SHARED STORYBOOK READING IN FAMILIES FROM DIVERSE CULTURAL BACKGROUNDS

by

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Abstract

This study explored relationships among parents' literacy beliefs, parents' self-reported literacy behaviors, parent-child storybook interactions, and children's language and literacy achievement. Trends in parent-child interactions and children's language and literacy achievement were identified based on the grouping of parents' beliefs. The sample for this study consisted of 35 parents and 38 children from diverse cultural backgrounds and represented low SES to upper middle-class families involved in a larger multiple literacies project.

Four instruments were used in the study. The *Parents' Perception of Literacy Learning Interview Schedule (PPLLIS)* (Anderson, 1995a) was used to determine parents' beliefs about early literacy. Children's achievement was measured by the *Test of Early Reading Ability-2 (TERA-2)* (Reid, Hresko, & Hammill, 1989), the *Kindergarten Language Screening Test-2 (KLST-2)* (Gauthier & Madison, 1998), and a letter identification task (Clay, 1979a). Parent-child interactions were videotaped and coded using a modified scaled developed by Shapiro, Anderson, and Anderson (1997). Partial correlations, controlling for children's age in months, and *t*-tests were used to determine relationships in the data and to identify significant differences in scores on the *PPLLIS* based on selected demographic factors. The description of parent-child interactions and children's achievement was examined based on the grouping of parents' beliefs.

Findings from this study suggested that the more holistic were parents' beliefs, the more parents focused on print in storybook interactions, and the higher was children's language and literacy achievement. Parents' with more holistic beliefs were more likely

to engage in encouragement activities and less direct teaching of literacy. Types of interactions that were more cognitively demanding (Haden, Reese, & Fivush, 1996) related positively to children's achievement. Parents who were more educated had more holistic beliefs. Trends in the descriptive data supported the statistical analysis.

Based on the results of this study, it can be inferred that parent-child interactions in storybook reading are related to young children's literacy achievement in families from diverse cultural backgrounds. It is necessary to understand parents' beliefs about literacy to gain insight as to why parents interact with children in literacy events in particular ways. This study provides a basis for understanding factors related to young children's literacy achievement.

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CHAPTER I: AN INTRODUCTION TO THE STUDY

Introduction

The importance of parents reading to children has been heavily promoted by educators for some time. As early as 1908 in the United States, Huey suggested that children's literacy learning begins with parents reading to their child at home. It has been claimed that, although many experiences are said to contribute to early literacy (Snow, Burns, & Griffin, 1998; Whitehurst et al., 1988), no other single activity is regarded as important as the shared book experience between caregivers and children (Neuman, 1999).

Problem

While many parents are encouraged by educators to read storybooks to their children, there is little research on the relative influence of the quality of storybook interactions on children's literacy learning (Senechal, LeFevre, Thomas, & Daley, 1998). Even less is known about the quality of storybook interactions among diverse cultural groups (Anderson, Anderson, Lynch, & Shapiro, 2003). Because parents' beliefs have been shown to relate to their interactional behavior (DeBaryshe & Binder, 1994), knowing what parents' beliefs are about literacy may be an important key to understanding variation in parent-child interactions in literacy events, such as book sharing. Surprisingly, little research has examined the relationship between parents' beliefs about literacy and how parents assist children in acquiring this skill (Evans, Barraball, & Eberle, 1998). Because much of children's literacy learning occurs within the family context at home (Weinberger, 1996), a study of parents' beliefs in relation to

how they support their children, and how this relates to children's early literacy knowledge, is needed.

Purpose of the Study

The purpose of this study was to examine the relationships among parents' literacy beliefs, how they support their children's literacy development (their behaviors), parent-child storybook interactions, and children's language and literacy achievement in families from diverse cultural backgrounds. The following questions were addressed in this study:

1. Is there a relationship among parents' literacy beliefs, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement?
2. Are there differences in parents' literacy beliefs based on parents' education level and parents' gender?
3. Based on parents' literacy beliefs, are there trends or patterns in parents' demographic characteristics, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement?

Significance of the Study

By examining parents' beliefs about literacy and the ways in which they help children learn to read and to write, the findings of this study can provide educators with information about what parents believe is important for children's literacy development and perhaps insight on differences in children's early literacy knowledge. The present

study is important for informing researchers about the role of parents' beliefs and how these beliefs relate to storybook reading in a diverse population. Further models of literacy acquisition can be developed when findings of research with the cultural groups represented in a society are incorporated into theories and models of early literacy. Moreover, such research can challenge or refine theories about the importance of various types of interactions in storybook reading, particularly those that are cognitively challenging, and the relationship of these interactions with children's literacy development. The present study provides information on whether there are relationships between storybook reading interactions and children's achievement. Such information is crucial when educators encourage parents from diverse cultural groups to read to their children. This research also provides important information to those deciding to implement early literacy intervention programs. As Bus, Leseman, and Keultjes (2000) argue, the benefits of storybook reading among diverse cultural groups should be ascertained before encouraging parents from non-mainstream groups to read to children because storybook reading is not practiced in some cultural groups (Mason, 1992).

Definition of Key Terms

The following are the key terms defined for this study:

1) Skills-based beliefs: Reading is viewed as the skill of translating print into speech and it is taught by direct instruction, which involves learning to break the alphabetic code (Evans, Shaw, Moretti, & Bell, 2001). This is considered a more traditional view of literacy acquisition.

2) Traditional readiness (or skills) orientation: Reading is viewed as a sequenced mastery of skills and these skills form the basis of reading as a subject to be taught (Teale & Sulzby, 1986).

3) Holistic beliefs: Reading is viewed as a natural extension of spoken language in which meaning, purpose, and co-construction of the meaning of text are emphasized (Evans et al., 2001). This relates to an emergent literacy perspective.

4) Emergent literacy: The skills, knowledge, and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing (Teale & Sulzby, 1986). Literacy acquisition is holistic, meaning-centered, and developmental (Clay, 1966). Significant others serve a facilitative role by engaging the child in functional literacy activities (Sulzby & Teale, 1991).

5) *Parents' Perceptions of Literacy Learning Interview Schedule (PPLLIS)*: The *PPLLIS* is an instrument designed to measure parents' beliefs about how children learn to read and to write. In particular, this instrument reveals parents' beliefs about how children learn to read and to write as more traditional or more emergent (Anderson, 1995a).

6) *Test of Early Reading Ability-2 (TERA-2)*: This standardized test measures children's ability to attribute meaning to printed symbols, their knowledge of the alphabet and its functions, and their understanding of the conventions of print (Reid, Hresko, & Hammill, 1989).

7) Knowledge of the alphabet: This refers to the understanding of letter naming, alphabet recitation, and "oral reading" (letters, letter sounds, and words) (Reid et al., 1989).

8) Knowledge of conventions: This refers to the knowledge an individual has of conventions of print, such as book handling, response to other print conventions, and "proofreading" (Reid et al., 1989).

9) Construction of meaning: This refers to the ability an individual has to construct meaning from print, such as awareness of print in environmental contexts, knowledge of relations among vocabulary items, and awareness of print in connected discourse (Reid et al., 1989).

10) *Kindergarten Language Screening Test-2 (KLST-2)*: This standardized test measures children's general verbal language ability. The test is composed of several types of tasks reflecting both receptive and expressive language competence (Gauthier & Madison, 1998).

11) Socio-cultural view of learning: From this perspective, all learners are seen as members of a defined culture, and their identity with this culture determines what they will encode about the world and the ways in which they interpret information. Socio-economic status (SES), religion, family education history, gender, ethnicity, and socio-political status intertwine and interact to result in individual cultural identities (Purcell-Gates, 1995).

12) The distancing model: According to this model, certain behaviors or events separate the child cognitively from the immediate behavioral environment. The behaviors or events in question are those that require the child to attend to or react in terms of the non-present (future or past) or the non-palpable (abstract language) (Sigel, 1970).

13) Decontextualized language: This refers to language interactions that involve people, events, and experiences that are not part of the immediate context (Snow, 1991).

14) Utterance: A group of words that make up a unit of sense or meaning usually separated from the next utterance by a pause (Sorsby & Martlew, 1991).

15) Cultural diversity: This refers to the notion that differences exist between people based on a shared ideology and value set of beliefs, norms, customs, and meaning (Kroeber & Kluckhohn, 1952; Seigel & Gunderson, in press).

16) Mainstream: This refers to the predominant current of a society or movement (Morehead & Morehead, 1981). Within the research on shared book reading, mainstream usually refers to people of middle-class, White or Caucasian backgrounds.

Because of the overlap in the definitions of "holistic" and "emergent", as well as in "skills-based" and "traditional" views of literacy, these terms were used interchangeably in the present study. Also, cultural diversity incorporates a variety of cultural groups represented in the geographical area in which the study was conducted. Standardized achievement tests were used to examine children's early language and literacy but the term "development" is most often used to describe children's literacy before formal schooling. Therefore, the terms "achievement" and "development" were often exchanged in the study. Moreover, the terms "reading" and "literacy" were used somewhat interchangeably. When parents' literacy behaviors were referred to in the current study, this implies parents' self-reported literacy behaviors.

Overview

The following is an outline of the presentation of the study. In Chapter I, the purpose and background were introduced. Chapter II contains the literature review and it specifically focuses on some of the key research examining storybook reading. Chapter III describes the research methodology and in Chapter IV the findings based on data analysis are presented. Chapter V is a discussion of the findings and suggests implications of the research.

CHAPTER II: REVIEW OF THE RELATED LITERATURE

Introduction

This literature review was conducted to explore the relationships among parents' literacy beliefs, parents' literacy behaviors, parent-child interactions in book reading, and children's language and literacy achievement in families. First, theories and models of literacy are presented. Next, this review focuses on parents' beliefs about how young children learn to read and write. Factors related to storybook sharing, such as parents' beliefs, cultural diversity, parents' education and SES, children's age and competency, parents' and children's gender, and children's achievement were then reported. Following this, children's early and later literacy achievement were explored.

Theory and Models

Literacy as Social Practice

Over the last several decades, there has been a shift in thinking in that reading and writing are seen not just as a set of cognitive/linguistic skills but as complex social practices (Barton, Hamilton, & Ivanic, 2000). As Clay (1993) and Blackledge (1999) indicated, there is considerable variation in literacy practices, the meanings ascribed to literacy and the way in which literacy is mediated across and within cultural groups. Blackledge (1999) claimed that literacy development is influenced by qualities of individuals' engagement in particular literacy practices. Moreover, literacy practices include not only what people do with literacy but also their values, attitudes, feelings, and social relationships that are facilitated by and expressed through literacy (Barton &

Hamilton, 1998). Literacy is always situated within a social context, according to this view, and needs to be evaluated within this context.

Theorists within the "literacy as social practice" paradigm also argue that schools privilege certain literacy practices and dismiss or ignore others. Janes and Kermani (2001) pointed out "... as many theorists have demonstrated, schools have traditionally privileged an elite group by emphasizing language, content, and interactional behavior that is familiar to this group" (p. 458). Heath (1982) posited that it is generally accepted that "...whatever it is that mainstream school-oriented homes have, these other homes do not have it; thus these children are not from the literate tradition and are not likely to succeed in school" (p. 50). Referring to how storybook reading in middle-class homes embodies this privileging of particular literacy events, Heath elaborated:

> ... the mother points and asks, 'What is X' and the child vocalizes and/or gives a nonverbal signal of attention. The mother then provides verbal feedback and a label. Before the age of two, the child is socialized into the "initiation-reply-evaluation" sequences repeatedly described as the central structure of classroom lessons .... (p. 51)

Hence, parents' beliefs about literacy need to be addressed within this paradigm of literacy as social practice. Furthermore, it is important to be aware that some parents may feel that storybook reading is not crucial for children to become literate and may engage in other types of practices.

Vygotskian or Social Constructivist Perspective

From a Vygotskian perspective, the most rapid changes in behavior are expected when there is frequent modeling, practice, and immediate feedback in the use of emerging skills (Whitehurst & DeBaryshe, 1989). The Vygotskian or social constructivist perspective maintains that learning occurs in the context of shared meaningful activities, of which storybook reading is an example. According to Vygotsky

(1978), adults structure shared activities so that children produce more complex behaviors than they can produce on their own by creating a "zone of proximal development." Based on Vygotsky's work, DeBaryshe (1992) claimed that adults generally yield responsibility for the interactions as the child is able to function more independently. Hence, the child would take more control over the interaction as he or she becomes more competent. Parent-child interaction in book sharing assumes an important role in a social constructivist perspective of early literacy development.

Theories of Reading

Theorists and educators tend to view learning to read from either a constructivist or top-down perspective, a skills-based or bottom-up perspective, or a combination of both of these perspectives (Evans et al., 2001). Those who view learning to read from a constructivist perspective see reading as a natural extension of spoken language in which meaning, purpose, and co-construction of the meaning of the text are emphasized. Advocates of this view include Edelsky, Altberger, and Flores (1991), K. Goodman (1967) and Smith (1982). Others view reading as the skill of translating print into speech, and this skill is taught by direct instruction, which involves learning to break the code. Advocates of this view include Adams (1991), Beck and Juel (1995), and Ehri (1994). Others believe that reading is an interactive process and acknowledge the importance of a constructivist (or top-down) and a skills (or bottom-up) orientation (Evans et al., 2001). Currently, many teachers base their instruction on a balanced approach to literacy instruction in which meaningful literature is used to teach children how to read, and some skills are taught in isolation through direct instruction (Stahl,

Duffy-Hester, & Stahl, 1998). However, the debate about how best to teach children to read continues (Stahl et al., 1998).

Distancing Model

It is widely believed that adult/child interactions surrounding the sharing of storybooks is significant for children's literacy understanding (DeTemple & Beals, 1991; Snow, 1993), although there is less consensus on how certain types of interactions relate to different aspects of children's literacy knowledge. Sigel (1970) defined distancing as "behavior or events that separate the child [individual] cognitively from the immediate behavioral environment" (pp. 111-112). It refers to the interposing of physical and/or psychological space between the person and the event (Sigel, 1993). During parent-child book sharing, certain types of questions place more cognitive demands on children than do others. As well, certain statements exemplify more or less cognitive distancing. Low-level distancing utterances include labeling, focusing on pictures, and repeating text. High-level distancing utterances involve explaining, evaluating, and extending text (Leseman & de Jong, 1998). Parents' interaction style is important for the thinking effort it invokes and the related cognitive skills it helps to develop in children.

Torr and Clugston (1999) based their research on Sigel's (1970) distancing model. They claimed that questions that seek a yes/no response (that seek to confirm) or demand information about person, location, or time (e.g., who? what? where? when?) do not encourage children to engage in abstract reasoning, unlike questions (e.g., how? why?) that require some explanation about cause and effect, consequences, or processes. Moreover, " ... questions which make 'higher order' cognitive demands on children ... are thought to promote literacy understandings in terms of developing skills of

hypothesizing, predicting, and understanding the relativity of one's own perspective relative to others" (p. 31). Haden, Reese, and Fivush (1996) claimed that prediction and print interactions are considered highly demanding for children while association interactions are considered moderately demanding, requiring some distancing from the present to relate the text to past or future experiences. Snow (1991) addressed the importance of certain types of talk about text for story comprehension. She suggested that talk that goes beyond the immediate text, such as predicting outcomes and evaluating parts of a story, foster the type of cognitive skills necessary for higher-level comprehension. She emphasized the importance of such "decontexualized language" for children's literacy achievement.

Developmental Model of Interactive Reading

Bus and van IJzendoorn (1995) designed a model of interactive reading based on their study of 3-year-old children's interactions with parents in storybook sharing. This model provides insight on the ways in which parents interact with their children in shared book reading along a developmental scale. Their scale of interactive reading entails the following:

- comments on the pictures
- extended discussions, primarily about pictures, accompanying the reading
- some discussion, primarily about the story plot, accompanying the reading
- text reading, focusing the child's attention on the print.

This scale ranges from commenting on pictures at the lowest level, to just reading the text and focusing on print at the highest level. Bus and van IJzendoorn (1988) found that print interactions with children were based on children's previous experiences with

text and children's age. That is, children with more shared book experiences and older children interacted with parents at higher levels of this model. Bus and van IJzendoorn (1995) claimed that their model of interactive reading, in combination with Sulzby's (1985) model of independent reading, may lead to a more comprehensive theory of emergent literacy. They suggested that future research should test their developmental model of interactive reading.

Parents' Beliefs and Behaviors

According to Goodnow (1988), "accounts of socialization are incomplete without attention to what parents consider they or their children are doing" (p. 287). Parents' belief systems may be a key for understanding their behavior when they read with their children. Indeed, some research has shown that parents' beliefs relate to their actions in teaching and learning activities (DeBaryshe & Binder, 1994; McGillicuddy-DeLisi, 1982). DeBaryshe and Binder (1994) suggested that some studies that have not shown a relationship between parents' beliefs and actions may have focused on a broad definition of parents' beliefs. McGillicuddy-DeLisi (1982) claimed that parental beliefs that were more global in nature (e.g., children learn through an accumulation of knowledge) did not contain such clear-cut behavioral expressions and, thus, the link between behavior was not as clear because of the multiple options of expression. Hence, an examination of domain-specific beliefs and directly relevant behavior may show possible links between beliefs and actions.

It is common knowledge that most parents want their children to do well in school and have a good education. Many children come to school having had many literacy

experiences. These experiences often relate to, and reflect, parents' beliefs about what is important for children's literacy development (Janes & Kermani, 2001). Parents' beliefs about education, in particular children's reading development, are of prime importance because reading permeates the entire school curriculum (Cook, 1988) and, thus, reading relates to children's overall academic success.

Literacy Learning in Schools

Some research has shown that parents' beliefs relate to their knowledge of literacy learning in schools. Weinberger (1996) examined working-class and middle-class Caucasian parents' beliefs about the importance of certain home literacy experiences and parents' knowledge of school literacy practices. Weinberger's study of 42 parents of children aged 3, 6, and 7 showed that children with literacy difficulties had parents who knew less than other parents about literacy in school, and were less likely to be able to give examples of everyday literacy occurring at home. It is reasonable to assume that parents who are more aware of the types of literacy activities in school may engage with children in similar activities in the home to support literacy development in school. It has been suggested that reading at home to young children familiarizes children with the discourse structures used at school (Heath, 1983). Hence, this familiarity could place children who are read to at an advantage by making a smoother transition from home to school literacy.

Some parents want more school knowledge than they currently possess about how to prepare children for reading. A British study by Hannon and James (1990) of 40 parents and their 3- and 4-year-old children attending nursery class indicated that parents knew relatively little about literacy learning that took place in nursery school. Parents

believed that literacy was important for their children at this age and engaged with children in a variety of activities at home, such as helping children learn the alphabet. Hannon and James found that these parents would have welcomed more guidance from nursery teachers about other ways to support their children's literacy development. As one parent commented: "a lot of parents don't do things with their kids because they don't want to do it wrong" (p. 263). Hence, for some parents, schools are the authority when it comes to literacy practices and, thus, parents' beliefs about literacy would be influenced by what is considered important by the school.

McNaughton, Kempton, and Turoa (1994), investigating families living in New Zealand, reached similar conclusions to that of Hannon and James (1990). That is, a lack of communication between parents and teachers of young children may provide a schooling disadvantage for some children. Maori parents in McNaughton et al.'s study believed that education was important and had ideas about the nature of child development, but were unsure about school-based knowledge and forms of teaching and learning. Maori parents believed that promoting writing, for example, was not a family responsibility, but the primary responsibility of teachers, because the teachers were "... the ones that knew what they were doing" (p. 6). As well, parents felt that children would learn things when they were ready.

Some parents believe that literacy learning is developmental and that we must wait to engage children in activities appropriate for their level. Neuman, Hagedorn, Celano, and Daly's (1995) research with African-American mothers showed that 6 of the 19 mothers in peer group discussions felt that when children were ready, they would try to read. As one mother said, "When they're ready, they will try, so you just wait until

they're ready to read" (p. 816). In contrast to the parents in Neuman et al.'s study, Anglo/European parents in McNaughton et al.'s (1994) study tended to adopt explicit developmental goals, for example, expecting their children to learn to write their names by age 5, before going to school. Anglo/European parents were also explicitly teaching children aspects of reading and writing that were valued at school, and, therefore, children were going to school with more "valued" knowledge. McNaughton (2001) claimed that parents who do not have an intimate knowledge of schools and who have access to limited resources are constrained in their ability to help children in the transition into school settings. McNaughton concluded by stating " ... the development of shared understanding with educators about specific literacy activities and about the nature of educational guidance is an important component of effective transitions for children from diverse communities" (p. 50).

Stipek, Milburn, Clements, and Daniels (1992), in a study of 551 parents of young children, found that parents' literacy activities covaried with their beliefs about how best to teach basic skills to preschool children. Furthermore, parents who agreed with teacher-directed methods reported reading to their children less often and used flashcards and workbooks more often than parents who disagreed with these methods.

Overall, then, these studies suggest that parents' beliefs about effective school literacy learning were related to their engagement with children in literacy activities in the early years. It is important for schools to consider the beliefs of parents and the ways in which they engage with their children in literacy activities so that schools can work with parents to optimize children's school success. For parents who are uncertain of ways to foster their child's literacy development, schools should provide more guidance. It

seems that many parents would welcome more guidance from educators on how best to support their young children's literacy development.

Storybook Reading

It has long been assumed that reading to young children is important for their literacy development (Pellegrini, 1991). Moreover, "there is widespread agreement that joint parent-preschooler reading is a highly beneficial practice that promotes the acquisition of literacy-related knowledge and, consequently, paves the way for successful achievement" (Scarborough & Dobrich, 1994, p. 246). However, Scarborough and Dobrich claimed that the quantitative evidence to support this has not been entirely convincing. The following is some of the key research related to storybook reading.

