to McCarthy verbal scores (see Table 2). Because the McCarthy verbal scales assess children’s expressive vocabulary, reasoning may be a key component in the development of these expressive vocabulary skills. It appears that dialoguing with children enables children to incorporate new words into their thinking. In turn, children who develop this broader vocabulary base, due to the parent/child verbal interaction, will develop the early reading skills necessary for literacy success (Farver et al., 2006; Senechal & Cornell, 1993).

In this study, children who ask to be read to also tend to have parents who are supportive in encouraging and explaining consequences. However, children’s initiation of book reading does not mediate between parental encouraging/explaining consequences and children’s expressive and receptive vocabulary. Child initiation explained 18% of the variance in the path from encouraging/explaining consequences to McCarthy verbal scores but this was not significant. Instead, encouraging/explaining consequences significantly predicted verbal scores.
Limitations of the current study

One limitation of this study is the use of parental reports for child initiation of book reading. From the literature, parental reports have been found to be potentially biased because parents may report that their child is more interested in literacy activities than the child actually is. Parents may also be reporting how interested they are in literacy and simply assume that their child possesses the same level of interest. However, parental reports are still widely used (Baker et al., 1997; Baker & Scher, 2002; Laasko et al., 2004; Senechal et al., 1996; Payne, et al., 1994) because most preschool children cannot read independently yet and they are not able to fill out a self-reported literacy interest questionnaire.

The definition of child interest is also discussed very differently across various studies. Child interest has been operationally defined as how much the child likes books (Senechal et al., 1996), how long the child can sit and listen to storybooks (Deckner et al., 2006; Laakso et al., 2004), participation by the child during shared reading experiences (Deckner et al., 2006; Laakso et al., 2004), asking parents how much their child asks about words or pretends to read alone (Baker & Scher, 2002), or asking the child his or her feelings towards literacy activities (Frijters, et al., 2000). Therefore, it is very difficult to determine if parent-reported child interest in book reading would even be the same as child-reported interest in book reading.

A second limitation of this study is the population studied. Only Head Start children from north-central Oklahoma and their families were included. The fact that child initiation of book reading as a partial mediator between the home literacy environment and child emergent literacy was not supported, and that child initiation of
book reading as a partial mediator between parental emotional support and child emergent literacy was partially supported can only be generalized to the specific population tested. If the study were to include either Head Start children from a much larger sampling area, or if the study included all three and four year old children regardless of Head Start enrollment, then different results might be seen.

Implications for future research

Head Start preschool children have language and literacy scores that fall below the national average. It is important to encourage families to foster a home environment rich in literacy activities and strong in positive parental emotional support so that children from these economically disadvantaged homes will be given the best opportunity for literacy success. This study supported the literature in showing that the association of child emergent literacy to home literacy environment or parental encouraging/explaining consequences is significant. A unified definition of child interest is desired so that research can more accurately report what role the child plays in his or her own literacy development. Currently, it is very difficult to report child interest and to know what role it may actually play in emergent literacy because child interest is defined so differently throughout the literature. More research is also needed with regard to the reporting of child initiation of book reading. Because parental reports alone can create research bias, a better way of gathering child literacy interest is needed. One way of gathering child literacy interest may be through observation. Observing the child’s own literacy interest may allow researchers to collect more accurate information. Gathering information from the individual child may also be a better way of reporting child literacy interest. Baroody, Diamond, and Hong (2007) created a 15-item child report measure to assess literacy
interest. Children were shown pictures of various activities and were asked if they liked the activity a lot, a little, or not at all. Children’s literacy interest was found to significantly correlate with letter knowledge. Thus, this extremely new child report measure recently proved successful (Baroody et al., 2007) in predicting letter knowledge, which is a necessary skill for literacy success, suggesting that it could be used in future research to compare parent and child reports of child interest in literacy.

Final conclusions

When it comes to emergent literacy in preschool children, parents really do matter. They enhance their children’s literacy abilities by the literacy environment they provide at home through teaching their children to read words and by having children’s books available. Parents also enhance children’s literacy through instilling verbal reasoning skills in their children by encouraging their children to think about the consequences of their behavior and explaining consequences of behavior to their children. This study has revealed that parents are essential in the development of their children’s emergent literacy.
REFERENCES


*Child Development, 69*, 848-872.
VITA

Rachel Carolyn Bonnett

Candidate for the Degree of

Master of Science

Thesis: RELATION OF HOME LITERACY, PARENTAL SUPPORT, AND CHILD INITIATION OF READING TO EMERGENT LITERACY IN HEAD START PRESCHOOL CHILDREN

Major Field: Human Development and Family Science

Biographical:

Personal: Born in Enid, Oklahoma, on December 7, 1978, the daughter of Michael and Joyce Bonnett.

Education: Graduated from Enid High School, Enid, Oklahoma in May, 1997; received Bachelor of Science degree in Family Relations and Child Development from Oklahoma State University, Stillwater, Oklahoma in August, 2001; completed the requirements for the Master of Science in Human Development and Family Science at Oklahoma State University, Stillwater, Oklahoma in July, 2007.

Experience: Taught pre-kindergarten for three years; employed by Oklahoma State University, Department of Human Development and Family Science as a graduate research assistant, 2005 to present; assessed Oklahoma Head Start preschool children’s cognitive development using the Peabody Picture Vocabulary Test and the McCarthy Scales of Children’s Abilities.

Professional Memberships: Society for Research in Child Development
Title of Study: RELATION OF HOME LITERACY, PARENTAL SUPPORT, AND CHILD INITIATION OF READING TO EMERGENT LITERACY IN HEAD START PRESCHOOL CHILDREN

Scope and Method of Study: The purpose of this study was to examine the links among home literacy environment, parental emotional support, child initiation of book reading, and emergent literacy in Head Start preschool children. Participants in the study included 245 primary caregivers and their three- to four-year-old preschool children from Head Start centers located in north-central Oklahoma. Parents completed a modified version of the Parenting Behavior Questionnaire-Head Start (PBQ-HS). Each child was evaluated using both the Peabody Picture Vocabulary Test-III and the McCarthy Scales of Children’s Abilities. Correlations and regression analyses were used in testing the two hypotheses.

Findings and Conclusions: In support of hypothesis 1, child initiation of reading partially mediated the relation between parental teaching of reading and children’s McCarthy verbal scores. The mediator explained 28% of the variance ($p = .024$) in the path from teaching reading to McCarthy verbal scores. Child initiation of reading also significantly partially mediated between books in the home and McCarthy verbal scores. However, it did not mediate between books in the home and PPVT-III scores. Contrary to hypothesis 2, the results indicated that child initiation of book reading did not significantly mediate between encouraging/explaining consequences and child emergent literacy. Child initiation explained 18% of the variance in the path from encouraging/explaining consequences to McCarthy verbal scores but this was not significant. Instead, encouraging/explaining consequences significantly predicted verbal scores. Parents who verbally encourage their children to think about the consequences of behavior and who verbally explain behavioral consequences have children with higher receptive and expressive vocabularies.