Parent's Beliefs and Interactions

Culture

Parents' beliefs about literacy often vary depending on their cultural background. In an exploratory study, Gunderson and Anderson (2003) combined interviewing and survey techniques to investigate the beliefs about literacy learning and teaching held by Chinese Canadian, European Canadian and Indo-Canadian parents. They found that cultural groups vary in their beliefs about how reading should be taught and the importance placed on interactions around text. In their study, many Chinese Canadian parents indicated that they were offended that their children were encouraged to predict while reading. They did not subscribe to the notion articulated by K. Goodman (1986) that reading is a "psycholinguistic guessing game" in which readers predict words on the basis of context. Only about one half of the Chinese Canadian parents viewed learning to read as holistic. These parents generally felt that workbooks and basal readers

were necessary to help children to learn how to read, which is consistent with a traditional or skills-based view of learning to read. The Indo-Canadian parents also felt that workbooks and basal readers "helped a lot" in children's literacy learning. European Canadian parents ascribed less importance to basal readers and workbooks. European Canadian parents also thought it important that children interrupt and ask questions when engaging in shared reading, which more clearly resembled an emergent or holistic view of literacy learning.

Based on their work with non-mainstream families, Anderson and Gunderson (1997) concluded that most of the parents from the non-mainstream groups opposed aspects of emergent literacy. For example, parents believed that accuracy in literacy knowledge was important from the beginning, rather than that accuracy would evolve with practice. These parents generally felt that teachers should provide direct instruction and not be seen as facilitators of children's learning, and that memorization should be the focus of evaluation.

Evans (1998), working with 63 parents and their 4- and 5-year-old children from middle-class Caucasian backgrounds, found that half of the parents focused on phonics in coaching their own children or in remediating reading difficulties. Parents listed basal readers, the use of phonics, and reading aloud as the most common activities in explaining how they themselves learned to read. When parents were asked which components of a reading instruction program were most important, they listed items associated with learning to decode the alphabetic script. These included sounding out unfamiliar words, learning letter-sound correspondences, and practicing the alphabet. Lowest ratings were given to using meaning approaches, such as picture clues,

knowledge of the topic, and context clues to recognize words. Even though some researchers (e.g., DeBaryshe, 1992) have shown that many mainstream parents have an emergent literacy view when it comes to interacting with their child in book reading, Evans suggested that mainstream parents are much more traditional in their literacy beliefs when it comes to reading instruction. Parents' beliefs may relate to their children's level of literacy development, in that beliefs may become more skills-based as children progress in literacy development, although Anderson (1995a) found that this was not the case with the parents with whom he worked. Evans et al. (1998) concluded that parents seem to rely on their memories of how they themselves learned to read as a basis for determining what activities were important in learning to read and what activities to provide their children.

Bus, Leseman, and Keultjes (2000) studied how parents from different cultural groups mediated a simple narrative text to their 4-year-old children. These researchers studied 19 Surinamese-Dutch, 19 Turkish-Dutch, and 19 Dutch low SES mother-child dyads. Most mothers from ethnic minorities in their study stated that book reading was not so much for pleasure as for learning words or reading conventions, and this was reflected in their interactions with text. The ethnic minority groups' focus on reading conventions in Bus et al.'s study showed similarities to Gunderson and Anderson's (2003) findings in which ethnic minorities ascribed more importance to the conventions of reading than to exploring meaning in text. Mothers from ethnic minorities were less inclined to deviate from text than were non-minority mothers. Interactions between dyads from ethnic minorities were characterized by low cognitive-demand behaviors such

as naming details. The fact that all groups in Bus et al.'s study were of low SES meant that differences in parents' beliefs and behaviors could not be attributed to SES.

Leseman and de Jong (1998) found that parents' recreational (i.e., social-interactional) literacy was more strongly related to the instructional quality of their interactions with children in storybook reading than was parents' informational literacy (i.e., reading genres of books considered critical/educational). Parents' instructional quality was evaluated through their narrative-focused explanations and their evaluations and extension of text. Not all cultural groups believe that evaluation of text when reading is an important part of children's literacy development (see Anderson, 1995b). Nevertheless, the parents in Leseman and de Jong's study, who came from various ethnic and socio-economic backgrounds and who engaged in reading for pleasure, were also those parents who tended to engage in higher-order thinking skills with their children during book interactions.

There may be many types of activities besides book reading that can help promote children's literacy development. However, with a strong current emphasis on book reading in schools (Pellegrini, 1991), the need to understand cultural beliefs about book reading and shared reading practices is crucial. Janes and Kermani's (2001) study with low-income immigrant families showed that despite the efforts of child-care workers to introduce what has generally been thought to be effective ways of interacting with children in book sharing (i.e., asking more open-ended and higher level thinking questions), those involved in this intervention program experienced problems because parents' beliefs and values were not considered when designing the intervention. Books that contain pictures of people from different cultures may not be enough to encourage

parents to read to their child. The beliefs and knowledge considered important by certain cultural groups may need to be represented in such books for parents to take an interest in them, as Janes and Kermani demonstrated.

Research conducted with parents from different socio-cultural backgrounds seemed to suggest that children's literacy development was important for the parents in all of these studies. However, there were differences in terms of what parents believed was important for children's literacy development. There were also differences between cultural groups in how they supported young children's literacy development based on their beliefs about literacy. It seems that certain cultural groups support a more traditional view of literacy, while others tend to have more holistic beliefs about literacy development.

Education and SES

As with cultural background, educational level and socio-economic factors seem to play a role in parents' beliefs and their interactions with children. Fitzgerald, Spiegel, and Cunningham (1991) investigated relationships between parents' perceptions of emergent literacy and their own literacy level. They found that highly literate parents held beliefs consistent with an emergent literacy perspective but that lower literate parents held more traditional perceptions of literacy learning. The results of the survey indicated that parents varied in their beliefs about the importance of different kinds of literacy experiences in the development of early literacy skills. All of the parents believed that informal literacy experiences like book reading were important for children's literacy development. However, not all parents agreed on the importance of more structured experiences, such as the use of preschool workbooks. Lower literate

parents wanted a structured approach in literacy teaching, whereas highly literate parents preferred less structure. Similarly, Stipek et al. (1992) found that less well-educated parents evidenced stronger support for didactic methods (such as flashcards) than did well-educated parents.

DeBaryshe (1992) studied 73 low-income and middle-to-upper-class mothers and their 2- to 5-year-old children and concluded that there were some differences in reading style based on SES. High SES parents asked more questions (34% more) and provided more feedback (30% more) to their children when reading aloud. High SES mothers also engaged in more conversation (by 20%) and reading of the text (19%). It appears that high SES mothers believed that interaction around text was an important part of children's literacy development, including children's interpretation of the text. The DeBaryshe study demonstrated that high SES mothers tend to interact with children in ways consistent with an emergent literacy perspective more so than did lower income mothers. She argued, "The strong role of maternal belief systems suggests that intervention efforts must be designed to address parents' values and goals" (p. 18).

In some studies which examined only parent-child interaction in storybook reading and SES, rather than parents' beliefs, results showed that low income parents focus their children's attention more on pictures than on print (e.g., Elster, 1995; Kerr, Mason, & McCormick, 1991). However, Shapiro, Anderson, and Anderson's (1997) research with middle-class parents revealed a similar finding as that in the studies with low SES parents. Mothers of 4-year-old children focused mostly on the illustrations rather than on print when book sharing with their child. Also, Yaden, Smolkin, and

MacGillivray (1993) found similar results with high SES families, which may indicate that other factors besides SES may play a role in parents' beliefs and interactions.

DeTemple and Snow (1996) coded the extent to which maternal utterances moved away from what could be seen on the page. They found that those mothers with the lowest score on a scale that assessed the family's literacy involvement used very little non-immediate talk during book sharing. Hence, more cognitively demanding interactions were prevalent with more literate or educated parents. Generally, previous research has shown that parents from lower SES backgrounds seem to have more skills-oriented beliefs and interact with children in more low-cognitively demanding ways than those parents from higher SES backgrounds. Some research suggests that SES plays a role in the types of storybook interactions.

Children's Age and Competency

Children's age may also be important for how parents and children interact during storybook reading. Martin (1998) examined mothers' interactions during book reading with 6-, 12-, 18-, and 24-month-olds, as well as with 4-year-old children. Mothers in this study were found to use three basic types of text deviation strategies: simplification, cognitive elaboration, and engagement. Simplification strategies involved labeling and word/sentence omissions. Cognitive elaboration involved mothers adding words, phrases, or sentences to extend the text. Mothers' engagement strategies involved asking questions, such as to elicit a personal reaction or to confirm predictions. Martin found that for both expository and narrative texts, mothers of 4-year-old children elaborated on important concepts in the text more often through extended discussions than did the mothers of the 24-month-olds. Mothers of 4-year-olds used discussions to extend their

children's understanding of concepts in the expository text more than any other strategy. These mothers also asked more questions that stimulated children's engagement than did mothers of younger children.

In a study with low-income families, Dickinson, DeTemple, Hirschler, and Smith (1992) examined children's book reading experiences with their mothers when the children were 3 and 4 years old. They coded talk about texts as immediate (e.g., labeling pictures), non-immediate (e.g., recall, analysis), organizational, or extending (e.g., requesting clarification, feedback). Their findings revealed that with 3- and 4-year-old children, talk around books was dominated by "immediate talk." However, when children were 4 years old, there was less extending talk by mothers, and more extending comments by children than when children were 3.

Previous studies have shown that mothers extend the text once book-reading routines have been established (Altwerger, Diehl-Faxon, & Dockstader-Anderson 1985; Ninio, 1980). Ninio (1980) found that in high SES families, there was a significant increase with children's age in the behaviors parents used to elicit information from storybooks. For example, there were more "where" questions used with younger children than "what" questions. The findings suggest that children's age or developmental level with text may be important in influencing the strategies parents use during book sharing with young children. Hence, children's age needs to be considered when evaluating the quality of parent-child interactions in storybook reading.

Children's competency level may also play a role in parent-child interactions with text. Pellegrini, Brody, and Sigel (1985) studied 3- to 5-year-old children with communicative (CH) and non-communicative handicaps (NCH) in terms of the

interactions with their parents during storybook reading. These families were generally of high SES. The cognitive demand associated with the questions during book reading was coded according to a derivation of Sigel's Distancing Hypothesis (Sigel & McGillicuddy-DeLisi, 1984). Low cognitive demand strategies included asking children to label or describe a picture or to reproduce an utterance. Medium cognitive demands resulted in children sequencing events, inferring similarities and differences, and classifying. High cognitive demands included evaluations, inferring cause and effect, generalizing and resolving conflicts. Although Pellegrini et al. found no differences between mothers' and fathers' language with their children, parents used more low demand strategies with children with CH than did parents who read to children with NCH. There was also a greater frequency of conversational turns observed between CH children and their parents. The researchers suggested that this result might indicate that parents were trying to involve their children in the conversation by eliciting children's language. The implication is that parents' perceptions of children's abilities related to parent-child interactions with text.

Parents' and Children's Gender

Very little research has examined parents' and children's gender with regard to interactions in storybook reading. Most studies examining parent-child interactions in storybook sharing involve mothers (Bus, Belsky, van IJzendoorn, & Crnic, 1997). One of the few studies that examined parents' gender was conducted by Hayden and Fagan (1987). Findings of this study showed no differences between mothers and fathers in the nature of the interaction strategies used with their children in storybook reading. Pellegrini et al. (1985) did not find any effect of parent gender on storybook reading

strategies, such as questioning, verbal and emotional support, or paraphrasing. Bus et al. (1997) examined parents' gender in relation to attachment security and storybook interactions. They found some differences based on parents' gender in that mothers and fathers did not display a similar quality of book reading with their sons. (Only boys were included in the sample.) The quality of interactions in storybook reading between mother and child was dependent on the security of the parent-child relationship. That is, high quality book reading depended on the interactional context with insecure-avoidant mother-son pairs having difficulty starting interactions about the meaning of pictures and text (considered high quality interactions in their study). In contrast, for father-child dyads, there were no attachment-group differences and the quality of interactions was not as high as for those of securely attached mother-son pairs. Thus, some mothers interacted in higher demanding ways with their sons than did fathers. Some studies (e.g. Evans et al., 2001) have found no differences in results based on children's gender. However, Evans et al. (1998) reported that when 5- to 7-year-old children made oral reading errors, parents pointed out letter details as a clue to decoding to boys more frequently than they did to girls. Thus, there was more of a skills-focus in helping their sons learn to read than there was for girls.

To reiterate, most studies examining parent-child book sharing involve only mothers. Clearly, further research is needed to examine the role of gender in interactions with storybooks. Even less is known about parents' literacy beliefs in terms of gender. Such research may provide insight as to reasons why study findings suggest gender differences in aspects of children's early reading achievement (e.g., Lynch, 2002).

Achievement

"Becoming literate is thought to start at an early age, long before formal instruction in reading and writing begins" (Leseman & de Jong, 1998, p. 294). One of the ways in which parents help their children become literate is through storybook reading. Based on previous research with mainstream groups (e.g., Bus, van IJzendoorn, & Pellegrini, 1995), reading aloud to young children positively correlated with oral language skills, emergent literacy, and later reading performance in elementary school. A review by Mason and Allen (1986) suggested that the presumed benefits of storybook reading are numerous, including the acquisition of word knowledge and novel vocabulary, increased familiarity with the syntax of written language, and heightened awareness of written letters and words.

Whitehurst et al. (1988), in one of the first experimental studies on storybook interactions, examined the quality of interactions of shared book reading with young preschoolers (approximately 2-3 years of age) in relation to children's language development. In an intervention program, parents in the experimental group were encouraged to promote active participation by the child (e.g., by asking open-ended questions), to provide informative feedback (e.g., by recasting the child's utterances in more correct form), and to adjust their behavior appropriately to the child's current linguistic level. Parents of the 15 children in the control group were told about the importance of reading to their children, but were not trained on specific book-reading procedures. The experimental group asked more challenging questions, relied less on printed text, and provided more contingent feedback than the parents in the non-experimental group. Contingent feedback referred to maximally informative feedback,

for example, incorporating expansions and other forms that might highlight differences between what the child had actually said and what he or she might have said. The results of the study showed that the expressive, but not receptive, language scores of the children in the experimental group were significantly higher than those of the control group. This result was consistent with other research (e.g., Neuman, 1999) which showed that children's expressive language was not directly related to the frequency of storybook reading. Perhaps just being read a storybook is enough to relate to children's receptive language development. These findings suggested that the types of parent-child interactions could benefit children's expressive language.

Kertoy (1994) examined the types of interactions between White, middle-class parents and children aged 3 to 6 years old. In one of the few studies to compare questions with comments, Kertoy found that questioning by the adult contributed to a greater percentage of the children's utterances related to story structure and print than did commenting or general story reading by the adult. However, commenting by the adult contributed to a greater percentage of utterances by the child related to story meaning than did questioning or general story reading by the adult. It has been shown that when children have opportunities to provide expanded comments, their story comprehension improves (Gambrell, Pfeiffer, & Wilson, 1985). Kertoy recommended that parents and teachers combine questioning and commenting during storybook reading to maximize opportunities for lengthier comments by children. However, because her study was conducted with middle-class groups, the ways in which these adults and children interacted in storybook reading may be different than for other SES and cultural groups.

Ewers and Brownson (1999) examined 66 children assigned to active and passive storybook reading groups. While listening to a narrative, the active group participated by answering a "what" or "where" question immediately after each sentence containing a target word. The passive group participated by listening to a recast containing a familiar synonym for each target word. The results of this study showed that children in the active group (i.e., those who were asked questions) acquired significantly more words than those children in the passive group. In a similar study, Senechal, Thomas, and Monker (1995) found that 4-year-olds who were asked what/where questions or who pointed to illustrations depicting the target word acquired significantly more words than peers who only heard the text read verbatim. Vocabulary knowledge has been shown to be a strong predictor of reading comprehension and academic achievement (Ewers & Brownson), and these studies signify the importance of having children actively involved in the shared-reading experience.

Senechal et al. (1998) examined whether storybook exposure and the direct instruction of reading and writing skills reported by middle-class Caucasian parents were related to the oral-language skills and written-language skills of children in kindergarten ($N = 110$) and Grade 1 ($N = 58$). This was one of the first studies to examine oral language as separate from written language knowledge. Results showed that storybook exposure explained statistically significant variance in children's oral-language skills but not in their written-language skills. In contrast, parent teaching explained statistically significant variance in children's written-language skills but not in their oral-language skills. Parent teaching referred to parents' attempts to impart knowledge about reading and writing. Oral language measures referred to children's vocabulary, listening

comprehension, and phonological awareness, and written language measures referred to print concepts, alphabetic knowledge, invented spelling and decoding. According to Senechal et al., the finding that storybook reading did not account for variance in written language skills contradicted Bus et al.'s (1995) conclusion that storybook reading accounted for 8% of the variance in children's written-language skills.

Evans, Shaw, and Bell's (2000) research supported Senechal et al.'s (1998) findings. They found that parents' teaching of the very specific early literacy skills (such as the alphabet) predicted subsequent reading skills, whereas exposure to books at home did not. These researchers found that reading to children, in contrast, was more likely to influence children's vocabulary development than their ability to decode words. Whitehurst et al.'s (1994) research also revealed similar findings. Direct instruction or teaching appeared to have an effect on early spelling and print concepts, but it did not appear to affect children's oral language skills in comparison to those children who were merely read stories.

One of the proposed contributors to children's literacy success has been parent-child book sharing. Researchers have revealed different ways in which parents' interactions with their children in storybook reading benefit children's language and literacy achievement. However, there is surprisingly little experimental research designed to test hypotheses about the mechanisms through which reading aloud affects children's development (DeBaryshe, 1992). Also, from this review it can be seen that more studies have focused on children's language, rather than literacy, outcomes of storybook reading interactions. Recent research seems to suggest that language gains are

more pronounced than literacy gains when parents share storybooks with their young children.

Culture

Leseman and de Jong (1998), in their study of Turkish, Surinamese, and Dutch families living in the Netherlands, found that there were differences in children's receptive knowledge of Dutch words after parents and children engaged in storybook reading. Receptive vocabulary was a measure of children's oral language development. Turkish children's receptive knowledge of Dutch words at ages 4 and 7 was two to three standard deviations below Dutch children's vocabulary. Interactions during book reading between mothers and their children revealed some differences among these cultural groups. In the Turkish group, relative to both of the other groups, mothers pointed far less to the pictures in the book and also uttered (slightly) fewer picture labels and picture descriptions. Turkish mothers seemed to make less use of pictures in the picture book to scaffold their young children's understanding of the story. Furthermore, the percentages of utterances requiring literal repeating and completing of read sentences were very high in both the Surinamese and the Turkish group as compared to the Dutch group. Higher level utterances (i.e., explaining, evaluating, and extending utterances) were more predominant among the Dutch group than in the other groups and this seemed to relate to children's vocabulary knowledge. To this point, Leseman and de Jong's study is one of the few quantitative studies to examine the quality of parent-child interactions in storybook reading in relation to children's achievement, involving a sample of groups from different cultural backgrounds.

Education and SES

A recent study by Neuman (1999) examined the impact of a literacy intervention program on economically disadvantaged children in child-care centers. Children involved in the "books aloud" intervention program, which focused on story extenders, causal relations between events, and retellings, had significant differences in their literacy development in comparison to the control group. At the end of the school year, the "books aloud" children showed greater gains than the control group on concepts of print, letter name knowledge, concepts of writing, and concepts of narrative. In a follow-up study six months later, gains made by the children in the "books aloud" program were still evident. This research has shown that an intervention program that teaches adults "effective" ways of interacting with children through book sharing can provide many early literacy benefits to children of low SES. However, in Neuman's study, neither children's environmental print knowledge nor their receptive language skills appeared to be influenced by the intervention.

Bus and van IJzendoorn (1995) found high SES mothers were more inclined to explain complex inferences than were low SES mothers when children were experienced in reading storybooks. Explaining complex inferences helps a child to understand the story plot by engaging the child in the thinking process (Bus & van IJzendoorn). Complex inferences are part of the process of reasoning and are thought to make "higher order" demands on children (Torr & Clugston, 1999). According to Bus and van IJzendoorn, parents who engage children in higher level thinking skills are thought to benefit children's literacy learning by promoting literacy understandings in terms of

developing skills of hypothesizing, predicting, and understanding the relativity of one's own perspective to others.

Frequency

More research has examined the frequency of storybook reading in relation to children's achievement than the quality of storybook interactions (Senechal et al., 1998). Bus et al. (1995) reviewed empirical evidence supporting parent-preschooler reading and several outcome measures. In particular, they focused on studies related to the frequency of book reading to preschoolers. Results from their review showed that parent-preschool reading was related to outcome measures such as language growth and reading achievement. Specifically, book reading frequency affected acquisition of the written language register, such as letter naming and name writing. Findings of that review showed that the frequency of parent-preschooler reading was not dependent on the SES of the families. That is, there was no relationship between a family's SES and the number of times book sharing occurred. Bus et al. concluded that even in lower-class families with (on average) low levels of literacy, book reading frequency affected children's literacy skills.

Lyytinen, Laakso, and Poikkeus (1998) studied 108 Finnish 2-year-olds and their parents during book sharing sessions. Children who frequently engaged with their parents in shared book reading were found to be linguistically more advanced than children who engaged less frequently with their parents in shared reading. Children's language skills were determined by *The Toddler Communicative Development Inventory (CDI)* (Fenson et al., 1994). Specifically, the frequency of mothers' shared reading with their children correlated significantly with children's lexical and grammatical skills.

Lyytinen et al. concluded that linguistically and cognitively skillful children were more interested in printed material than were children less linguistically and cognitively advanced. Because these children had a large vocabulary, the researchers speculated that from early on, the larger vocabulary helped them to follow their parents' story reading.

Whitehurst et al. (1994) also claimed that book-reading frequency was important. They found that book reading at home influenced children's vocabulary development, while teaching alphabet knowledge in the child's daycare setting influenced knowledge of reading and writing conventions. Similarly, Evans et al.'s (2000) research revealed that shared book reading at home made no contribution to the prediction of literacy skills of letter name and letter sound knowledge in kindergarten. However, the frequency of being read to was correlated with children's vocabulary scores. The frequency of activities entailing letters, such as learning letter names and sounds and printing letters, predicted phonological sensitivity in their study. Overall, then, the findings seemed to suggest that reading frequency related more to children's oral language rather than to their written language knowledge.

Children's Language and Literacy Achievement

Early Achievement

Development with Text

Some researchers have proposed stages of development involving children's early interaction with text. Clay (1979b) proposed that before children go to school they "read" books by inventing the text. Clay identified five stages of emergent reading. In Stage 1, children have knowledge that print can be turned into speech. Children at this

stage are aware that print and language are equated. In Stage 2, young children use a special type of talking found only in books, such as "here is a ... ." In Stage 3, children are aware that the picture is a guide to the message found in books and they may invent statements which are appropriate to the picture but which are not an exact rendering of the text. During Stage 4, some sentences from the text are almost memorized and in Stage 5, children construct the sentences from memory of the text, picture clues, and visual cues from letters. Clay also claimed that early reading behaviors involved awareness of left and right sides of a book, orientation to the open book, and observing directional behaviors, such as a left to right orientation.

Sulzby (1985) studied young, mostly middle-class, children's interaction with text. She categorized kindergarten children's attempts at storybook reading into several categories. The categories included (from higher to lower level): attempts governed by print; attempts governed by pictures, stories formed; attempts governed by pictures, stories not formed; and refusals (low level) and/or dependent reading. Sulzby claimed that children who refuse to read at a low level do not give evidence that they conceive of needing to know more about print in order to be able to read and, thus, are judged less proficient in emergent reading. Sulzby also claimed that some children will refuse to read before the attempts governed by print category because they are aware that they cannot actually read the text. This is referred to as a high-level refusal.

Sulzby's (1985) second study examined 2-, 3-, and 4-year-olds who were read two books per session for four sessions spaced over one year. Children's reading attempts fell into the categories listed previously. Sulzby found that children's range and distribution within these categories changed predictably with increased age, such that lower levels of

the scheme, including low level refusals and dependent attempts, were frequent with the 2-year-olds, and the higher levels were increasingly represented with the older groups. Anderson and Matthews (1999) found that students of low SES do not necessarily follow Sulzby's scheme of storybook reenactment. This might suggest that Sulzby's scheme is not appropriate for all cultural and SES groups.

Other Factors

Researchers have stressed a variety of factors that are significant for successful reading. Adams (1991) stressed the importance of letter recognition in children's success in learning to read and claimed that individual letter familiarity was a strong correlate of reading achievement among beginners. She also claimed that the speed and accuracy of letter naming was an index of the thoroughness or confidence with which the letters' identities have been learned and the automaticity or effortlessness with which letter recognition occurs. Similarly, Chall (1967) claimed that knowledge of the names of letters hastens children's knowledge of their sounds because it mediates their ability to remember the sounds.

Researchers have suggested that phonemic awareness is important for early reading development. Mattingly (1984) argued that in order to learn to read, children need to segment words into phonemes so that they can pair phonemes with graphemes. Torgesen and Wagner (1998) claimed that phonological ability was a more powerful cause of variability in the rate of growth in early word reading skills than any other cognitive variable, including general verbal intelligence. According to Byrne, Freebody and Gates (1992), children who were relatively strong in phonological awareness in

kindergarten, before reading instruction began, typically learned to read more easily than those with relatively delayed development in this area.

K. Goodman (1976) agreed that mastery of the phonological system, as well as the grammatical system, is an important part of the reading process. However, he argued that successful reading must involve meaningful interpretation. He proposed that materials used in the teaching of reading at all stages must necessarily be meaningful. K. Goodman claimed that the development of reading competence was best achieved when the learner's focus was on the content of materials and not on reading itself. As expressed by Wells (1985):

> Being able to decode new words and spell conventionally are important abilities but to focus on them to the near-exclusion of the content and purpose of written communication, and of the mode of thinking that these characteristically involve, is to stunt the development of literacy rather than to promote it. (p. 249)

Snow (1983) suggested that the ability to use decontextualized language is important in children's early literacy development. She claimed that many of the experiences identified as contributing to preschool children's literacy development (such as being told stories, being read to, receiving help in constructing descriptions of past events, being asked tutorial questions) contributed more to their ability to use language in a decontextualized way than to their literacy skills per se. Snow also claimed that children need both literacy (i.e., print-related) and decontextualized language skills to succeed in school, and that decontextualized skills require experiences that rely heavily on those provided in the home. Snow's research indicated that decontextualized language plays a significant role in children's success in reading.

Donaldson (1978) suggested that for many children, the earliest encounter with the written word is indirect, arising in the situation where a story is read aloud by an

adult. "This is already in a sense language 'freed' from context; but the experience of hearing a story is not so likely to enhance awareness as the direct grappling with words on a page" (p. 91). Donaldson suggested that word meaning plays a key role in young children's reading success. She claimed that children's reading acquisition is facilitated when the children are asked questions about word meanings when a story is read. Donaldson, as well as many others (e.g., Heath, 1983; Leseman & de Jong, 1998), considered conversation around text important for children's reading success.

Overall, then, it seems that diverse factors are important for children's literacy achievement. Researchers have claimed that specific knowledge, such as phonological awareness, decontextualized language, and word meaning, contributes to children's overall success in reading.

Later Achievement

Studies have indicated that children's early literacy experiences relate to their later literacy success (Evans et al., 2001; Stevenson & Newman, 1986) and their overall success in school (Halle, Kurtz-Costes, & Mahoney, 1997). There is little debate that children's acquisition of literacy starts well before the onset of formal instruction in reading (Teale & Sulzby, 1986). For example, Wells (1982) indicated that listening to a story read aloud during parent conversations at age 3 was significantly associated with oral language ability and knowledge of literacy at age 5, and reading comprehension at age 7. Moon and Wells (1979) found correlations between children's reading at age 7 and their preschool knowledge of literacy, including their metalinguistic awareness. Wells (1981) also found that reading ability at age 7 was related to children's language

before age 4, a range of preschool activities, preschool interest and concentration on literacy, and story comprehension.

Mason and Dunning (1986) tested 100 children at the beginning and at the end of the kindergarten and first-grade years. Their findings revealed that the children's comprehension at the end of first grade was predicted by their language understanding upon entering kindergarten. These authors concluded that children who could read and spell words in first grade were the ones who had demonstrated better reading and language skills in kindergarten and were more involved in literacy activities at home, such as reading storybooks with others, than those without the ability to read and spell words in first grade. Mason and Dunning suggested that home literacy fosters language understanding, which in turn eases the burdens of decoding and later reading comprehension. It is important that children have optimal literacy experiences before and during early schooling. Children who enter first grade at the bottom of the class usually continue to lag behind their classmates in reading (Calfee & Piontkowski, 1981). Furthermore, Stevenson and Newman's (1986) research showed that young children's knowledge of letter names and their ability to associate visual and verbal stimuli were related to their later high school reading achievement.

Summary

The present literature review includes relevant theories and perspectives on storybook interactions. The role of parents' beliefs in relation to their interactions with children in storybook reading and children's early achievement was presented. Many studies did not include an examination of parents' beliefs, particularly about how children

learn to read and to write, when examining parent-child storybook interactions. Those studies that have examined parents' beliefs found that parents from certain cultural backgrounds, such as East Asian, and those parents from low educational and socioeconomic backgrounds, tended to have more skills-based or traditional beliefs about literacy than did many mainstream families.

Various factors have been shown to be important when examining parent-child interactions and children's achievement, such as cultural background, education and SES, children's age and competency, and the frequency of shared reading. Most of the relevant research was conducted with White, middle-class families. However, this literature review included some studies with families from other cultural and socioeconomic backgrounds. The types of interactions in storybook reading tended to be less cognitively challenging with non-mainstream groups.

Some study findings suggested differences in children's reading achievement based on the types of storybook interactions, which, nevertheless, related to parents' SES and cultural background. This review has shown that parents who believed their children were at a more advanced developmental level in their interaction with text generally engaged with their children in higher level or more demanding interactions when book sharing. Also, in this review, more cognitively demanding interactions seemed to be associated with children's language and literacy achievement, which may suggest that "distancing acts" (Sigel, 1970) play an important role in young children's literacy achievement. The study findings also suggested that interactions in storybook reading that focus on print are more important for children's literacy, whereas reading frequency relates more to children's language achievement.

The present literature review has focused on some of the most foundational research related to children's early and later literacy development. Although engaging in storybook reading may be just one way of helping children learn to read, it seems that children's early experiences, especially with storybooks, can provide an important role in children's early language and literacy development. It appears that children's cognitive, linguistic and reading development involves a complex process in which joint storybook reading seems to play a role.

Research Questions

The present study addresses the need for information on the role of storybook reading in families from diverse cultural backgrounds and the possible association to children's achievement, as well as to provide pertinent information about parents' literacy beliefs, by answering the following questions:

1. Is there a relationship among parents' literacy beliefs, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement in families from diverse cultural backgrounds?
2. Are there differences in parents' literacy beliefs based on parents' educational level and parents' gender?
3. Based on parents' literacy beliefs, are there trends or patterns in parents' demographic characteristics, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement?

CHAPTER III: DESIGN AND METHODOLOGY

Introduction

The focus of the study was an investigation of the relationships among parents' literacy beliefs, parents' literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement in families from diverse cultural backgrounds. Parents' education and gender were examined to determine whether there were differences in parents' beliefs based on these factors. Parents' beliefs were also divided into three groups to examine possible trends in parents' demographic characteristics, parents' literacy behaviors, interactions with children, and children's achievement based on parents' beliefs. Furthermore, crosstabulations were used to confirm the findings of the *t*-test and to offer more information on the role of demographic factors in relation to parents' beliefs.

Sample

Participants included 38 children and their parents living in an urban area of Western Canada. Children were 3 (n = 12, range = 36-45 months, M = 41.17, SD = 2.72) or 4 (n = 26, range = 48-59 months, M = 52.92, SD = 3.90) years of age. Fourteen boys and 24 girls participated. Table 3:1 gives the breakdown of children's participation by gender and age. All of the children were involved in preschool programs. A total of 35 parents, mostly mothers (28 mothers and 7 fathers), were involved in this study. Three of the parents (two fathers and one mother) participated with two of their children. Parents were from diverse cultural backgrounds. The sample included East Asian Canadians,

South Asian Canadians, Mexican Canadians, European Canadians, and First Nations people. A majority of the school population in the area where the study was conducted are from diverse cultural backgrounds (Anderson et al., 2003). Parents' education level ranged from a high school diploma to university graduate degrees. Based on the educational background of parents, this seemed to indicate that the families in this study came from varying socio-economic backgrounds, ranging from low SES to upper-middle-class.

Table 1

Children's Participation by Gender and Age

	3 years	4 years	Total
Male	4	10	14
Female	8	16	24
Total	12	26	38

The families involved in this study were part of an ongoing longitudinal project on multiple literacies conducted by Anderson, Anderson, and Shapiro at The University of British Columbia. The researchers are examining relationships among parents' beliefs, parent-child book sharing interactions, and children's literacy development. This larger study also compares shared book reading in narrative and information texts. Furthermore, it investigates parent-child interactions in playing a board game to examine early mathematical development.

Daycares and preschools in neighbourhoods with diverse populations were contacted by the researcher. Preschool administrators distributed a permission letter and

information about the study to parents. Parents were asked to complete several literacy tasks with their children and to give permission for their children to complete several tasks individually. Only those families from diverse cultural backgrounds who could complete the tasks in English were asked to participate. This was requested because of the prohibitive cost involved with having videotapes and the instruments that were used transcribed in parents' first languages. Furthermore, the parent who most frequently read to the child was asked to participate to capture that which most naturally occurs in the home. Parents were told that the purpose of this project was to examine how parents from diverse cultural groups support their young children's multi-literacy development. The data required to answer the research questions in this study were utilized from information gathered as part of the larger study.

Data Sources

Parents engaged in two tasks in this study. Parents were interviewed using the *Parents' Perceptions of Literacy Learning Interview Schedule (PPLLIS)* (Anderson, 1995a). This instrument was used to determine parents' beliefs or perceptions of how children learn to read and write and to provide information on the types of literacy activities parents engage in with their children. Parents also shared a storybook with their children, *Swimmy* (Lionni, 1991) or *Mr. McMouse* (Lionni, 1992), and the shared reading session was videotaped in its entirety.

Children were asked to complete four tasks. In addition to shared book reading, three instruments were used to determine children's language and literacy development. *The Test of Early Reading Ability-2 (TERA-2)* (Form A) was used to determine children's

knowledge of the alphabet, conventions of print, and their ability to construct meaning from print (Reid et al., 1989). *The Kindergarten Language Screening Test (KLST-2)* was used to determine verbal language abilities (including receptive and expressive language competence) considered normal for children of a particular age group (Gauthier & Madison, 1998). Children also did a letter identification task (Clay, 1979a).

Parents' Perceptions of Literacy Learning Interview Schedule (PPLLIS)

The *PPLLIS* measures parents' perceptions or beliefs about how children acquire literacy (Anderson, 1995a) (Appendix A). This questionnaire was designed by Anderson and was based on Deford's (1978) instrument on beliefs about how children learn to read and write. The questionnaire consists of 33 statements and one open-ended question. From a review of the research, Anderson claimed that there were a number of salient features of emergent literacy and that these could be thematically grouped into reading, writing, and general literacy. Parents' views of literacy as more holistic or more skills-based were revealed by the questionnaire. The following are examples of statements on the *PPLLIS*: "A child learns to read by first learning the letters of the alphabet and their sounds, then words, then sentences and then stories", "A child should be encouraged to write only easy words and short sentences when he/she begins to write", and "A child needs workbooks and basal readers [examples shown to parents] to learn how to read and to write." The responses to the statements on the questionnaire include one of five choices: Strongly Agree (SA), Agree (A), Neutral or Undecided (N), Disagree (D), and Strongly Disagree (SD). All statements on the questionnaire were scored on a 5-point Likert scale with a higher score given for responses that represented a more holistic literacy perspective. A 5-point scale, rather than a 3-point scale in the original

questionnaire, was used to more accurately portray parents' beliefs. The data were scored by summing the raw scores.

The questionnaire was examined for validity. To establish face validity and content validity of the *PPLLIS*, two university professors with expertise in early literacy reviewed the *PPLLIS*. The instrument was then administered to a class of 40 senior undergraduate primary education students who had studied emergent literacy in-depth in language arts/reading methods courses. Half of the students were instructed to answer as if they believed in a traditional readiness orientation while others were asked to answer as if they subscribed to an emergent literacy view. The answers were then coded as to the anticipated responses and a percentage agreement of 95% was established (Anderson, 1995a). Chronbach's alpha was used to determine the reliability of the statements on the *PPLLIS*. For parents' responses to the 33 statements in this study, an alpha of .85 was calculated.

The questionnaire also contained an open-ended question asking parents to name the five most important ways they help their children learn to read and write. The responses for this question were scored based on frequency and divided into five categories: teaching literacy skills, encouraging/demonstrating/valuing literacy, participating in literacy activities, knowledge development, and other responses (Anderson, 1995b). The "teaching literacy skills category" involved parents' direct attempts to instruct children about reading and writing. "Encouragement/demonstrating/ valuing literacy" included parents' attempts to support children's literacy by encouraging and valuing children's literacy development. "Participation in literacy activities" involved literacy events in which parents and children collaboratively participated. The

"knowledge development" category included parents' attempts to promote children's general intellectual or cognitive development. Parents' responses that were included in the "other" category were those which did not fit any of the other four categories, for example, that of limiting television viewing. The sum for each category of this question on the *PPLLIS* were used in the analysis. Furthermore, the researcher listened to the audiotapes of parents' interviews to gain more in-depth understanding of the parents' responses on both the statements and the open-ended question. A graduate student specializing in literacy education also coded the entire data set for parents' responses to the open-ended question and the inter-rater agreement for the responses to the open-ended question was 87%.

Videotaping (Parent-child Book Sharing)

Parents were asked to share the storybook with their child as they normally would, in their home or at the preschool, as they preferred. They were told that this study would examine how they support children's literacy through storybook reading. Parents were videotaped while reading a narrative book to their child to reveal how they interact with children while book sharing. Narratives are the dominant genre in early childhood and primary school curricula (Haden et al., 1996); hence, the decision to use narratives in this study. Videotapes were transcribed in their entirety in relation to parent and child verbal and gestural interactions when book sharing. Data from the videotaping were analyzed using a modified category scheme developed by Shapiro et al. (1997). The coding scheme used utterances as the unit of analysis for verbal interactions (Sorsby & Martlew, 1991). This scheme was selected because of its focus on different levels of thinking skills associated with the various types of interactions. Unlike many instruments

that focus on the level of language development in parent-child interactions in storybook reading (e.g., Whitehurst et al., 1988), the purpose of this analysis was to examine distancing statements and questions from the immediate story context. Sigel (1970) defined the distancing model as behaviors and events that separate a child cognitively from the immediate behavioral environment. The researcher modified Shapiro et al.'s coding scheme in several ways. The most apparent of these were not including the attention to mathematics, and by including questioning as a category within each type of interaction rather than as a separate category. The "new knowledge" category was omitted from the original scheme and a category labeled "association" was added. These changes were made after the researcher transcribed the videotapes and reviewed the transcripts. This coding scheme was modified because of the need to focus on specific literacy events in the shared reading and to distinguish questions from statements because questions and statements produce different types of discourse (Kertoy, 1994).

The coding scheme measured different forms of interactions, such as attending to print and to story meaning through clarification and elaboration. The number of the types of interactions was recorded. Categories were grouped based on whether the parent or the child spoke in the interaction and whether the interaction was phrased as a question or statement. Parents' and children's gestures were also coded. A total of 27 categories, which included questions, statements, and gestures, were used in this study. Two categories (i.e., child print statements and child print questions) were combined into one category because there was only one child who asked a question about print and this child also made statements about print. To strengthen the variable of children and print,

statements and questions were combined for this situation only. Low frequency categories make estimates of reliability less stable.

The sum for each interaction was used in the analysis. The researcher coded all of the data and a graduate student specializing in literacy education independently coded 26% of the data that had been randomly selected by the researcher. On this set of data, an agreement of 81% was obtained before discussion, and 89% after discussion of the disagreements. The following is a list of the types of interaction categories included in this study, an explanation of their meaning, and examples of the categories.

Types of interactions

- Gesture

Gesture 1: parent points to illustration

Gesture 2: child points to illustration

Gesture 3: parent points to print

Gesture 4: child points to print

- Print/graphophonics

Print 1: parent print/graphophonics statements

Print 2: child print/graphophonics statements & questions

Print 3: parent print/graphophonics questions

- Confirmation

Confirmation 1: parent confirmation statements

Confirmation 2: child confirmation statements

Confirmation 3: parent confirmation questions

Confirmation 4: child confirmation questions

- Clarification

Clarification 1: parent clarification statements

Clarification 2: child clarification statements

Clarification 3: parent clarification questions

Clarification 4: child clarification questions

- Elaboration

Elaboration 1: parent elaboration statements

Elaboration 2: child elaboration statements

Elaboration 3: parent elaboration questions

Elaboration 4: child elaboration questions

- Association

Association 1: parent association statements

Association 2: child association statements

Association 3: parent association questions

Association 4: child association questions

- Prediction

Prediction 1: parent prediction statements

Prediction 2: child prediction statements

Prediction 3: parent prediction questions

Prediction 4: child prediction questions

Explanation of the Categories

- Gesture 1 & 2: Parent/child points to the illustration with his/her finger.
- Gesture 3 & 4: Parent/child points to the print with his/her finger.
- Print/graphophonics: Parents and children make statements and ask questions about the print or the sound and name of individual letters.
- Confirmation: Parents and children confirm that which is written in text by repeating the text exactly or by paraphrasing the text. Parents and children confirm what is in the illustrations by labeling what is seen in the illustration. Interactions involve basic comprehension of what has already occurred in the text, for example, by helping the child order story events. Confirmation also includes parents' and children's responses to one another (agreement or disagreement).
- Clarification: Parents and children explain the meaning of what is written in the text or that presented in the illustration. There is more of a connection made to help one understand what is happening in the text or illustrations than that which occurs in confirmation. The cause-effect relationship included here makes explicit many implicit connections in the story, for example, why a character performs a certain action.
- Elaboration: Parents and children expand on or extend what is in the text (not necessary for clarifying what is happening in the text but helps to create meaning). The elaboration of text sometimes occurs after clarification interactions.
- Association: Parents and children incorporate their own personal experiences in interactions with text and illustrations.

- Prediction: Parents and children make statements or ask questions about what will happen in the text or illustrations. That is, they predict future story events.

Examples of the Categories

- Print/graphophonics

C: Those letters are a mouse too.

P: There is the word mouse.

P: What sound is this?

C: /s/ (sound)

P: Can you tell me what all those letters are?

C: s m s m

- Confirmation

HE SWAM FASTER THAN HIS BROTHERS AND SISTERS. HIS NAME WAS SWIMMY. (Capitalization indicates that the parent read the text verbatim.)

P: His name was Swimmy. Did he run fast?

C: ya

P: Where is Swimmy?

C: (points to illustration)

ONLY ONE OF THEM WAS AS BLACK AS A MUSSEL SHELL.

P: One of them was black.

- Clarification

ONE DAY A TUNA FISH, SWIFT AND FIERCE AND VERY HUNGRY CAME DARTING THROUGH THE WAVES. IN ONE GULP HE SWALLOWED ALL THE LITTLE RED FISH. ONLY SWIMMY ESCAPED.

C: Why could he escape and not get eaten?

P: because he swam very fast.

... HE SWAM FROM MARVEL TO MARVEL.

P: Do you know what it is, marvel to marvel?

P: That's a beautiful thing. Something that is marvelous.

AN EEL WHOSE TAIL WAS ALMOST TOO FAR AWAY TO REMEMBER.

P: because the head of the fish is here and its tail is way down there.

- Elaboration

HE SAW A MEDUSA MADE OF RAINBOW JELLY.

P: A medusa is a character in mythology that had snakes for hair. (The parent stated this after clarifying that a medusa is a type of jellyfish.)

BUT WHEN SPINNY WAS HALFWAY UP THE TRUNK, SPINNY SAW A BLACK CAT SLOWLY NEARING THE TREE.

P: What do cats like to do? They like to eat mouse.

WE ARE ALL GOING TO SWIM TOGETHER LIKE THE BIGGEST FISH IN THE SEA.

C: Mommy, the red ones, the red ones can, can kill people.

- Association

BUT THE SEA WAS FULL OF WONDERFUL CREATURES AND … .

P: Ooh, just like we saw at the Aquarium.

"I'M SORRY," HE SAID. "I JUST CAN'T EAT BERRIES. THEY MAKE ME SICK."

P: What kind of berries do you like?

C: apple berry…

C: Once I saw a fish, a snake fish in the Aquarium and it was in water and it was so long.

- Prediction

SWIMMY THOUGHT AND THOUGHT AND THOUGHT. THEN SUDDENLY HE SAID, "I HAVE IT."

P: What are they going to do?

C: I don't know but they may form one big, big fish.

ONLY TIMOTHY AND SPINNY WERE STILL RUNNING. THE CAT A FEW FEET BEHIND.

P: She is going to run up these (steps) as fast as she can.

Test of Early Reading Ability - 2 (TERA-2)

The *TERA-2* is a norm-referenced test that provides a measure of early reading achievement. It is based on the work of many researchers in early literacy from the 1960s to the present (Harp, 1996). The test was designed by Reid et al. (1989) and its purpose is to identify significant differences in children's early reading development, document children's progress in learning to read, serve as a measure in research projects, and suggest instructional practices. The *TERA-2* is based on the understanding of the early conceptions children have about reading and is used to measure three components of reading - the ability to construct meaning, knowledge of the alphabet, and knowledge of the conventions of print (Reid et al., 1989). The ability to construct meaning is assessed by examining the child's awareness of print in environmental contexts, knowledge of relations among vocabulary items, and awareness of print in connected discourse. Knowledge of the alphabet is assessed through letter naming, identifying spoken words, and "oral reading" of letters, their sounds, and words. Knowledge of the conventions of written language is assessed through book handling tasks, response to other conventions of print, and "proofreading." The following are examples of each of the *TERA-2* categories: "Tell me about this. What can you get there?" (meaning); "What letter is this? Tell me its name." (alphabet); and "Which one is the letter?" (conventions).

The *TERA-2* is composed of 46 questions representing the three components. Questions on the test were scored incorrect (score of 0) or correct (score of 1) according

to the scoring protocol. Basals were used to determine the number at which to begin testing based on the child's age. When five consecutive incorrect responses were given, the researcher stopped testing as per the test instructions. A score for each of the three categories (alphabet, meaning, and convention), and a total score of the three combined categories were used for statistical analysis.

The *TERA-2* showed evidence of content validity, criterion-related validity, construct validity, and item validity (Reid et al., 1989). Cronbach's alpha coefficient was completed as an estimate of the reliability of the *TERA-2*, as presented by the *TERA-2* manual. The *TERA-2* manual provided reliability analysis of the instrument for children, ages 3 through 9. The reliability coefficient for 3- and 4-year-olds was found to be .98 and .94, respectively.

A reliability analysis was performed on the *TERA-2* based on the results found in the present study. For this group of children, an alpha reliability of the total test was .76 and when children's scores were separated based on age, a coefficient alpha of .85 was calculated for both 3- and 4-year-olds. This alpha was calculated based on 32 of the 46 test questions (14 of the questions were not considered due to no variance in test responses). The use of ceilings, as part of the testing procedure, may have contributed to the lack of variability in responses for these questions. The coefficient alpha for each of the *TERA-2* categories was as follows for children who participated in the current study: meaning = .48, alphabet = .81, and conventions = .76. The test manual did not provide a coefficient alpha for the categories of the test.

Kindergarten Language Screening Test-2 (KLST-2)

The *KLST-2* was used to measure children's general verbal language ability (Gauthier & Madison, 1998). Inadequate verbal language skills have been considered one of the best indicators of academic failure for children entering the public school system (Haynes & Shulman, 1994). Furthermore, language skills play a critical role in the development of academic skills, such as reading and writing (Neidecker & Blosser, 1993).

The *KLST-2* is composed of several types of tasks reflecting both receptive and expressive language competence. The instrument is composed of 18 items, and responses are generally scored correct (score of 1) or incorrect (score of 0). However, some of the questions were scored on a 0-2 scale in which a score of 2 represents a correct response, 1 represents a partially correct response, and 0 represents an incorrect response. Item 18 on the test was for clinician reference and was not included in the overall score. Total scores on the *KLST-2* were based on 17 items and these were used in the statistical and descriptive analyses for this study. The following are two of the items on this test: "Point to the colors and tell me their names." (item 4); and "Show me your chin." (item 5).

The *KLST-2* showed evidence of content, criterion-related, construct, and item validity. The coefficient alphas of the *KLST-2* were provided for children ages 4 to 9 in the test manual. For 4-year-olds, the alpha provided was .90. This demonstrated that the *KLST-2* was a highly reliable test. A reliability analysis was performed on this test based on the results in this study. Because 3-year-olds were also included in this study, the following is the overall test reliability as well as the coefficient alphas for each age group: *KLST-2* overall = .81, 3-year-olds = .78, and 4-year-olds = .76. Although the

coefficient alphas were not given in the test manual for 3-year-olds, children of this age were used in the test-retest reliability coefficients with this instrument (Gauthier & Madison, 1998). Moreover, the reliability measures on this test for children in this study were moderate to high both when ages were combined and separated in the reliability test.

Letter Identification Task

Many researchers have claimed that alphabetic knowledge is one of the most important predictors of children's early school literacy success (e.g., Adams, 1991; Byrne, 1992). In this task, children were presented with the letters of the alphabet, both in lower- and upper-case, and randomly ordered with upper-case letters presented before lower-case ones. Children were asked to identify the letter that was pointed to by the researcher. When no response was given, children were asked if they knew the name of the letter, a word that starts with that letter, or if they knew the sound of the letter, in no particular order (Clay, 1979a). Children were given a raw score out of 54 in which one point was given for letter recognition, that is, whether children named the letter, said a word that began with the letter sound, or if they said the sound of the letter. The scoring system was recommended by the developer and is the one commonly used. The lower case "a" and "g" were represented twice on the task to account for the stylistic differences in the way these two lower case letters can be written. Clay reported a .97 split-half reliability for this measure. A copy of this task may be viewed in Appendix B.

Procedure

As mentioned previously, the research for this study was conducted within Anderson, Anderson, and Shapiro's longitudinal study of multiple literacies. Hence, ethics approval had been attained from The University of British Columbia for the administration of the instruments to be used in this study (Appendix C). The researcher contacted the head teacher of several preschools in a diverse cultural urban area, explained the purpose of this study (i.e., to examine how diverse cultural groups support children's early literacy development), the tasks that parents and children were required to participate in, and asked the teacher if he/she would be willing to distribute letters to parents. A copy of this letter may be viewed in Appendix D. Letters were issued by the researcher to the head teacher or administrator of those preschools that agreed to participate. It was important that preschools had a quiet space where parents and children could complete these tasks if they desired to do so at the preschool. Letters were provided only to preschools that could provide this option for parents. The head teacher of the preschool was asked to distribute the letters to parents who could complete the tasks in English. Thus, some parents with limited proficiency in English were not included in the study. The researcher collected the returned consent forms from the preschools and contacted those parents by phone who agreed to participate in this study. It was explained to parents that these tasks would be completed over 2-3 sessions and that they would be given an honorarium for participating in this study when they and their children completed all of the tasks. Because this study was part of a much larger literacy project, only several of the tasks presented in this letter for parents were examined in this current study.

Parents were videotaped while sharing a children's storybook and then were interviewed using the *PPLLIS*. Children were assessed by first using the *TERA-2*, then the *KLST-2*, and the letter identification task. Tasks were generally completed over two sessions with children but the number of sessions ultimately depended on the children's attention span and, thus, their ability to stay on task. This decision was made by the researcher during data collection. Parents were given a choice of participating in this study at home or at the preschool their child attended. One family, who completed only some of the tasks, was excluded from the analysis of this study.

English was the language used in all preschools that children attended. Parents were asked by the researcher to share the books with their children in English. Nevertheless, in some instances parents reverted to another language while book sharing. In these instances, a research assistant was employed to transcribe these interactions and readings. A total of 10 videotapes of parent-child interactions, containing at least some spoken second language, were transcribed by bilingual graduate students studying language and literacy education. When a second language was spoken on the videotapes, it generally did not play a major role in the overall interactions.

PPLLIS

The researcher interviewed parents using the *PPLLIS* in parents' homes or at the preschool. This interview was audiotaped to provide further clarity of parents' responses to the questions. Parents' responses were transcribed by the researcher. The interview took approximately 15-20 minutes. This interview followed the videotaping of parents and children book sharing.

Videotaping (Parent-child Book Sharing)

Parents were videotaped while sharing a children's narrative either at home or at the preschool, whichever parents preferred. In most videotaping sessions, there was only one researcher present, unlike Ninio and Bruner's (1978) study in which two researchers were present. This was done in an attempt to make the shared reading experience as natural and comfortable as possible for the participants. Furthermore, the video recorder was placed at distance of approximately 12-15 ft from the participants to distract from a focus on it rather than on the shared reading activity. Parents were asked to wear a lapel microphone to ensure that all interactions were recorded as clearly as possible. The book was provided to parents by the researcher. Because two different narratives were used in this study, the researcher maintained a balance for each book shared. This study was part of a longitudinal study in which parents would share both storybooks over a two-year period. Hence, in an attempt to control for book familiarity, two different narratives were used in the longitudinal research, one book to be shared each year. The books, *Swimmy* and *Mr. McMouse* by Leo Lionni, are popular books with young children and have similar style and quality of illustrations. These books were chosen in consultation with two specialists in children's literature. Parents were videotaped during shared book reading to capture all verbal and gestural interactions during this activity. This session took approximately 10-20 minutes.

TERA-2

The *TERA-2* was administered to children individually and the test took approximately 10-15 minutes for children to complete. Testing began with the item on the test that corresponded with the child's age (the basal) and children were tested until

five consecutive items were missed (the ceiling). All children in this study started the test at question number 1 (for 3- and 4-year-olds). Most children completed approximately 10-15 items on the *TERA-2*.

KLST-2

The *KLST-2* was administered to children individually and the test took children approximately 10-15 minutes to complete. Children were asked to answer all questions on the test. The researcher praised and encouraged each child consistently, as is recommended in the directions for administering the test.

Letter Identification Task

The letter identification task was also administered to children individually and this activity took children 5-10 minutes to complete. Children were shown the letters of the alphabet and asked what each letter was as it was pointed to. Other questions, such as the name of the letter, the sound the letter makes, or words beginning with the letter sound, were used randomly in the event that the child did not respond.

Research Design

Part of the research design for this study was correlational, examining relationships between pairs of continuous or ordinal variables. In addition, a causal-comparative design was used when comparing differences between groups on some of the variables. The sample chosen was not a random one and there was no control group. Only preschools in a diverse urban area were asked to participate in this study. According to Keppel and Zedeck (1989), correlational designs have traditionally been used to study correlations "present and existing in nature." Moreover, "correlational

research is used to precisely study those phenomena that the experimenter had not learned to control or could never hope to control" (p. 27). Parents' beliefs would be an example of this. Gay (1996) claimed that relationship studies are conducted in an attempt to gain insight into factors or variables that are related to complex variables, such as academic achievement.

All correlations used in the analysis were partial correlations in order to control children's age. Because of the sample size, the analysis of data by age was not appropriate for this study. It was assumed that parent-child interaction might vary in relation to children's age (e.g., Bus & van IJzendoorn, 1988), and, thus, in order to focus more on the role of parents' beliefs, age in months would need to be controlled. The current study examined whether there were relationships among parents' literacy beliefs, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement by using correlational analysis. The second research question, which asked whether there were differences in parents' literacy beliefs based on parents' educational and their gender, was examined by *t*-tests. The third research question that asked whether there were trends or patterns in the demographic characteristics of parents, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement, based on parents' literacy beliefs, was examined by presenting a description of the findings, including the use of crosstabulations. The descriptive analysis in this study provided insight into patterns based on parents' beliefs that correlational research may not reveal. The descriptive information also provided more specific information on parents'

behaviors and the types of parent-child interactions that will help the reader to gain a more in-depth understanding of the study findings.

CHAPTER IV: ANALYSIS OF DATA

Introduction

Chapter IV describes an analysis of the data to determine whether significant relationships existed among parents' literacy beliefs, parents' literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement. Descriptive statistics were computed for the instrument used with parents in this study (*PPLLIS*) to describe group responses on the instrument. Specifically, *t*-tests were used to examine whether there were differences in parents' beliefs when parents' education and gender were examined. All correlations presented in this study are partial correlations, controlling for children's age in months. Partial correlation coefficients were used to examine relationships among measures of parents' literacy beliefs and behaviors, parent-child interactions, and children's literacy and language achievement by establishing levels of association among the *PPLLIS*, the shared book reading interactions, the *TERA-2*, *KLST-2*, and the letter identification task. As recommended by the *American Psychological Association (APA)* (2001), the effect size (ES) or strength of the relationships was included to aid the reader in fully understanding the importance of the findings. Cohen's *d* and r^2 were used to calculate ESs in this study. The following normative scale developed by Cohen (1977) for interpreting r^2 was used: .01 = small, .09 = medium, .25 = large. Cohen, the developer of the effect size *d*, noted that some people underestimate these effect sizes because they are so small. Cohen claimed that the correlation coefficients encountered in the behavioral sciences are of this order of magnitude (i.e., $r^2 = .09$), and that this relationship would be perceptible to the naked eye

of a reasonably sensitive observer. Cohen's scale for interpreting *d* was also used: .20 = small, .50 = medium, and .80 = large. Some of the *ES*s found in the current study were relatively modest and should be interpreted with caution.

In the analysis of data of the open-ended question of the *PPLLIS*, the first five responses given by parents were included in the correlational analysis. Even though many of the parents gave more than five responses, only the first five responses were included to have an equivalent data sampling base from all participants. Furthermore, to ensure that there were no differences in the types of interactions based on the specific storybook shared, an independent samples *t*-test was used and no significant differences were found for each of the 27 categories of parent-child interactions.

To provide further description of the statistical results found in this study and to identify whether patterns or trends existed in the data based on parents' beliefs, parents' demographic characteristics, the total number of parents' literacy behaviors, parent-child interactions and children's total achievement scores, as well as the means and standard deviations, were presented based on the grouping of parents' beliefs. *APA* (2001) format was used for the table and figure titles, but a single-spaced boxed format was used for some of the tables to facilitate ease of reading. To reiterate, in all instances where parents' literacy behaviors were stated in this study, this refers to parents' self-reported literacy behaviors.

Findings

Parents' Literacy Behaviors

On the *PPLLIS*, parents were asked the following question:

What are the five most important things you are doing to help your child learn to read and to write?

- Parents responses were coded into the following five categories. Listed are the top three responses that parents gave for each category as well as the total number of responses for each category:

1. Direct teaching activities (total responses - 33)

   There were 13 different responses given in this category.

   - teach the alphabet (help children recognize letters and sounds and to write the alphabet) (13 parents)
   - help child write his/her name and the name of things (4 parents)
   - use workbooks with their child (4 parents)

2. Participation in literacy activities (total responses - 55)

   There were 14 different responses given in this category.

   - read to them (31 parents)
   - play letter games with them (6 parents)
   - write with them (e.g., alphabet, grocery lists, emails) (4 parents)

3. Encouragement of literacy (total responses - 45)

   There were 19 different responses.

   - provide books, workbooks, and journals for the child (13 parents)

- provide literacy computer games with stories and letters and cassette tapes (5 parents)
- let children see parents reading and writing (4 parents)

4. Knowledge development (total responses - 30)

   There were 11 different responses.

   - talk to them/answer their questions (7 parents)
   - draw pictures with them (7 parents)
   - go on outings with them: point out things (4 parents)

5. Other (total responses - 10)

   There were 8 different responses.

   - limit television viewing (2 parents)
   - provide a book to draw numbers and count them (2 parents)
   - show and draw shapes with children (2 parents)

Research Question One

Is there a relationship among parents' self-reported literacy beliefs, parents' literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement?

Parents' Literacy Beliefs and Behaviors

There was a significant relationship between parents' total score on the *PPLLIS* and parents' encouragement of literacy, $r(32) = .37$, $p = .03$ ($ES = .14$), which suggests that the more parents believed that children learned literacy in a more holistic way, the more they encouraged literacy activities as a way to help their children develop literacy. Also, a moderately large negative relationship existed between parents' literacy beliefs

and their teaching of literacy activities, $r(32) = -.52$, $p = .00$ ($ES = .27$). This result suggested that the more holistic were parents' beliefs, the less they engaged in the direct teaching of literacy activities with their children (see Table 2).

Table 2

Correlations Between Parents' Total Literacy Belief Scores and Parents' Literacy Behaviors

Parents' literacy behaviors	Parents' total literacy belief scores
Encouragement	.37*
Participation	.12
Direct teaching	-.52**
Knowledge development	.05
Other	-.16

*$p < .05$. **$p < .01$.

Parents' Literacy Beliefs and Parent-child Storybook Interactions

There was a significant relationship between parents' beliefs and their interactions with children in book sharing. Specifically, parents' belief score about how children learn to read and write was related to parents' comments, $r(35) = .32$, $p = .05$ ($ES = .10$) about print. This finding suggested that parents with more holistic beliefs interacted more with their children around print during book sharing (see Table 3). There was also an

approaching significant relationship between parent's beliefs and their questions about print, $r(35) = .31$, $p = .06$ ($ES = .10$).

Table 3

Correlations Between Parents' Total Literacy Belief Scores and Parent-child Storybook Interactions

Parent-child interactions	Parents' total literacy belief scores
P. points to illustration	-.17
C. points to illustration	-.12
P. points to print	.19
C. points to print	.22
P. print statements	.32*
C. print statements/questions	.27
P. print questions	.31
P. confirmation statements	-.16
C. confirmation statements	-.05
P. confirmation questions	-.06
C. confirmation questions	.08
P. clarification statements	-.08
C. clarification statements	.08
P. clarification questions	-.09
C. clarification questions	-.08
P. elaboration statements	.10
C. elaboration statements	-.11
P. elaboration questions	.13
C. elaboration questions	-.04
P. association statements	-.00
C. association statements	-.14
P. association questions	.10
C. association questions	-.23
P. prediction statements	.02
C. prediction statements	-.01
P. prediction questions	-.03
C. prediction questions	-.11

Note. P = parent; C = child.
*$p < .05$.

Parents' Beliefs and Behaviors and Children's Language and Literacy Achievement

There was a significant relationship between parents' total score on the *PPLLIS* and children's language development, $r(35) = .46, p = .00$ ($ES = .21$). This result indicated that the more holistic parents' beliefs were about how children acquire literacy, the higher children scored in language achievement. Also, this finding suggested that the more language knowledge children had, the more holistic were parents' beliefs. There was no significant correlation between parents' report of literacy behaviors with children and children's language development.

A significant relationship was found between parents' beliefs as measured by the *PPLLIS* and children's literacy outcomes as revealed by the total score of the *TERA-2*, $r(35) = .44, p = .01$ ($ES = .19$). This finding suggested that parents with more holistic beliefs had children who scored higher in their reading achievement. This finding may have also indicated that the higher children's reading achievement was, the more holistic were parents' literacy beliefs. There were also significant correlations between parents' literacy beliefs and the different categories of the *TERA-2*. Parents' literacy beliefs related to children's knowledge of the alphabet, $r(35) = .38, p = .02$ ($ES = .14$), and children's knowledge of conventions, $r(35) = .40, p = .02$ ($ES = .16$). There was no significant relationship between parents' literacy beliefs and children's meaning scores on the *TERA-2*. There were also no significant correlations between parents' literacy behaviors and children's literacy outcomes as revealed by the *TERA-2*.

There was a marginally non-significant relationship between parents' reports of engaging in knowledge-based activities to help children to read and to write and children's meaning scores on the *TERA-2*, $r(35) = .31, p = .06$ ($ES = .10$). This result

seemed to suggest that the more parents felt that promoting children's general cognitive development was important for children's literacy development, the higher their children scored in their ability to construct meaning as revealed by the *TERA-2* (see Table 4).

Table 4

Correlations Among Parents' Total Literacy Belief Scores, Parents' Literacy Behaviors, and Children's Language and Literacy Scores

	Parents' total literacy belief scores	Parents' literacy behaviors				
		Enc.	Parti.	Teach.	Knowl.	Other
Children's language achievement (*KLST-2*)	.46**	-.13	.28	-.12	.04	-.06
Children's reading achievement (*TERA-2*)						
Total score	.44**	.01	-.08	.01	.12	.12
Meaning	.19	-.23	.09	-.04	.31	-.18
Alphabet	.38*	.09	-.19	.12	.01	.19
Convention	.40*	.05	-.00	-.11	.08	.19
Children's letter knowledge (Letter identification task)	.12	-.03	-.27	.28	.01	.29

Note. Enc. = encouragement; Parti. = participating; Teach. = teaching; Knowl. = knowledge development.
*$p < .05$. **$p < .01$.

Parent-child Storybook Interactions and Children's Language and Literacy Achievement

There were no significant correlations between parents' interaction with their children in shared reading and children's language scores on the *KLST-2*. It is important to note that the *KLST-2* manual did not provide standard reliabilities for 3-year-olds;

however, based on children's responses in this study, this test was reliable with this age group.

Negative relationships were found between different types of parent-child interactions and children's construction of meaning scores on the *TERA-2*, particularly with the frequency of parents' gestures to illustrations, $r(35) = -.34$, $p = .04$ ($ES = .12$), and parents' confirmation statements, $r(35) = -.33$, $p = .05$ ($ES = .11$) and questions, $r(35) = -.35$, $p = .03$ ($ES = .12$). These results suggested that the more parents gestured toward illustrations, made confirmation statements and asked confirmation questions, the lower children scored in the area of meaning development on the *TERA-2*. Or, rather, when children scored lower in their ability to construct meaning as part of literacy achievement, parents interacted in these ways with their children.

Children's knowledge of reading conventions related to parents' clarification statements, $r(35) = .34$, $p = .04$ ($ES = .12$) and elaboration statements, $r(35) = .47$, $p = .00$ ($ES = .22$). This relationship with elaboration statements was a relatively strong one. Therefore, the more parents made statements that clarified and extended the text, the higher children performed in their knowledge of reading conventions. Or, rather, the more knowledge children had of literacy conventions, the more parents clarified and expanded on the text when storybook sharing. There was a marginally non-significant relationship between children's knowledge of reading conventions and children's confirmation questions, $r(35) = .31$, $p = .06$ ($ES = .10$).

There were a number of parent-child interactions during book sharing that related to children's knowledge of the alphabet as revealed by the *TERA-2*. Children's alphabet scores on the *TERA-2* related to their confirmation questions, $r(35) = .47$, $p = .00$

(*ES* = .22) and clarification questions, $r(35) = .33$, $p = .05$ (*ES* = .11) during book sharing. Parents' confirmation statements related to children's knowledge of the alphabet, $r(35) = .39$, $p = .02$ (*ES* = .15) and children's gestures to illustrations was marginally non-significant with children's alphabet scores, $r(35) = .32$, $p = .06$ (*ES* = .10). Furthermore, children's alphabet scores on the *TERA-2* were associated with parents' clarification statements, $r(35) = .39$, $p = .02$ (*ES* = .15) and children's clarification statements, $r(35) = .34$, $p = .04$ (*ES* = .12). These results suggested that the more parents made confirmation and clarification statements during shared book reading, the higher children were scoring on their alphabetic knowledge as measured by the *TERA-2*. These findings may also suggest that children with more knowledge of the alphabet had parents who made more confirmation and clarification statements about the story. The results also seemed to suggest that children made more clarification statements and asked more confirmation and clarification questions when they had more knowledge of the alphabet.

Parents' clarification, $r(35) = .40$, $p = .01$ (*ES* = .16), and elaboration statements, $r(35) = .40$, $p = .01$ (*ES* = .16), related to children's overall reading achievement. Hence, the higher children scored overall on the *TERA-2*, the more parents made clarification and elaboration statements. Children's confirmation questions related to their overall reading achievement, $r(35) = .34$, $p = .04$ (*ES* = .12).

Children's letter knowledge, as revealed by the letter identification task, related to parents' confirmation statements, $r(35) = .36$, $p = .03$ (*ES* = .13) and parents' clarification statements, $r(35) = .38$, $p = .02$ (*ES* = .14). Children's confirmation questions related to their letter knowledge, $r(35) = .46$, $p = .00$ (*ES* = .21). There was a marginally non-significant relationship between parents' gestures to illustrations and children's letter

knowledge as revealed by the letter identification task, $r(35) = .31, p = .06$ ($ES = .10$) (see Table 5).

Children's Language and Literacy Achievement

There were moderate correlations between the *TERA-2* and the *KLST-2*. Children's total score on the *TERA-2* related to children's language scores on the *KLST-2*, $r(35) = .41, p = .01$ ($ES = .17$). This finding suggested that the more literacy knowledge children had, the more developed was their language ability or vice versa. All categories of the *TERA-2*, except the alphabet category, related to children's language scores, $r(35) = .28, p = .09$. Children's language achievement related to their meaning scores, $r(35) = .37, p = .03$ ($ES = .14$) and their convention scores, $r(35) = .34, p = .04$ ($ES = .12$). There were relatively strong correlations between children's achievement on the *TERA-2* and their letter identification knowledge. In particular, children's letter identification scores related to children's knowledge of reading conventions, $r(35) = .44, p = .01$ ($ES = .19$) and, as expected, their alphabet knowledge, $r(35) = .79, p = .00$ ($ES = .62$) on the *TERA-2*. Children' scores on the *KLST-2* did not relate to children's letter identification scores, $r(35) = .13, p = .47$ (see Table 6).

Table 5

Correlations Between Parent-child Interactions and Children's Language and Literacy Scores

Parent-child interactions	Children's language achievement	Children's literacy achievement (*TERA-2*)				Children's letter task
		M	A	C	TS	
P. points to illustration	-.13	-.34*	.26	.17	.12	.31
C. points to illustration	.06	-.23	.32	-.02	.10	.14
P. points to print	.22	-.18	.04	.06	-.01	-.11
C. points to print	.29	-.01	.21	.14	.17	-.04
P. print statements	.29	-.05	.21	.22	.20	.02
C. print statements/questions	.25	-.10	.23	.18	.18	.02
P. print questions	.16	-.08	.24	.28	.24	.17
P. confirmation statements	-.00	-.33*	.39*	.18	.20	.36*
C. confirmation statements	.19	-.20	.11	-.03	-.01	-.06
P. confirmation questions	-.02	-.35*	.08	.06	-.02	.04
C. confirmation questions	.14	-.19	.47**	.31	.34*	.46**
P. clarification statements	.02	.13	.39*	.34*	.40*	.38*
C. clarification statements	.20	-.02	.34*	.05	.20	.08
P. clarification questions	.07	-.09	.08	-.06	-.00	.09
C. clarification questions	.04	-.00	.33*	.10	.23	.23
P. elaboration statements	.17	.12	.29	.47**	.40*	.17
C. elaboration statements	.13	-.01	.09	.02	.05	-.01
P. elaboration questions	.21	-.19	.14	.15	.09	.19
C. elaboration questions	.08	.02	.14	.01	.09	-.18
P. association statements	.15	.15	-.10	.27	.21	.07
C. association statements	-.08	.23	-.01	.11	.11	-.12
P. association questions	.23	.15	.16	.14	.19	.12
C. association questions	.06	-.09	-.14	.00	-.10	-.21
P. prediction statements	-.07	-.04	.27	.25	.25	.28
C. prediction statements	.10	.07	-.07	.01	-.01	.06
P. prediction questions	.18	-.08	.28	.12	.19	.30
C. prediction questions	-.25	-.15	.02	-.23	-.13	.01

Note. M = meaning score; A = alphabet score; C = convention score; TS = total score (*TERA-2*); P = parent; C = child.
*$p < .05$. **$p < .01$.

Table 6

Correlations Between Children's Language and Literacy Achievement

	KLST-2	Letter knowledge
Children's language achievement (*KLST-2*)	---	.13
Children's reading achievement (*TERA-2*) (Total score)	.41*	.65***
Meaning	.37*	.06
Alphabet	.28	.79***
Convention	.34*	.44**
Children's letter knowledge (Letter identification task)	.13	---

*$p < .05$. **$p < .01$. ***$p < .001$.

Research Question Two

Are there differences in parents' literacy beliefs based on parents' education and gender?

Parents' Beliefs, Education, and Gender

A *t*-test showed a significant difference in parents' beliefs when their education was examined. Parents' education level was divided into two groups: parents with post-secondary education completion and parents without this level of education. Parents who had completed post-secondary education, which included obtaining a degree, diploma, or certificate, had more holistic beliefs about how children learn to read and to write than did parents who did not complete post-secondary education, $t(33) = -2.30$, $p = .03$ ($ES = .80$). There were no significant differences in parents' beliefs based on their gender, $t(33) = 1.16$, $p = .25$ (see Table 7).

Table 7

Parents' Beliefs About Literacy by Selected Demographic Factors

Demographic factors	*n*	*M*	*SD*
Education:			
(Without post-secondary education completion)	11	108.91	12.35
(With post-secondary education completion)	24	119.83	13.30
Gender:			
(Female)	28	117.75	14.24
(Male)	7	111.00	11.31

Note. There was a significant difference between parents' literacy beliefs and their education, $p < .05$.

Research Question Three

Based on parents' literacy beliefs, are there trends or patterns in parents' demographic characteristics, parents' literacy behaviors, parent-child interactions in storybook reading and children's language and literacy achievement?

Grouping of Parents' Beliefs

In order to have a better understanding of the correlational data in this study and to examine possible trends in parents' demographic characteristics, parents' behaviors, parent-child interactions in book reading and children's achievement, based on parents' beliefs, parents' responses on the *PPLLIS* were divided into three categories: more skills-oriented (Group 1), a combination group of both skills-oriented and holistic beliefs (in comparison to the other groups) (Group 2), and a more holistic orientation to literacy learning (Group 3). Of the 35 parents who participated, the 11 parents who scored the

lowest on the *PPLLIS* were placed in the first, or more skills-oriented group. The 12 parents whose score fell in the middle were placed in the second group, and parents' beliefs that were more holistic, and thus scored in the top one-third on the *PPLLIS*, were placed in the third group. Even groups were used to make trends in the data more clear than using groups with an uneven number of participants. Based on the *PPLLIS* scores, parents seemed to be more holistic than skills-based. Parents' beliefs were in the 89-153 score range ($M = 116.40$, $SD = 13.82$) with the lowest possible score being 33 and the highest possible score 165. This signifies that, overall, parents in this study seemed to have more holistic beliefs than skills-based ones.

When parents were grouped based on their beliefs, there was not a major divide between each of these groups based on parent's literacy belief scores. However, the intention was not to make discrete claims about parents' behaviors, parent-child interactions, and children's achievement based on this separation, but to identify trends along a continuum. Furthermore, there was more emphasis on comparing Groups 1 and 3 because Group 2 was not as well defined and might carry characteristics of the other two groups. Parents' beliefs formed a relatively normal distribution. Group 1 contained approximately 40% of the range of scores (89-109), Group 2 contained about 20% (112-120) and Group 3 contained about 40% (121-153). There was one outlier in Group 3 that was not included in the range calculation for this group. The groups were approximately one standard deviation apart.

Even though three parents shared books with two of their children and these data were included in the correlational analysis, only one child for each parent was used in this

descriptive analysis to increase the clarity of findings. The first child the parent read to was included in the descriptive analysis.

Parents - Education and Gender

Parents' education.

Parents were divided into two sections based on their education level: those who did not complete secondary level education (i.e., had high school education or less, some post-secondary courses) and those who completed post-secondary education (i.e., degree, diploma, certificate). A crosstabulation based on the grouping of parents' beliefs into three categories and parents' education can be seen in Table 8. From the table, it seemed that those parents with less educational attainment had more skills-based views than those parents with post-secondary completion. Over half of the sample of parents who did not complete post-secondary education had more skills-based beliefs. From the table it can also be seen that parents with post-secondary completion had more holistic views of literacy learning rather than skills-based ones.

Table 8

Crosstabulation of Parents With and Without Post-secondary Education Completion Based on the Grouping of Parents' Total Literacy Belief Scores

	Parents' total literacy belief scores			
	More skills-based	Combination	More holistic	Total
Not complete	6 54.5%	2 18.2%	3 27.3%	11 100%
Complete	5 20.8%	10 41.7%	9 37.5%	24 100.0%
	11 31.4%	12 34.3%	12 34.3%	35 100.0%

Parents' gender.

Parents were divided based on their gender. The results of a crosstabulation based on the grouping of parents' beliefs into three categories and parents' gender can be seen in Table 9. There did not seem to be a trend in mothers' beliefs, but fathers' beliefs seemed to be less holistic than were mothers. Approximately 80% of fathers' beliefs were either more skills-based or a combination of skills-based and holistic in relation to the rest of the sample. Unfortunately, relatively few fathers volunteered to participate in this study, and so the interpretation of this trend is cautious and only speculative.

Table 9

Crosstabulation of Parents' Gender in Relation to the Grouping of Parents' Beliefs

	Parents' total literacy belief scores			
	More skills-based	Combination	More holistic	Total
Mothers	8 28.6%	9 32.1%	11 39.3%	28 100.0%
Fathers	3 42.9%	3 42.9%	1 14.3%	7 100.0%
	11 31.4%	12 34.3%	12 34.3%	35 100.0%

Summary.

There were different representations among the grouping of parents' beliefs based on parents' education level and parents' gender. In Group 1, or parents with more skills-oriented beliefs, the greatest number of parents without post-secondary education completion were represented (6 out of 11 parents). Fathers were also more likely to be represented in Group 1 or the middle group.

In Group 3, only one father had beliefs that fell in this category. Most of the parents had completed post-secondary education (9 out of 12). These results suggested a trend in the data. It seemed that fathers tended to have more skills-based or traditional beliefs about how children learn to read and to write than did mothers. However, because the number of fathers who had participated in this study was rather low in comparison to mothers, this finding should be interpreted with caution. Parents with less formal

education tended to have more skills-based beliefs about how children learn to read and to write.

Cultural Background

There was a lack of even distribution of the different cultural groups that participated in this study, which would make analysis by group difficult considering the relatively small numbers in particular groups. However, it was not the purpose of this study to compare different cultural groups but to include a sample more representative of the current context in which this study was conducted. Nevertheless, there were some trends in the representation of cultural groups based on the grouping of parents' beliefs. More of the European Canadian parents were represented in Group 3 than in the other groups and East Asian Canadians were more represented in Groups 1 and 2.

Parents' Literacy Behaviors

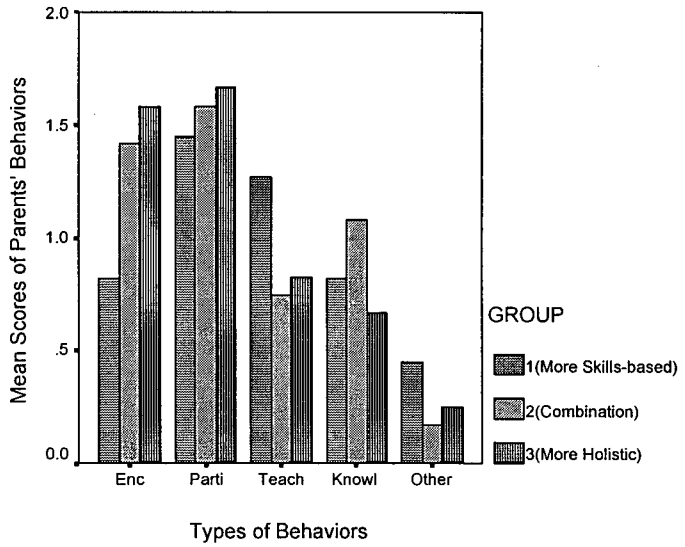
When parents' beliefs were divided into three groups, it seemed that parents with more skills-based beliefs were less likely to view as important, activities that encourage children's literacy development, such as providing books as a means to help them to read and write. Approximately twice as many parents in Groups 2 and 3 reported encouragement activities compared to those parents in Group 1. From the total number of behaviors reported by parents and the means of parents' behaviors, it also seemed that skills-based parents engaged in more direct teaching activities, such as teaching the alphabet to children and teaching children to write their names and the names of things, than those parents in the other groups (see Table 10). Figure 1 is a bar graph of these findings. Similar trends were observed in the correlational data between parents' beliefs and their behaviors.

Table 10

Total Number and Mean Scores of Parents' Behaviors Based on the Grouping of Parents' Beliefs

	Total			*M (SD)*					
	Grp. 1 $n = 11$	Grp. 2 $n = 12$	Grp. 3 $n = 12$	Grp. 1 $n = 11$		Grp. 2 $n = 12$		Grp. 3 $n = 12$	
Encouragement	9	17	19	.82	(1.08)	1.42	(1.38)	1.58	(1.44)
Participation	16	19	20	1.45	(.69)	1.58	(.90)	1.67	(1.07)
Teaching	14	9	10	1.27	(.90)	.75	(1.14)	.83	(.83)
Knowledge development	9	13	8	.82	(.75)	1.08	(1.08)	.67	(.98)
Other	5	2	3	.45	(.52)	.17	(.39)	.25	(.45)

Figure 1. Parents' mean literacy behavior scores based on the grouping of parents' beliefs.



Note. Enc = encouragement; Parti = participating; Teach = teaching; Knowl = knowledge development.

Parent-child Interactions

There were some differences in parent-child interactions in storybook reading based on parents' beliefs about how children learn to read and to write. Parents with more holistic beliefs tended to interact more around print than those with more traditional or skills-based views about literacy learning (Print 1 & 3, Gesture 3). This can be seen from the number of times parents with more holistic beliefs pointed to and talked about print when interacting with their children in storybook reading than those parents in the other groups (see Table 11 & 12). It can also be seen from Table 11 that parents and children interacted similarly in the number of interactions around print, which suggested that there may be a relationship between these interactions (Print 2 & Print 3). It seemed that parents with more holistic beliefs were less likely to point to the illustrations (Gesture 1).

As parents' beliefs became more holistic, they were less likely to make confirmation statements (Confirmation 1) and ask confirmation questions (Confirmation 3). Parents with more holistic beliefs also tended to make slightly fewer clarification statements than parents in the other groups (Clarification 1). Children of parents in Group 2 (parents whose beliefs fell in the middle group or had more of a combination of skills-based and holistic beliefs in comparison to other parents) tended to make fewer confirmation (Confirmation 2) and clarification (Clarification 2) statements and ask fewer clarification questions (Clarification 4). However, children of parents in Group 2 tended to ask slightly more confirmation questions (Confirmation 4) than those children of parents in the other groups. Children of parents with more skills-based beliefs asked slightly more clarification questions (Clarification 4) while those children of parents with

more holistic beliefs made more clarification statements (Clarification 2) than the other groups.

Based on the grouping of parents' beliefs, there were few interactions that involved elaboration of text and even fewer of association and prediction interactions. The reliability for these types of interactions was likely to be lower than it would have been with more interactions. Nevertheless, parents in the middle group tended to ask fewer elaboration questions (Elaboration 3) in their interactions with children but asked more prediction questions (Prediction 3) than parents in the other groups. Parents with more skills-oriented beliefs tended to make more association statements (Association 1) but asked fewer association questions (Association 3). Children of parents with more holistic beliefs tended to make fewer elaboration statements (Elaboration 2) than children of parents in the other groups. Parents with more holistic beliefs asked fewer prediction questions (Prediction 3) than those parents in the other groups. There was almost no variation in children's prediction statements and questions based on the grouping of parents' beliefs (see Table 11& 12). Figure 2 is a bar graph that depicts selected interactions that were most comparable based on the grouping of parents' beliefs.

Table 11 and 12 also includes the types of interactions for the full sample to demonstrate overall how parents and children interacted in storybook reading. Gestures to illustrations and confirmation questions and statements tended to dominate the storybook interactions in the full sample. There were more gestures to illustrations than to print. Nevertheless, print interactions were more common than some other types of interactions (e.g., association and prediction). Clarification interactions were relatively

frequent in story sharing, particularly clarification statements made by the parent (see Table 11 & 12).

Summary.

Parents with more holistic beliefs interacted more around print, both in gestures and in their statements and questions. These parents were less likely to make confirmation statements and ask confirmation questions. They were also less likely to point to the illustrations. Children of parents with more holistic beliefs were more likely to interact around print and to make clarification statements. More skills-based parents did not tend to interact around print but focused often on the illustrations, as did their children. Most of their interactions involved confirmation statements and questions.

Table 11

Total Number and Mean Scores of Parent-child Interactions Based on the Grouping of Parents' Beliefs

	Total				*M*			
	Grp.1 $n = 11$	Grp.2 $n = 12$	Grp.3 $n = 12$	Full Sample $N = 35$	Grp.1 $n = 11$	Grp.2 $n = 12$	Grp.3 $n = 12$	Full Sample $N = 35$
Gesture 1	135	111	74	320	12.27	9.25	6.17	9.14
Gesture 2	89	62	72	223	8.09	5.17	6.00	6.37
Gesture 3	11	7	38	56	1.00	.58	3.17	1.60
Gesture 4	2	1	11	14	.18	.08	.92	.40
Print 1	0	11	39	50	0	.92	3.25	1.43
Print 2	0	7	27	34	0	.58	2.25	.97
Print 3	0	8	22	30	0	.67	1.83	.86
Confirmation 1	225	155	140	520	20.45	12.92	11.67	14.86
Confirmation 2	152	100	143	395	13.82	8.33	11.92	11.29
Confirmation 3	135	114	80	329	12.27	9.50	6.67	9.40
Confirmation 4	12	23	15	50	1.09	1.92	1.25	1.43
Clarification 1	73	66	54	193	6.64	5.50	4.50	5.51
Clarification 2	11	6	21	38	1.00	.50	1.75	1.09
Clarification 3	21	11	15	47	1.91	.92	1.25	1.34
Clarification 4	19	5	14	38	1.73	.42	1.17	1.09
Elaboration 1	14	10	12	36	1.27	.83	1.00	1.03
Elaboration 2	5	5	1	11	.45	.42	.08	.31
Elaboration 3	5	1	7	13	.45	.08	.58	.37
Elaboration 4	1	0	1	2	.08	0	.08	.06
Association 1	4	5	1	10	.36	.42	.08	.29
Association 2	2	2	1	5	.18	.17	.08	.14
Association 3	2	6	4	12	.18	.50	.33	.34
Association 4	2	0	0	2	.18	0	0	.06
Prediction 1	5	6	4	15	.45	.50	.33	.43
Prediction 2	1	1	1	3	.09	.08	.08	.09
Prediction 3	5	9	2	16	.45	.75	.17	.46
Prediction 4	1	1	0	2	.09	.08	0	.06

Note. Gesture 1 = parent points to illustration; Gesture 2 = child points to illustration; Gesture 3 = parent points to print; Gesture 4 = child points to print; Print 1 = parent print statements; Print 2 = child print statements & questions; Print 3 = parent print questions; Confirmation 1 = parent confirmation statements; Confirmation 2 = child confirmation statements; Confirmation 3 = parent confirmation questions; Confirmation 4 = child confirmation questions; Clarification 1 = parent clarification statements; Clarification 2 = child clarification statements; Clarification 3 = parent clarification questions; Clarification 4 = child clarification questions; Elaboration 1 = parent elaboration statements; Elaboration 2 = child

elaboration statements; Elaboration 3 = parent elaboration questions; Elaboration 4 = child elaboration questions; Association 1 = parent association statements; Association 2 = child association statements; Association 3 = parent association questions; Association 4 = child association questions; Prediction 1 = parent prediction statements; Prediction 2 = child prediction statements; Prediction 3 = parent prediction questions; Prediction 4 = child prediction questions.

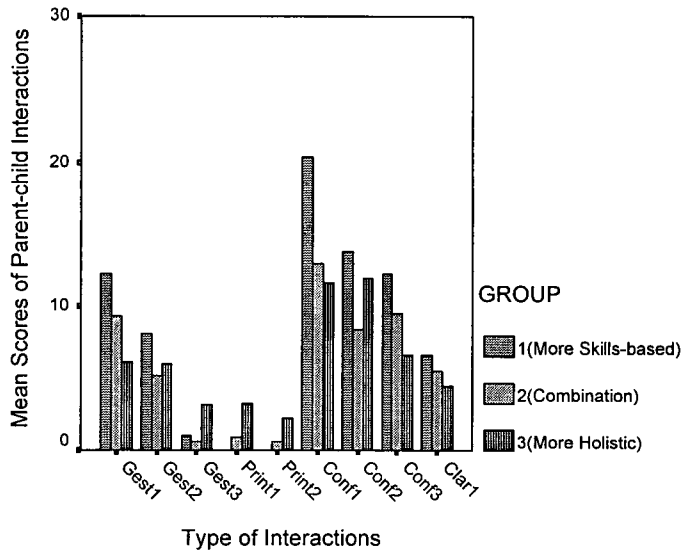
Table 12

Standard Deviations of Parent-child Interactions Based on the Grouping of Parents' Beliefs

	SD			
	Grp.1 $n = 11$	Grp.2 $n = 12$	Grp.3 $n = 12$	Full Sample $N = 35$
Gesture 1	11.65	6.73	5.81	8.48
Gesture 2	7.06	5.20	6.05	6.06
Gesture 3	1.26	1.00	4.63	3.01
Gesture 4	.40	-	1.38	.91
Print 1	-	2.02	5.56	3.64
Print 2	-	1.44	4.39	4.39
Print 3	-	2.02	3.21	2.29
Confirmation 1	18.64	11.15	8.81	13.51
Confirmation 2	10.35	6.11	10.51	9.20
Confirmation 3	18.89	9.05	5.53	12.11
Confirmation 4	1.38	3.15	1.54	2.16
Clarification 1	6.02	5.98	3.68	5.23
Clarification 2	1.26	1.45	1.86	1.60
Clarification 3	2.66	1.31	2.18	2.09
Clarification 4	2.80	.90	1.53	1.90
Elaboration 1	1.27	1.19	2.22	1.60
Elaboration 2	.82	1.00	-	.76
Elaboration 3	1.21	-	1.44	1.09
Elaboration 4	-	-	-	.24
Association 1	.50	.51	-	.46
Association 2	.40	.39	-	.36
Association 3	.60	.67	.65	.64
Association 4	.40	-	-	.24
Prediction 1	.82	.67	.65	.70
Prediction 2	-	-	-	.28
Prediction 3	.82	1.06	.39	.82
Prediction 4	-	-	-	.24

Note. See Table 11 for explanation of coding categories; - = could not be computed.

Figure 2. Mean scores of selected parent-child interactions based on the grouping of parents' beliefs.



Note. Gest1 = parent points to illustration; Gest2 = child points to illustration; Gest3 = parent points to print; Print1 = parent print statements; Print2 = child print statements & questions; Conf1 = parent confirmation statements; Conf2 = child confirmation statements; Conf3 = parent confirmation questions; Clar1 = parent clarification statements.

Overall total of parent and child interactions based on parents' beliefs.

The most interactive parents overall were those in Group 1, or those parents with more skills-based beliefs. The majority of their interactions were confirmation statements and questions. There also seemed to be a trend when the total number of parent interactions and child interactions were compared. When parents' beliefs were more holistic, parents and children were more similar in their total number of interactions in story sharing (see Table 13).

Table 13

Total and Mean Scores of All Parents' and Children's Interactions Based on the Grouping of Parents' Beliefs

	Total			*M (SD)*					
	Grp.1 $n = 11$	Grp.2 $n = 12$	Grp.3 $n = 12$	Grp.1 $n = 11$		Grp.2 $n = 12$		Grp.3 $n = 12$	
Parent	635	520	492	57.73	(58.02)	43.33	(30.23)	41.00	(31.41)
Child	297	213	307	27.00	(18.95)	17.75	(13.09)	25.58	(22.74)

Examples of parent-child interactions based on groups 1, 2, and 3.

The following are some examples of the more frequent types of interactions in shared book reading.

- Print

A HAPPY LITTLE SCHOOL OF FISH LIVED IN A CORNER OF THE SEA

SOMEWHERE. THEY WERE ALL…

(mother in Group 2)

M: Do you know this one? Can you sound it out? (mother points to print)

SPINNY SAW A BLACK CAT SLOWLY NEARING THE TREE,

ITS MUSCLES TAUT, READY FOR A LEAP.

"CAT" SHE YELLED AS LOUD AS SHE COULD.

(mother in Group 3)

M: c a t (mother spells this word)

- Confirmation and clarification

BUT ONE DAY, INSTEAD OF HIMSELF, TIMOTHY SAW A STRANGE CREATURE DRESSED IN BLACK STARING BACK AT HIM FROM THE MIRROR. HE JUMPED BACK, LET OUT A SHRIEK AND RAN FOR HIS LIFE.

(mother in Group 1 - confirmation)

M: What's this? This is a mouse.

(mother in Group 2 - clarification)

M: So what happened here?

(mother in Group 3 - clarification)

C: Mommy, why did he run to the outskirts of town?

M: I guess he was so surprised and shocked that he just wanted to run away.

Within cultural groups there were differences in parents' beliefs and how they interacted with children in storybook reading, which the following examples with East Asian Canadians demonstrate. The types of parent-child interactions exemplified here represent the trends reported earlier in the descriptive data.

- Group 1 (more skills-based)

A HAPPY SCHOOL OF LITTLE FISH LIVED IN A CORNER OF THE SEA SOMEWHERE. THEY WERE ALL RED.

M: What color?

C: Black

M: No, all red. Red

ONLY ONE OF THEM WAS AS BLACK AS A MUSSEL SHELL.

M: These are small mussels.

C: I think they are black. (child points to picture)

HE SWAM FASTER THAN HIS BROTHERS AND SISTERS. HIS NAME WAS SWIMMY.

M: Swimmy, right?

C: Mommy, I can see they are black.

M: Yeah, black fish.

- Group 2 (combination group)

A HAPPY SCHOOL OF LITTLE FISH LIVED IN A CORNER OF THE SEA SOMEWHERE.

THEY WERE ALL …

M: Do you know this one? Can you sound it out?

C: Red

RED. ONLY ONE OF THEM WAS AS BLACK AS A MUSSEL SHELL

HE SWAM FASTER THAN HIS BROTHERS AND SISTERS. HIS NAME WAS SWIMMY.

M: His name was what?

C: Swa

M: Swimmy, Swim-my.

C: Swimmy

M: Do you see him? Right there. (mother points to picture)

C: (points to picture) How come he's red?

M: They are all red and he's the only one that is black. That's because he's unique and different, right.

- Group 3 (more holistic)

C: Hey, he has hundreds of fishes as his friends. (child points to picture)

A HAPPY SCHOOL OF LITTLE FISH

M: I guess when there are so many (mother points to picture) …

C: Hum …

M: … more than one fish they call it a school

LIVED IN A CORNER OF THE SEA SOMEWHERE.

THEY WERE ALL …

C: Mommy, that one is broken and that one is broken and they're broken. (child points to picture)

M: Ya, some of them were not completed were they? What color are these fish? (mother points to picture)

C: Red.

(mother repeats first part of sentence) RED.

C: And he was black (child points to picture)

M: And he's black. Look at this word. (mother points to print) That says red. They were all …

C: Red

M: Red

ONLY ONE OF THEM WAS AS

M: What color is that?

C: Black

M: Black (mother points to picture)

BLACK AS A MUSSEL SHELL.

HE SWAM FASTER THAN HIS BROTHERS AND SISTERS. HIS NAME WAS ...

C: Swimmy

SWIMMY.

M: Swimmy, that's right.

C: How come he swims more faster?

M: I don't know. Let's find out.

Children's Achievement

When parents' beliefs were divided into three groups, namely more skills-based, a combination group, and more holistic, there was a trend in children' achievement scores based on this grouping. Children's achievement scores on the *KLST-2*, *TERA-2*, and the letter recognition task were higher when parents' beliefs were more holistic. The average age for children when parents were divided into three groups based on their beliefs is as follows: Group 1 = 3.9 years (range = 36-58 months, $M = 47.18$, $SD = 6.90$), Group 2 = 3.8 years (range: 39-56 months, $M = 45.83$, $SD = 5.78$), and Group 3 = 4.5 years (range: 45-59 months, $M = 53.42$, $SD = 4.91$). *TERA-2* (Percentile rank) was used to control for

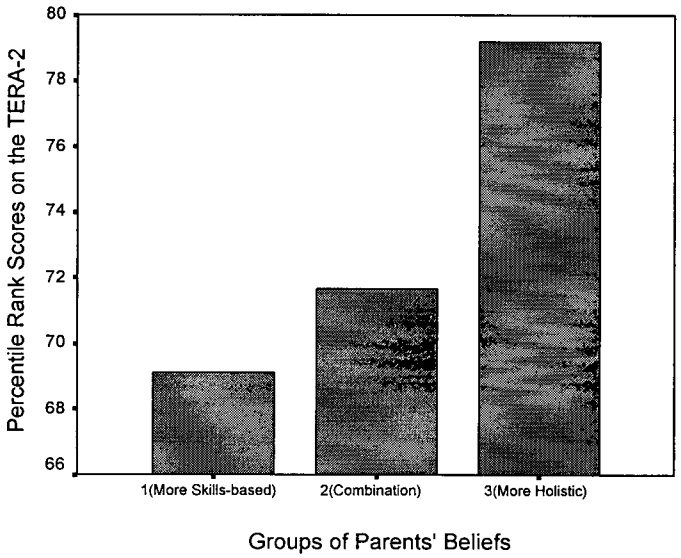
children's age. Even when children's age was controlled for in the *TERA-2* assessment, children's achievement scores were highest when parents' beliefs were more holistic. There were also no significant differences in parents' literacy beliefs based on whether children were age 3 or 4, $t(33) = 1.80, p > .05$. The findings can be viewed in Table 14. Figure 3 depicts children's percentile rank scores on the *TERA-2* based on the grouping of parents' beliefs.

Table 14

Total and Mean Scores of Children's Achievement Based on the Grouping of Parents' Beliefs

	Total			*M (SD)*					
	Grp.1 $n = 11$	Grp.2 $n = 12$	Grp.3 $n = 12$	Grp.1 $n = 11$		Grp.2 $n = 12$		Grp.3 $n = 12$	
TERA-2 (Meaning)	41	54	66	3.73	(1.35)	4.50	(1.62)	5.50	(1.45)
TERA-2 (Alphabet)	43	51	78	3.91	(2.81)	4.25	(2.60)	6.50	(2.61)
TERA-2 (Conventions)	17	24	40	1.55	(1.63)	2.00	(1.91)	3.33	(2.77)
TERA-2 (Percentile rank)	760	860	950	69.09	(13.00)	71.67	(24.69)	79.17	(21.54)
TERA-2 (Total score)	101	129	184	9.18	(3.43)	10.75	(5.33)	15.33	(6.26)
KLST-2 (Total score)	185	234	328	16.82	(5.34)	19.50	(8.33)	27.33	(6.91)
Letter identification (Total score)	254	349	374	23.09	(21.92)	29.08	(22.01)	31.17	(18.40)

Figure 3. Children's percentile rank scores on the *TERA-2* based on the grouping of parents' beliefs.



The grouping of parents' beliefs based on children's achievement.

For an increased understanding of children's literacy achievement, parents' beliefs and interactions were examined in relation to children's *TERA-2* scores. In particular, those children scoring at the extremes of the test, that is, those with below average and superior scores, were examined. Based on children's achievement on the *TERA-2*, their standardized scores could be placed into four ratings: below average, average, above average, and superior. There were some trends in parents' literacy beliefs and parent-child interactions based on children's scores which further supported those trends based on the grouping of parents' beliefs. However, because there was only one child in the below average category that was included in the descriptive section of this study, this finding should be interpreted with caution. The parent of this child was in the middle or combination group based on her beliefs. Unlike the trend in the current study where more overall interactions were more prevalent with lower scoring children, there were

very few parent-child interactions for this dyad. However, the interactions that occurred were confirmation questions and statements.

There were 11 of 35 children in the superior category. The following were the number of children in each of the groups based on their parents' beliefs: Group 1 (more skills-oriented) = 1, Group 2 (combination) = 4, and Group 3 (more holistic) = 6. Clarification and confirmation statements/questions were prevalent in the types of shared book interactions, and there was some elaboration of text among these families. A few parents focused on print and there were generally more parent-child interactions compared to the child who had below average scores. Overall, the types of interactions and parents' beliefs based on children's achievement seemed to support results based on the grouping of parents' beliefs.

Summary of Findings

The following is a list of the statistically significant findings in this study:

1. parents' literacy beliefs and their encouragement of literacy activities, $r(32) = .37$, $p = .03$ ($ES = .14$)
2. parents' literacy beliefs and their teaching of literacy activities, $r(32) = -.52$, $p = .00$ ($ES = .27$)
3. parents' literacy beliefs and their comments about print, $r(35) = .32$, $p = .05$ ($ES = .10$)
4. parents' gestures to illustrations and children's construction of meaning on the *TERA-2*, $r(35) = -.34$, $p = .04$ ($ES = .12$)
5. parents' confirmation statements and children's construction of meaning on the *TERA-2*, $r(35) = -.33$, $p = .05$ ($ES = .11$)

6. parents' confirmation questions and children's construction of meaning on the *TERA-2*, $r(35) = -.35, p = .03$ ($ES = .12$)
7. parents' clarification statements and children's knowledge of reading conventions on the *TERA-2*, $r(35) = .34, p = .04$ ($ES = .12$)
8. parents' elaboration statements and children's knowledge of reading conventions on the *TERA-2*, $r(35) = .47, p = .00$ ($ES = .22$)
9. children's confirmation questions and their alphabetic knowledge on the *TERA-2*, $r(35) = .47, p = .00$ ($ES = .22$)
10. children's clarification questions and their alphabetic knowledge on the *TERA-2*, $r(35) = .33, p = .05$ ($ES = .11$)
11. parents' confirmation statements and children's alphabetic knowledge on the *TERA-2*, $r(35) = .39, p = .02$ ($ES = .15$)
12. parents' clarification statements and children's alphabetic knowledge on the *TERA-2*, $r(35) = .39, p = .02$ ($ES = .15$)
13. children's clarification statements and their alphabetic knowledge on the *TERA-2*, $r(35) = .34, p = .04$ ($ES = .12$)
14. parents' clarification statements and children's overall reading achievement on the *TERA-2*, $r(35) = .40, p = .01$ ($ES = .16$)
15. parents' elaboration statements and children's overall reading achievement on the *TERA-2*, $r(35) = .40, p = .01$ ($ES = .16$)
16. children's confirmation questions and their overall reading achievement on the *TERA-2*, $r(35) = .34, p = .04$ ($ES = .12$)

17. parents' confirmation statements and children's letter knowledge as revealed by the letter identification task, $r(35) = .36, p = .03$ ($ES = .13$)
18. parents' clarification statements and children's letter knowledge as revealed by the letter identification task, $r(35) = .38, p = .02$ ($ES = .14$)
19. children's confirmation questions and their letter knowledge as revealed by the letter identification task, $r(35) = .46, p = .00$ ($ES = .21$)
20. parents' literacy beliefs and children's language achievement, $r(35) = .46, p = .00$ ($ES = .21$)
21. parents' literacy beliefs and children's overall achievement on the *TERA-2*, $r(35) = .44, p = .01$ ($ES = .01$)
22. parents' literacy beliefs and children's knowledge of the alphabet on the *TERA-2*, $r(35) = .38, p = .02$ ($ES = .14$)
23. parents' literacy beliefs and children's knowledge of conventions on the *TERA-2*, $r(35) = .40, p = .02$ ($ES = .16$)
24. children's language achievement and their overall literacy achievement on the *TERA-2*, $r(35) = .41, p = .01$ ($ES = .17$)
25. children's language achievement and their construction of meaning on the *TERA-2*, $r(35) = .37, p = .03$ ($ES = .14$)
26. children's language achievement and their knowledge of conventions on the *TERA-2*, $r(35) = .34, p = .04$ ($ES = .12$)
27. children's knowledge of reading conventions and their letter knowledge as revealed by the letter identification task, $r(35) = .44, p = .01$ ($ES = .19$)

28. children's alphabet knowledge on the *TERA-2* and their letter knowledge as revealed by the letter identification task, $r(35) = .79$, $p = .00$ ($ES = .62$)
29. parents' beliefs and parents who completed/did not complete post-secondary education, $t(33) = -2.30$, $p = .03$ ($ES = .80$)

CHAPTER V: DISCUSSION

Chapter V presents a summary and discussion of the findings as revealed by the statistical and descriptive analysis of data collected during this investigation. The study limitations and a conclusion are presented. Educational implications are drawn from the findings and recommendations are presented for further research.

Research Question One

Is there a relationship among parents' literacy beliefs, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement?

Parents' Literacy Beliefs and Behaviors

There was a significant relationship between parents' literacy beliefs and the behaviors they engage in to help their children to read and write. Specifically, parents who had more holistic beliefs were more likely to encourage children's literacy development. Because encouraging literacy development seems to be an important aspect of the holistic perspective of how children learn to read and to write, the finding that parents' encouragement of literacy activities related to their beliefs about literacy supported previous research (e.g., K. Goodman, 1986). Parents' teaching behaviors negatively related to parents' belief scores. Therefore, parents who engaged in more direct teaching activities as a means to help children learn to read and write were less likely to have holistic beliefs about how children become literate. Indeed, the direct

teaching of literacy skills to young children would seem to relate more to parents' beliefs which were skills-oriented (Fitzgerald, 1993).

For this culturally diverse sample, parents' participation in and encouragement of activities to help children to read and to write were most prominent of all the behaviors parents claimed to engage in with children. The one activity that parents claimed to engage in with children that surpassed all others was reading to them. This finding was shown in Anderson's (1995b) study, where reading to children was the most popular response among a diverse group of parents of 5-, 6-, and 7-year-olds, of ways to foster young children's literacy development. The present result suggested that parents in this culturally diverse sample were aware of the importance placed on shared book reading for children's early school success (Pellegrini, 1991). It was also possible that because parents were asked to read to children as part of this study, this activity was in the forefront of their minds when parents were asked what they do to help children to read and to write. Mason (1992) pointed out that certain cultural groups do not engage in storybook reading with young children. However, nearly all of the parents in the present study, all of whom lived in a culture where storybook reading is considered important for children's literacy development, claimed to engage in this practice.

Parents were also likely to encourage literacy activities as a means of helping children learn to read and to write. In particular, providing books for children was the most frequent response given by parents as a means of encouraging literacy development. In parents' reports of directly teaching their children, teaching children the alphabet was the most common response in this category. It has been shown that children's knowledge of letter names and sounds is associated with their reading success (Adams, 1991).

Hence, parents' behaviors were similar to those behaviors many schools would advocate for preparing children for school literacy: read to children, provide books for them, and teach the alphabet. Despite the diversity of this sample, the responses of parents were typical of those that would be provided by many White, middle-class parents.

Many responses (30) by parents concerning ways to help children to read and to write related to children's general knowledge development. Although not directly related to print, parents felt that such activities were important for children's literacy development. It seemed that parents who felt that such activities were important would also have beliefs that related to more holistic beliefs about literacy, because part of the holistic perspective focuses on the importance of children's general knowledge development, rather than just focusing on particular literacy skills (Serpell, 1997). However, there did not seem to be a trend in these responses with regards to parents' beliefs. Responses such as talking to children/answering their questions and drawing pictures with them were most popular in the knowledge development category. From this diverse group, many parents felt that these indirect literacy behaviors would help children to read and to write. This is consistent with a contemporary belief about literacy development.

Parents' Literacy Beliefs and Parent-Child Storybook Interactions

This study showed that parents with more holistic beliefs interacted more around print when book sharing with their young children than those parents with more skills-oriented beliefs. Intuitively, it would seem that parents who are more concerned with teaching literacy skills by direct instruction may focus more on print when sharing books with children and the opposite finding was unanticipated. Learning to "break" the

alphabet code is closely tied to traditional beliefs about literacy (Evans et al., 2001). It may be that parents with more holistic beliefs used the shared book reading experience as a means of teaching literacy skills, rather than teaching about print in a more isolated manner, which may be the case with parents with more skills-based beliefs. Hannon and James (1990) reported that parents engage in teaching children about print within shared reading. However, their finding seems to be in contrast with some others (e.g., Sonnenschein & Munsterman, 2002) who claim that there is little engagement in talk considered relevant for increasing knowledge about print during book sharing. It is possible that the ability to find other significant relationships between parents' beliefs and their interactions with children in book sharing may be attributed to the small sample size and the resulting limitation of power to detect these. This finding may also signify that parents' beliefs and how they interact in book reading are influenced by another factor that affects this relationship, such as children's previous experiences with text (Bus & van IJzendoorn, 1988). The correlation between parents' beliefs and their interactions with children around print in storybook reading was moderate. Cohen (1977) claimed that the correlation coefficients encountered in the behavioral sciences are of this order of magnitude (i.e., $r = .30$). It seems that although focusing on skills is just one aspect of the holistic approach toward literacy learning, parents feel it is important to use this meaningful event to involve children in learning about print, in particular the letters and their sounds.

Parents' Beliefs and Behaviors and Children's Language and Literacy Achievement

There was no significant relationship between parents' reports of literacy behaviors and children's achievement. Parents' report of literacy behaviors may vary

from those they actually engage in with children. However, there was a marginally non-significant relationship between parents' engagement in knowledge development behaviors and children's meaning scores on the *TERA-2*. Because knowledge development included such things as going on outings and pointing out things in the environment, and the meaning category included children's knowledge of environmental print, this relationship may suggest that the above mentioned activities may be important for children's construction of meaning. Important descriptive information about parents' literacy behaviors was revealed from this question, which, as previously documented, related to parents' literacy beliefs.

The more parents' beliefs were holistic, the higher children were performing in their language and literacy achievement. It may also have been the case that the more literacy and language knowledge children had, the more holistic parents' beliefs were about how children learn to read and to write. Such a finding may signify the importance of children's achievement in relation to parents' beliefs. This finding was somewhat contradictory to previous research that has shown that children in more traditional, skills-based classrooms faired better in tests of reading than their counterparts in a more language-oriented classroom (Evans & Carr, 1985), to which a holistic orientation about literacy would more closely relate. Evans and Carr's finding may be due to the greater emphasis on skills on some standardized tests. The *TERA-2*, which was used to evaluate children's literacy knowledge in this study, includes many aspects of emergent literacy. Because a holistic approach to literacy is now more emphasized in schools, such testing was in line with current practices. Parents who reported engaging in more direct instruction as a way to help children to read and to write, such as teaching the alphabet,

with less encouragement of literacy, had more skills-based beliefs and their children did not perform as well as children of parents with more holistic beliefs.

Parents' beliefs were unrelated to children's meaning scores on the reading test (*TERA-2*). It seems intuitive that parents with more holistic beliefs would focus on helping children to construct meaning in their interactions and children would show stronger vocabulary skills (Graham & Harris, 1994). The current finding suggests that parents' beliefs about literacy do not directly relate to children's comprehension knowledge. Many items in the meaning category on the *TERA-2* involved labeling objects and knowledge of environmental print. Despite no relationship between parents' beliefs and this aspect of literacy, it seems that helping children to improve their vocabulary knowledge would be an important way that parents could encourage this aspect of literacy development.

Unlike the absence of a relationship between parents' beliefs and children's meaning scores on the *TERA-2*, parents' literacy beliefs related to children's knowledge of conventions and their alphabetic knowledge. The more parents believed that children learn to read and to write from a more holistic perspective, the more knowledge children had of literacy conventions and of the alphabet. Because more skills-based parents reported engaging in direct teaching to help children to read and to write, in particular, of the alphabet, it was unexpected to find a relationship between more holistic parental beliefs and children's alphabetic knowledge. Nevertheless, parents with more holistic beliefs may be using many literacy opportunities to teach children the alphabet (i.e., pointing out print in the environment or during shared storybook reading).

Children's letter knowledge from the letter recognition task (Clay, 1979a) did not relate to parents' literacy beliefs. However, children's letter knowledge, as revealed by the letter recognition task, and children's alphabet scores on the *TERA-2*, did strongly relate to each other. A key difference in both measures is that the *TERA-2* involved children in identifying letter sounds and words rather than just letter naming. This difference may have contributed to the different relationship between these two measures and parents' beliefs. Therefore, it seemed that when parents' beliefs were more holistic, children had more letter-sound and word recognition knowledge. Children of parents with more skills-based and more holistic-oriented beliefs may have letter identification ability but those children of parents with more holistic beliefs seemed to have more letter-sound and word recognition skills. Parents with more holistic beliefs may be taking the opportunity to focus children's attention more on phonological awareness than those parents with more skills-based beliefs. Alternatively, the finding could suggest that when children had more phonological awareness, parents' beliefs were more holistic or emergent. Previous research has not examined whether parents' beliefs are developmental in relation to children's achievement.

Convention scores on the *TERA-2* included children's knowledge of print direction and book handling ability. The relationship between parents' beliefs and children's convention knowledge seemed to suggest that parents with more holistic beliefs may be interacting with children around text more often than those parents with more skills-based beliefs because convention knowledge usually develops through print exposure rather than direct teaching (Y. Goodman, 1986; Reid et al., 1989). Emergent beliefs about literacy promote the involvement of children with different types of print

material (British Columbia Ministry of Education, 2000). Children of parents with more holistic beliefs had more knowledge of literacy conventions. There has been little examination in previous research of the relationship between parents' beliefs and children's literacy achievement before children begin formal reading. Overall, the relationship between parents' beliefs and children's achievement on the *TERA-2* suggests that when children were performing higher in their literacy achievement, parents felt that the direct teaching of literacy skills was less important and encouragement of literacy was more important.

Children's language achievement also increased when parents' beliefs were more holistic. As part of the holistic perspective, there is a focus on development through many types of activities and experiences that may help to improve children's language development (British Columbia Ministry of Education, 2000). It may also be the case that the more language knowledge children had, the more holistic were parents' beliefs.

Parent-child Storybook Interactions and Children's Language and Literacy Achievement

There has been more research conducted on parent-child interactions and children's achievement than on parents' beliefs and children's achievement; however, less research has included the use of quantitative analysis and far less has included diverse cultural groups. There was no significant relationship between print interactions and achievement. It may be that although print interactions are considered highest on the parent-child interaction scale of storybook reading (Bus & van IJzendoorn, 1995) and are considered a high demand interaction because children have to treat the book simultaneously as a story and as a text (Hayden & Fagan, 1987), some children may not have benefited from print interactions because of developmental factors. That is, parents

may have interacted around print and were trying to scaffold such interactions but children were not cognitively advanced enough to make achievement gains based on such interactions. The effects of such scaffolding may be more gradual (van Kleeck, Gillam, Hamilton, & McGrath, 1997). Also, at the highest level on the scale of interactive reading, parents often read through the text with few interactions, assuming that children had comprehended what had been read (Bus & van IJzendoorn). Therefore, some parents in the current study with high-scoring children in literacy may not have focused on print. There were, however, relatively few interactions around print, and perhaps a larger sample might reveal similar or different patterns around print interactions. As will be discussed later in this chapter, print interactions were more prevalent among higher scoring children.

There was a negative relationship between parents' gestures to illustrations and children's meaning achievement scores. Because some educators believe that the use of illustrations will help increase children's comprehension of text (Sulzby, 1985; Trelease, 1995), in the present study it may have been the situation that parents pointed to the illustrations more when children had acquired less literacy knowledge (Bus & van IJzendoorn, 1995). Bus and van IJzendoorn's developmental scale of interactive reading lists "comments on the pictures" at the lowest level. There were also negative relationships between parents' confirmation statements and questions and children's meaning scores on the *TERA-2*. Confirmation statements and questions, as they relate to the transmission and acquisition of information, have been considered less challenging in terms of the level of thinking required to respond to them (Bloom, 1956). These types of statements and questions may be the result of parental awareness that the child's literacy

level is not yet at the appropriate level for more cognitively challenging questions (Bus & van IJzendoorn, 1995). Pellegrini, Perlmutter, Galda, and Brody (1990) have shown that low demand strategies negatively related to children's vocabulary scores. Children's meaning scores on the *TERA-2*, in which knowledge of the relationship among vocabulary items is included, negatively related to lower level cognitive demands made by parents (i.e., their confirmation statements and questions).

Wells (1985) found that the "ineffective" mother asked questions that focused on names and the "effective" mother asked questions that require much more from the child, such as by asking exploratory questions. The types of questions asked by an effective parent would be classified as clarification and elaboration questions in the current study. Clarification and elaboration statements made by parents positively related to children's overall literacy achievement, which may indicate the importance of explanations and extending the text for children's literacy achievement. It may also have been the case that children were at a more advanced developmental level in literacy and parents were adapting to the children's current literacy knowledge as Bus and van IJzendoorn (1995) found in their study.

Parents' confirmation and clarification statements related to children's alphabetic knowledge in the current study. This finding demonstrates that both higher and lower cognitively demanding interactions related to children's alphabetic knowledge. Children's knowledge of the alphabet can be strong whether they do or do not have storybook exposure, because the alphabet is often taught to children outside of storybook sharing (Senechal et al., 1998). It may be that parents interacted in lower cognitively demanding ways, such as making confirmation statements, with children who have fewer

previous experiences with storybook reading but have alphabetic knowledge, and higher demanding ways with children who have previous experience with text and knowledge of the alphabet. Bus and van IJzendoorn (1995) claimed that experience with text may relate to more demanding parent-child interactions.

It was only higher cognitively demanding statements made by parents that related to children's knowledge of literacy conventions. The finding suggests that for children with more knowledge of conventions and perhaps more text or written language exposure (British Columbia Ministry of Education, 2000; Reid et al., 1989), parents interacted in more cognitively challenging ways (Bus & van IJzendoorn, 1988).

There was no relationship between parents' and children's association and prediction statements and questions, and children's literacy achievement. Because there were relatively few instances of these types of interactions in this study, this finding should be interpreted cautiously. Parents used prediction statements in their book sharing as recommended by Trelease (1995) during read-alouds. Haden et al. (1996) considered prediction interactions to be a high demand interaction for children. However, as observed by this researcher, prediction interactions were often used to focus children's attention. Bus and van IJzendoorn (1995) argued that less frequently read-to children are less able to understand the story and are, therefore, more easily distracted. Parents in the current study also used prediction statements and questions to help children understand the story. There did not seem to be a clear pattern in the use of prediction statements and questions and this may have contributed to the non-significant relationship with children's achievement. Association statements have been considered moderately demanding for children, requiring some distancing from the present to relate the text to past or future

experiences, and have been promoted by educators (Haden et al., 1996). However, association statements and questions were infrequently incorporated in parent-child interactions and did not relate to children's achievement.

Children's interactions in story sharing related to different aspects of their literacy knowledge. Children's confirmation and clarification questions, as well as their clarification statements, positively related to their alphabetic achievement. This finding suggested that the more children were involved in questioning the story, the better they were performing in literacy. It may also have been the case that children who had more literacy knowledge, in particular, knowledge of the alphabet, were more confident in questioning the text and illustrations. It seemed that children were taking more control over the learning process by contributing their own knowledge to the story, such as by making statements and asking questions about what was happening in the story. Wells (1985) claimed that when children are encouraged to ask questions about events that occur and their causes and significance, children's awareness of the ways in which language can be used are developed and their inner representations of the world are enriched. Further support of the role of questions asked by children in storybook reading in children's achievement can been seen in Flood (1977). He found that the number of questions asked by children in book sharing was one of the best predictors of children's success on pre-reading tasks. In the present study, children's use of questions in story sharing related to their early literacy achievement.

Children's confirmation statements did not relate to their achievement. Confirmation statements included responses to parents' questions, which sometimes required a yes or no response only. These types of statements were common among high

and low scoring children. Children's clarification statements did, however, relate to achievement. Clarification statements are considered a high demand interaction and a relationship between this type of interaction and children's achievement was found in previous research (e.g., Haden et al., 1996).

There was no relationship between parent-child interactions and children's language achievement in this study. This may be attributed to the fact that the coding of parent-child interactions focused on the level of cognitive distancing in these interactions. Perhaps if the length of child utterances in storybook interactions had been analyzed, relationships may have been found. Such was the case in Whitehurst et al.'s (1988) study, where the mean length of the child's utterance related to children's language development. Moreover, the frequency of storybook reading has shown to relate to children's language development (Senechal et al., 1998) and it was not examined in this study.

Children's Language and Literacy Achievement

Alphabet scores both on the *TERA-2* and the letter identification task did not relate to children's language achievement. This finding suggests that children may know letter names, and may be able to identify some letter sounds, but may not be strong in their language ability or vice versa. There was also no significant relationship between children's meaning scores on the *TERA-2* and their alphabetic knowledge, which suggested that children's comprehension level may be not be directly linked to their alphabetic knowledge. It seems that parents can teach children the alphabet and children can memorize it, but the ability to construct meaning would develop through a variety of experiences, including discussion and experience with text.

Senechal et al. (1998) included comprehension as an oral language measure and children's alphabetic knowledge as a written language measure in their study. Children's oral language achievement related to their comprehension level more strongly than other literacy components studied in the current study, which supports Senechal et al.'s measurement classification. Furthermore, in support of Senechal et al.'s research, this study showed that alphabetic (or one aspect of written knowledge) and oral language may be developed through different types of activities because they did not directly relate to each other.

Research Question Two

Are there differences in parents' literacy beliefs based on their educational level and gender?

Education

The more highly educated the parents, the more holistic were their beliefs about literacy. This finding was consistent with some previous research (e.g., DeBaryshe, 1992; Fitzgerald et al., 1991). Fitzgerald et al. (1991) found that more highly literate parents held beliefs consistent with an emergent literacy perspective and less literate parents had more traditional beliefs about literacy learning. However, Anderson (1995a) found that parents' level of education did not relate to their beliefs about literacy learning. Parents with more holistic beliefs in the current study may have been more involved in schools or aware of current educational practices because schools in the area where data were collected promoted more holistic beliefs about literacy (British Columbia Ministry of Education, 2000). It has been well established that family status variables, such as income and education, often relate to parents' involvement in school and concomitantly to

their children's school success (Hoover-Dempsey & Sandler, 1997). When parents had more holistic beliefs, their children's language and literacy achievement scores tended to increase. Lyytinen et al. (1998) found that mothers' education level related to children's literacy achievement. Moreover, Heath (1983) and Leseman and de Jong (1998) found that mothers with more education go beyond the literal story more frequently in their discussions with their children than less educated mothers. This latter finding is consistent with the results of the present study, in that those parents with more education tended to engage in more cognitively distancing interactions with their children (i.e., with print).

Parental education appears to be a strong predictor of children's later language ability, partly through its association with linguistically more enriching parental interaction styles (Thal & Katich, 1996). Different types of interaction styles, for example, in storybook reading, may be linked to parents' education level and their SES. In the current study, the small numbers of parents separated in each group based on educational level did not permit the researcher to explore relationships between those parents within these groups and parent-child interactions in book reading. However, those parents who were more highly educated had more holistic beliefs, which correlated with children's literacy achievement.

Gender

There were no significant differences in parents' beliefs based on their gender. Relatively few fathers participated in this study (7 fathers, 28 mothers), and so this finding should be interpreted with caution. As can be seen in the grouping of parents' beliefs discussed in the next section, fathers who participated in this study seemed to be

more skills-based in their beliefs. There has been little research conducted on parents' literacy beliefs and gender.

Research Question Three

Based on parents' literacy beliefs, are there trends or patterns in parents' demographic characteristics, parents' self-reported literacy behaviors, parent-child interactions in storybook reading, and children's language and literacy achievement?

Parents' Education

There was a higher number of less-educated parents with skills-based beliefs who were, thus, in Group 1. This is consistent with the finding by Stipek et al. (1992) that less-educated parents stressed basic skills and performance-oriented instruction more than did well-educated parents. In this current study, parents with more skills-based beliefs were less likely to engage in activities that encouraged children's reading and writing but were more likely to be involved in the formal teaching of literacy activities, such as teaching children the alphabet.

Anderson-Yockel and Haynes (1994) and Neuman (1996) found that low-proficiency parent readers and their children were more likely to engage in text-focused interactions, compared with the interactions of more proficient parent readers, who displayed more meaning-based interaction strategies.

Parents' Gender

Although there were not many fathers involved in this study, those who participated seemed to be more skills-oriented in their beliefs. Because schools have tended to favor more holistic teaching practices over the past decade (e.g., Evans et al., 1998), and mothers have been traditionally more involved in young children's reading

(Grolnick & Slowiaczek, 1994), it may be the situation that fathers were relying more on perceptions of how they learned to read, rather than on knowledge of more current beliefs about literacy development. Previous research has shown that parents' beliefs are often influenced by their own memories of how they learned to read (Evans, 1998).

Cultural Background

The number of participants from different cultural backgrounds was unevenly distributed in this study. However, based on the breakdown of parents' beliefs into three groups, it seemed that European Canadian parents had beliefs that were more holistic and East Asian Canadian beliefs were more skills-based. This finding is supported by Anderson (1995a) and Elliot and Hewison's (1994) research and it may suggest that parents' beliefs relate to their cultural background. Nevertheless, there seemed to be variations within cultural groups in parents' beliefs and interactions and this is supported by previous research (Heath & Mangiola, 1991). As stated earlier in this study, there were so few participants from some cultural groups that any claims based on differences within the group or between groups would be unreliable. Also, the purpose of this study was not to compare cultural groups but to have an increased understanding of how diverse cultural groups, overall, interact with their children.

Parents' Literacy Behaviors

Parents with more skills-based beliefs were less likely to engage in the encouragement of literacy. These parents were more likely to engage in the direct teaching of literacy to young children. This finding supports previous research that claimed that parents with more skills-oriented beliefs engaged in more direct teaching of literacy (Anderson 1995b; Fitzgerald, 1993; Stipek et al., 1992). As stated in the

correlational results, the finding that parents with more holistic beliefs engaged in more encouragement of literacy is consistent with previous theoretical assumptions (K. Goodman, 1986).

Parent-child Interactions

Parents with more holistic beliefs (Group 3) interacted more around print than those parents with more skills-based beliefs. Parents with more holistic beliefs may use the shared reading experience as an opportunity to teach children about specific literacy skills, and so teaching children about print would occur within a meaningful context. There was a trend between parents' and children's interactions with regard to attention to print. The more parents pointed to print, so did children, and vice versa. From a careful review of the transcripts, in all but two interactions around print in storybook reading, it was the parent who initiated the print interaction. This may signify that parents were scaffolding print interactions for children. Overall, there were few print statements and questions compared to some other types of parent-child interactions (e.g., confirmation questions). Some parents may feel that a focus on print distracts from the meaning of the story, which they consider most important and, therefore, they do not interact in this way (Sonnenschein & Munsterman, 2002). Thus, in most cases when print was focused on in the current study, it occurred before the actual reading of the text began. Another reason for less focus on print may be that parents felt print interactions were not developmentally appropriate for their young children because print interactions are considered a high demand interaction (Haden et al., 1996).

As parents' beliefs became more holistic, they were less likely to make confirmation statements, ask confirmation questions, and point to illustrations. This

finding may suggest that parents with more holistic beliefs had children who were more advanced and required less of this sort of interaction to help them understand the story (see Bus & van IJzendoorn, 1995). Furthermore, children were less likely to make confirmation statements as parents' beliefs became more holistic. This may be the result of fewer confirmation questions asked by parents as their beliefs became more holistic. Indeed, more skills-based parents in this study were more likely to ask questions and make statements that were text-focused or lower-level demands for children's cognitive development (i.e., confirmation) than parents with more holistic beliefs. It seems that parents with more traditional views of literacy would be more concerned with story details and less with children's general knowledge development (Gunderson & Anderson, 2003). Interactions that were less demanding for children in the current study did not seem as beneficial for their literacy achievement as were more cognitively demanding interactions.

Children's achievement was lower when their parents had more skills-based beliefs. Because parents with more skills-oriented beliefs engaged more in the direct teaching of literacy skills, they may have spent less time fostering other aspects of literacy considered important by educators and these were evaluated in this study. Children of parents with skills-based beliefs had less knowledge of reading conventions, which may relate to children's exposure to text; these parents did not report teaching children about literacy conventions. Parents with more skills-based beliefs also tended to have less education.

A study by Bus et al. (2000) with native Dutch and immigrant families living in the Netherlands showed that Dutch mother-child dyadic pairs paid more attention to

connections going beyond the text and focused more on children's own experiences than did parents from the minority groups studied. This is similar to elaboration and association statements and questions in the present study. Bus et al.'s finding may support why so few of these types of interactions were found in the current study with culturally diverse families.

From the descriptive data, it can be seen that parents with more holistic beliefs interacted with children less than other parents overall, except in their elaboration questions and in interactions around print. Both of these types of interactions would be considered high demand interactions for children. Bus and van IJzendoorn (1995) also found that low SES parents, or those parents who were more skills-based in their beliefs in the current study, interacted more overall in the shared reading activity. Fewer interactions by parents with more holistic beliefs may signal that parents needed to provide less scaffolding for their children to understand the story, because children's achievement was higher when their parents had more holistic beliefs.

Children of parents with more holistic beliefs sometimes interacted more frequently in storybook sharing than those children of parents with more skills-based beliefs, particularly in their gestures and statements involving print, and in their clarification statements. From reviewing the transcripts of children's clarification statements, such statements were not always in response to parents' questions. Hence, children may have been taking a more active role in their own learning by making meaningful connections within the text to help them understand the story. Panofsky's (1994) research supports this current study finding. The total number of statements and questions from parents and from children was most similar among parents with more

holistic beliefs in the present study. Pellegrini (1991) claimed that mothers of more competent children provide less support in shared book reading.

In general, parents made more statements and asked more questions than did children. However, there were so few instances of some categories that it was difficult to make a claim that certain types of interactions would be more prevalent with parents than with their children. There were relatively few interactions involving prediction and association statements and questions in this study. Elaboration comments, although few, were mostly made by parents.

In the descriptive section of this study, there was only one child with below average scores on the *TERA-2*. Few parent-child interactions characterized this book sharing activity. More parent interactions in book sharing were apparent with other parent-child dyads when children were scoring lower. It may be that this child required more scaffolding from the parent to help increase his literacy knowledge. However, because there was only one child in this category, this finding should be interpreted cautiously. Children with superior scores on the TERA-2 generally had parents with more holistic beliefs, and parent-child interactions involved a mix of low and high cognitively demanding interactions, including interactions around print. This latter finding supports previous trends identified in the data.

Children's Achievement

There were some trends in children's achievement based on the grouping of parents' beliefs. All of the achievement measures, that is, children's results on the *TERA-2*, *KLST-2*, and the letter identification task, showed an increase in children's achievement as parents' beliefs became more holistic. This finding is consistent with the

correlational findings in the current study in that parents' beliefs related to children's achievement.

Scaffolding

Previous research has shown that when mothers used immediate talk or low cognitively demanding interactions, the children tended to do the same and when mothers used non-immediate talk, children tended to use it (DeTemple & Tabors, 1994). One example of this situation in this study involved the mother asking the following: "Ooh, what is happening?" The child, shortly after, asked: "Why is he out of breath?" An analysis of the transcript revealed that this type of question was not asked by the child previous to the initiation by the parent. This finding related to Vygotsky's (1978) zone of proximal development wherein parents help to scaffold children's learning (Bruner, 1986). When scaffolding, parents adjust their interactions based on children's responses to their interactions. The following is an example that shows that when a father notices a lack of his daughter's understanding of story plot and vocabulary, he does not make further attempts to ask what is happening, and he begins to confine the discussion to the illustrations, in particular, to labeling them. The father goes from making clarifying questions and statements, to confirmation questions and statements, to a focus on illustrations. The trend is from high demand interactions to less cognitively demanding interactions.

HE SWAM AWAY IN THE DEEP WET WORLD. HE WAS SCARED, LONELY AND VERY SAD.

F: Because the tuna fish ate all the red fish and Swimmy was left alone and he was very sad

C: Alone

HE SAW A MEDUSA MADE OF RAINBOW JELLY.

F: Why do they call it rainbow jelly?

C: (no response)

F: Because it was different colors, right?

AN EEL WHOSE TAIL WAS ALMOST TOO FAR AWAY TO REMEMBER

F: What it this? (refers to illustration)

C: Eel (makes shape with hands)

AND SEA ANEMONES WHO LOOKED LIKE PINK PALM TREES SWAYING IN THE WIND.

F: So what did he find … he found sea animals. What is this pink animal? (refers to illustration)

C: Sea animals

Previous research has shown that parents are sensitive to children's developmental level with text and adjust their interactions accordingly (Bus & van IJzendoorn, 1995). In another example, a father asked his daughter a "why" question and because she responded without difficulty to his question, he continued to ask further "why" questions. Storybook reading provides an optimal situation for parents to engage in scaffolding with their child (DeBaryshe, 1992). Many parents from diverse cultural backgrounds in the current study used scaffolding in storybook reading to enhance children's understanding of text.

Developmental Scale of Interactive Reading

The following are examples of children at different levels of the developmental scale of interactive reading (Bus & van IJzendoorn, 1995). As previously described in the current study, children's achievement tended to be lower when parents were interacting with children at lower levels of this scale and higher when interactions were at higher levels of this scale. This finding may signify that when children were achieving higher, they had more experience with text. Bus and van IJzendoorn's developmental scale also relates to research on the types of distancing interactions in that more distancing or demanding interactions related to higher levels on the scale.

1. Commenting on the pictures (lowest level)

M: Let's look at the pictures first. Do we have this one in our home? (mother points to picture)

M: This one? Take a look at this. (mother points to picture)

C: No

M: All right. This one. What is this? (mother points to picture)

C: Apple

M: What is this? (mother points to picture)

C: (no response)

M: This is a turtle. Look! He is climbing the tree. (mother points to picture)

2. Extending discussions, primarily about pictures

"HOW DID YOU KNOW I WAS A MOUSE?"

"WHO ELSE BUT A MOUSE WOULD HAVE A TAIL LIKE YOURS?" SAID SPINNY.

F: He has a tail. (father points to picture)

C: Ya, like the other mouse. (child points to picture)

F: Ya.

THEN AS THE OTHER MICE WENT ABOUT THEIR BUSINESS, SPINNY POINTED TO A BEAUTIFUL MOUND OF BOULDERS.

"WE LIVE OVER THERE IN THE CASTLE. COME WITH ME."

C: The castle … made of rocks … (child point to picture)

F: Ya

C: … and a stick. (child points to picture)

…

"I'M SORRY", HE SAID. "I JUST CAN'T EAT BERRIES. THEY MAKE ME SICK."

F: He doesn't like berries.

C: Yes.

3. Some discussion, primarily about the story plot

TIMOTHY RAN OUT OF THE BUILDING THAT HAD BEEN HIS HOME FROM THE DAY HE WAS BORN. AND HE KEPT RUNNING, ALL THE WAY TO THE OUTSKIRTS OF TOWN.

C: Mommy, why he run to the outskirts of town?

M: I guess he was so surprised and shocked that he just wanted to run away.

HE KNEW THAT HE COULDN'T GO BACK HOME. NO ONE WOULD RECOGNIZE HIM IN HIS NEW GUISE. HE HAD NO CHOICE. HE HAD TO GO ON. BUT FIRST HE WOULD NEED A QUIET PLACE TO REST.

M: He does not understand why he looks different does he?

C: I wonder why.

M: It's mysterious. Let's see what it says.

4. Just reading the text, and focusing the children's attention on the print (highest level)

M: What does this say? (mother points to print)

C: (no response)

M: Swimmy

C: Swimmy

M: Sw… What sound is this? (mother points to print)

C: S (sound)

M: S (sound)

C: It starts with an S.

M: Can you tell me what all those letters are? (mother points to print)

C: SM SM M Y (child points to print)

M: Okay. That's good. That's S. (mother points to print)

C: Swimmy

…

"LET'S GO AND SWIM AND PLAY AND SEE THINGS!" HE SAID HAPPILY.

"WE CAN'T," SAID THE LITTLE RED FISH. "THE BIG FISH WILL EAT US ALL."

"BUT YOU JUST CAN'T LIE THERE," SAID ....

M: Says who?

C: Tunafish

M: SWIMMY.

"WE MUST THINK OF SOMETHING."

(the last example included one of the few interactions between parent and child)

Conclusion

This study has shown that parents from diverse groups engage with children in higher order thinking interactions in storybook reading. It has shed light on how such interactions relate to different aspects of children's early literacy knowledge. The results are consistent with Bus and van IJzendoorn's (1995) developmental model, which may be helpful in understanding the contribution of shared book reading to children's literacy development. Some parents seemed sensitive to children's development with text and adjusted their interactions accordingly.

In the present study, parents who did not complete post-secondary education had beliefs that were more likely to be skills-based. Parents with more skills-based beliefs were more likely to ask confirmation questions and make confirmation statements in shared book reading, and had children who were performing lower in language and literacy achievement. Informing parents about the association between the types of storybook reading interactions and children's achievement may be one means of helping to improve children's early language and literacy achievement.

Indeed, the knowledge measured in this study is closely tied to what is valued in schools in this society, and is largely based on research with White, middle-class parents (Adams, 1991). Even though some studies claim that children from minority homes are at risk for reading failure because they are somehow deficient in important literacy skills, this does not seem to be the case in this study. Most of the children who participated in this study had reading achievement scores that were average or above average in terms of standardized norms. Nevertheless, there were differences in this sample in children's achievement that were related to parents' literacy beliefs. It would be unreasonable to predict that children who currently have less literacy knowledge will have literacy difficulties in school. However, it seems that some children will bring knowledge to school that will be more valued by educators and that may give them an advantage. It seems that the parents of children underachieving in literacy may benefit from information on how to further support young children's literacy through storybook reading. In addition, educators may want to find out about other types of print children are exposed to in the home and build on this in school.

Parents' beliefs related to their reported literacy behaviors and to children's achievement. The present study demonstrates that parents with more skills-based beliefs may be teaching children literacy knowledge, such as how to spell correctly, with less emphasis on other aspects of early literacy, such as meaning construction, that is valued by many educators. To ensure that children have the prerequisite knowledge that schools value and to build upon the knowledge that parents consider important for literacy, an increased communication between home and school is necessary. As one father expressed in this study, "Can you tell what I should be doing to help her learn to read?"

Waiting until children begin formal schooling to try and make home-school connections may be a little too late, because differences in the types of early literacy knowledge children possess already exist by that point.

Limitations

There were a number of methodological concerns that limit the generalization of the findings.

1. It may have been the case that parents who volunteered to participate in the study were those parents who were involved in shared book reading or felt confident in shared book reading with their children. Thus, the sample may not be representative of all the culturally diverse families living in the urban area in which the study was conducted.
2. The significant findings in this study have generally involved moderate effect sizes. This may relate to the importance one places on the associations among the measures used in this study. However, previous researchers have claimed that these effect sizes are expected in the behavioral sciences and that their significance should not be underestimated (e.g., Cohen, 1977; Lipsey, 1990).
3. The data analysis included only one observed interactive reading for each parent-child dyad, during a session arranged by the examiner. Sessions arranged by an examiner may be less realistic and not as valid a representation of its meaning and purposes in everyday experiences as a naturally occurring storybook reading event (Rogoff, Mistry, Goncu, & Mosier, 1993). However, parents were given the opportunity to have the shared reading taped in their home. It is expected that

discomfort and atypical actions that may have been present at the initiation of parent-child book sharing would have become more natural and realistic as the taped session progressed. The video recorder was placed at a reasonable distance from the participants to reduce it being a distraction during this event. The researcher observed that after several minutes, the participants, in general, did not look at the camera, which may signify a focus on the book sharing.

4. "The potential role of book reading as a stimulus for early literacy varies among culturally divergent groups" (Bus et al., 2000, p. 73). Hence, not all groups engage in storybook reading or do so early on as a way to promote children's early literacy development. By asking parents to share a storybook with their child, it may be the case that parents behaved in ways that they assumed were appropriate to the mainstream culture. However, based on the observation of the researcher, it seemed that parents were at ease and behaved as they normally would.
5. Parents' beliefs and their behaviors were measured by an interview based on a questionnaire format. There may be a risk, in that the tendency may be to give socially desirable answers (Leseman & de Jong, 1998). However, to establish a long-term relationship with the families in this study, the sample size would have needed to be significantly decreased and, hence, some of the common trends in these data may not have been revealed.
6. A letter identification task and standardized reading and language assessment measures were used to evaluate children's early language and literacy development. Children's scores on such measures may only represent their development in school-valued knowledge among mainstream groups. Nevertheless, these assessment tools

have high reliability and validity and assess a wide array of children's early language and literacy knowledge.

7. These children were involved in preschool programs. Children's early literacy development and parents' beliefs may relate to involvement with the preschool.

Educational Implications

The following are applied and theoretical implications based on the findings of this study.

Educators

Working with Parents and Children

1. This was one of the first studies to examine parents' beliefs about how children learn to read and to write before children begin formal instruction. Because parents' beliefs related to the way they interacted with young children in storybook reading, and to children's achievement, it is important that educators are aware that the knowledge children bring to school may relate to parents' literacy beliefs.
2. "Teachers commonly urge parents to read with their children but give little guidance as to the nature of the reading interactions" (Sonnenschein & Munsterman, 2002, p. 335). Communication between home and school must move beyond "read to your child" (Sonnenschein & Schmidt, 2000). Asking parents to read to their child may not produce meaningful conversations around text. Demonstrating to parents ways of interacting with children in storybook reading may be necessary.
3. The previous recommendation is not to make young children engage in higher level interactions but to encourage parents to see, when developmentally appropriate, these

interactions are important for children's achievement. Parents should be informed of ways to read to their children more effectively (Edwards, 1994). Moreover, parents want to be informed as how to best support their children's literacy development and early childhood educators can provide parents with this knowledge (Edwards, 2002).

4. It is also important that early childhood educators are aware of the types of activities that occur in families so that they can build on these in school. Knowledge of these activities would require that educators work closely with families. There may be other types of literacy activities parents engage in with children that involve higher demand interactions and may relate to children's literacy achievement.
5. From the descriptive data in this study, there was a trend in that those parents who focused more on print in storybook interactions had children who were performing at a higher level on literacy and language assessment measures. Senechal et al. (1998) claimed that instruction in print-specific skills during book readings may be required to improve children's written language skills in contrast to the frequency of reading which has shown to relate to children's oral language skills. Hence, storybook reading provides a meaningful context to introduce a focus on print. When early childhood educators share books with children, they should be aware that a print focus may be more effective in supporting children's written language knowledge. The use of "big books" or other enlarged texts to draw children's attention to print may be helpful.

Assessment

6. It has been suggested that difficulties in reading and writing in school may be due to failure to develop abstract approaches and strategies (Sorsby & Martlew, 1991).

Because this study has shown an association between more distancing interactions and children's achievement, storybook interactions may be helpful in supporting higher-order thinking skills often assessed by schools.

7. This study has shown support for Bus and van IJzendoorn's (1995) scale of interactive reading in that children's achievement was higher when children were interacting with parents at higher levels of this scale and vice versa. With reference to this scale, educators of young children will have more information on how their children are progressing in shared reading.
8. It has been claimed that a focus on meaning is more important than emphasizing discrete skills in the preschool period (DeBaryshe & Binder, 1994), and that focusing on meaning can be more beneficial for children's achievement (tenets consistent with current models of emergent literacy) (Sulzby & Edwards, 1993). The parents in the current study who reported to engage in more direct teaching of literacy and had more skill-oriented beliefs, seemed to have children with less literacy knowledge than those parents who engaged in more encouragement of literacy activities. It is important for educators to not underestimate the significance of encouragement activities for children's achievement.

Researchers

9. It is important that researchers examine the types of interactions and not just the frequency of interactions in relation to children's achievement. For example, there were few interactions during shared book reading in the dyad in which the child scored below average on the *TERA-2*. Because Bus and van IJzendoorn (1995) claimed that fewer interactions occur as children progress in interactive reading, there

seems to be a need to look at the quality and not just the frequency of storybook interactions. Because only one child with below average scores was examined in the current study, this recommendation should be treated with caution and further research with underachieving children and book sharing may be necessary to clarify the current finding.

10. Schools often base their curriculum on children's early literacy experiences, such as storybook reading. Most theories of how children become literate have been developed and based on research with middle-class Caucasian families (Bus et al., 2000). In order to shape school policy and curriculum with regard to literacy, studies such as this one provide much needed insight on how parents from diverse cultural backgrounds interact with their children in storybook reading when encouraged by educators to do so. Even though similar interactions were found in relation to children's achievement, in order to make generalizations about storybook reading and how certain interactions relate to children's literacy achievement, researchers should include diverse cultural groups in further studies.
11. The study has implications for researchers who design intervention programs to implement specific ways of teaching parents how to improve young children's literacy development. Because parents' beliefs related to their behaviors, any recommendations to parents to change the way they interact with their children should be introduced with respect to parents' literacy beliefs; if not, teachers may not be effective in implementing change (e.g., Janes & Kermani, 2001).

Recommendations for Further Research

1. A critical part of the empowerment process may be to learn from parents themselves about their beliefs and practices within their homes (Neuman et al., 1995). "The more educators know about the dynamics of parents' beliefs, the more likely they are to develop programs responsive to the families and children they are designed to serve" (Neuman et al., 1995, p. 804). Further research should observe parents interacting with children around various forms of print in the home context. Storybook reading is only one means of promoting children's literacy development. The observation of interactions around other types of print may be an important key to understanding children's early language and literacy development. Very little research, with the exception of Heath (1983) and Purcell-Gates (1995), has explored children's interactions with print in the home context.
2. It may be important for both educators and researchers to ask parents about their reasons for engaging in particular literacy behaviors, including their interactions with children in storybook reading. This insight on reasons for parents' beliefs may foster a better understanding between home and school of how best to support children's literacy learning.
3. Studies that examine parents' interaction with children in storybook reading should measure, or use as a control, the frequency of parent-child interactive reading and children's age. This may contribute to our understanding of various other factors that relate to early literacy development.

4. It is vital that further studies begin to examine whether there are gender differences in parents' beliefs and their interactions with children in reading. Only a few fathers were involved in this study and most studies of parent-child storybook interactions involved mothers (e.g., Bus & van IJzendoorn, 1995; Martin, 1998). The findings of the current study seem to suggest that fathers are more skills-based in their beliefs. There is a need for gender-balanced research to further test this finding. As well, further research is required to help fully define fathers' role in young children's literacy development. It seems that fathers are becoming more involved in young children's education, yet little is known about their beliefs and behaviors in relation to children's literacy outcomes.
5. Because questions and statements related in different ways to children's achievement, further research may help to delineate how both help to maximize children's literacy knowledge.
6. Further research should examine whether recent immigrants vary in their beliefs and activities in relation to literacy. It may be that those parents who are more recent arrivals in a new cultural environment have different beliefs from those who have assimilated to a greater extent into the new culture. To explore more deeply different cultural groups' beliefs about literacy and to examine variation within specific cultural groups, a larger sample of specific cultural groups is necessary.
7. Because of logistical factors, the sample size for this study was limited. Nevertheless, the analysis for this study revealed important findings, as there were a number of significant relationships among the variables, and trends in the descriptive data. It would be interesting to see if the findings of this study would be supported by a

similar study conducted with a larger sample and over several shared reading sessions. The effects of scaffolding distancing strategies on children's achievement may only show in the long-term (van Kleeck et al., 1997). Furthermore, longitudinal research may better delineate how parent-child interactions change with children's age or development with text.

8. Researchers may want to examine the book genre in relation to distancing questions and statements. The types of interactions may or may not have similar associations with aspects of children's literacy achievement. The frequency of types of interactions may vary with text genre (Pellegrini et al., 1990) and it may be beneficial to compare both genres in relation to distancing statements and questions.
9. Because parents with less education had more skills-oriented beliefs, and these beliefs negatively related to children's achievement, researchers may want to identify why educational level relates to parents' beliefs. Some previous research has shown similar findings but there is little explanation as to why this trend continues.

REFERENCES

Adams, M. (1991). *Beginning to read: Thinking and learning about print.* Cambridge, MA: MIT Press.

Altwerger, B., Diehl-Faxon, J., & Dockstader-Anderson, K. (1985). Read-aloud events as meaning construction. *Language Arts, 62*, 476-484.

American Psychological Association (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Anderson, J. (1995a). How parents perceive literacy acquisition: A cross-cultural study. In E. Sturtevant & W. Linek (Eds.), *Generations of literacy.* Commerce, TX: The College Reading Association.

Anderson, J. (1995b). Listening to parents' voices: Cross cultural perceptions of learning to read and to write. *Reading Horizons, 35*, 394-413.

Anderson, J., Anderson, A., Lynch, J., & Shapiro, J. (2003). Storybook reading in a multicultural society: Critical perspectives. In A. van Kleeck, S. Stahl, & E. Bauer (Eds.), *On reading to children: Parents and teachers* (pp. 203-230). Mahwah, NJ: Lawrence Erlbaum Associates.

Anderson, J., & Gunderson, L. (1997). Literacy learning outside the classroom. *The Reading Teacher, 50*, 514-516.

Anderson, J., & Matthews, R. (1999). Emergent storybook reading revisited. *Journal of Research in Reading, 22*, 293-298.

Anderson-Yockel, J., & Haynes, W. (1994). Joint book-reading strategies in working-class African American and White mother-toddler dyads. *Journal of Speech and Hearing Research, 37*, 583-593.

Barton, D., & Hamilton, M. (1998). *Local literacies: Reading and writing in one community.* London: Routledge.

Barton, D., Hamilton, M., & Ivanic, R. (2000). *Situated literacies: Reading and writing in context.* London: Routledge.

Beck, I., & Juel, C. (1995). The role of decoding in learning to read. *American Educator, 19*, 21-25, 39-42.

Blackledge, A. (1999). Language, literacy and social justice: The experience of Bangladeshi women in Birmingham, UK. *Journal of Multilingual and Multicultural Development, 20*, 179-193.

Bloom, B. (1956). *Taxonomy of educational objectives: The classification of educational goals* (1st ed.). New York: David McKay Company.

British Columbia Ministry of Education (2000). *The primary program: A framework for teaching*. Victoria, BC: The Queen's Printers.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Bus, A., Belsky, J., van IJzendoorn, M., & Crnic, K. (1997). Attachment and bookreading patterns: A study of mothers, fathers, and their toddlers. *Early Childhood Research Quarterly, 12*, 81-98.

Bus, A., Leseman, P., & Keultjes, P. (2000). Joint book reading across cultures: A comparison of Surinamese-Dutch, Turkish-Dutch, and Dutch parent-child dyads. *Journal of Literacy Research, 32*, 53-76.

Bus, A., & van IJzendoorn, M. (1988). Mother-child interactions, attachment, and emergent literacy: A cross-sectional study. *Child Development, 59*, 1262-1272.

Bus, A., & van IJzendoorn, M. (1995). Mothers reading to their 3-year-olds: The role of mother-child attachment security in becoming literate. *Reading Research Quarterly, 30*, 998-1015.

Bus, A., van IJzendoorn, M., & Pellegrini, A. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research, 65*, 1-21.

Byrne, B. (1992). Studies in the acquisition procedure for reading: Rationale, hypothesis, and data. In P. Gough, L. Ehri, & R. Treiman (Eds.), *Reading acquisition* (pp. 1-34). Hillsdale, NJ: Erlbaum.

Byrne, B., Freebody, P., & Gates, A. (1992). Longitudinal data on the relations of word-reading strategies to comprehension, reading time, and phonemic awareness. *Reading Research Quarterly, 27*, 141-151.

Calfee, R., & Piontkowski, D. (1981). The reading diary: Acquisition of decoding. *Reading Research Quarterly, 16*, 346-373.

Chall, J. (1967). *Learning to read: The great debate*. New York: McGraw-Hill.

Clay, M. (1966). *Emergent reading behavior*. Unpublished doctoral dissertation. University of Auckland, New Zealand.

Clay, M. (1979a). *The early detection of reading difficulties.* Auckland, New Zealand: Heinemann.

Clay, M. (1979b). *Reading: The patterning of complex behavior* (2nd ed.). Auckland, New Zealand: Heinemann.

Clay, M. (1993). Always a learner: A fable. *Reading Today, 3*, 10.

Cohen, J. (1977). *Statistical power analysis for the behavioral sciences.* New York: Academic Press

Cook, C. (1988). *Self-concept and the disabled reader: An annotated bibliography.* Indiana: Indiana University Press. (ERIC Document Reproduction Service No. ED 298 440)

DeBaryshe, B. (1992). *Early language and literacy activities in the home.* Greensboro, North Carolina: North Carolina University, Department of Human Development and Family Studies. (ERIC Document Reproduction Service No. ED 351 406)

DeBaryshe, B., & Binder, J. (1994). Development of an instrument for measuring parental beliefs about reading aloud to young children. *Perceptual and Motor Skills, 78*, 1303-1311.

Deford, D. (1978). *A validation study of an instrument to determine a teacher's theoretical orientation to reading instruction.* Unpublished doctoral dissertation, Indiana University, Indiana.

DeTemple, J., & Beals, D. (1991). Family talk: Sources of support for the development of decontextualized language skills. *Journal of Research in Childhood Education, 6*, 11-19.

DeTemple, J., & Snow, C. (1996). Styles of parent-child book reading as related to mothers' view of literacy and children's literacy outcomes. In J. Shimron (Ed.), *Literacy and education: Essays in memory of Dina Feitelson* (pp. 49-68). Cresskil, NJ: Hampton Press.

DeTemple, J. & Tabors, P. (1994, December). *Styles of interaction during a book reading task: Implications for literacy intervention with low-income families.* Paper presented at the National Reading Conference Annual Meeting, San Diego, CA.

Dickinson, D., DeTemple, J., Hirschler, J., & Smith, M. (1992). Book reading with preschoolers: Coconstruction of text at home and at school. *Early Childhood Research Quarterly, 7*, 323-346.

Donaldson, M. (1978). *Children's minds.* New York: W.W. Norton & Company.

Edelsky, C., Altberger, B., & Flores, B. (1991). *Whole language: What's the difference?* Portsmouth, NH: Heinemann.

Edwards, P. (1994). Responses of teachers and African-American mothers to a book-reading intervention program. In D. Dickinson (Ed.), *Bridges to literacy: Children, families and schools* (pp. 175-208). Cambridge, MA: Blackwell.

Edwards, P. (2002, December). *The impact of family on literacy development: Convergence, controversy, and instructional implications.* Paper presented at the annual meeting of the National Reading Conference, Miami, FL.

Ehri, L. (1994). Development of the ability to read words: Update. In R. Ruddell, M. Rapp Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (pp. 323-358). Newark, DE: International Reading Association.

Elliot, J., & Hewison, J. (1994). Comprehension and interest in home reading. *British Journal of Educational Psychology, 64*, 203-220.

Elster, C. (1995). Importations in preschoolers' emergent readings. *Journal of Reading Behavior, 27*, 65-84.

Evans, M. (1998). Parental involvement in beginning reading: Preliminary report from a three year longitudinal study. *Canadian Journal of School Psychology, 14*, 11-20.

Evans, M., Barraball, L., & Eberle, T. (1998). Parental responses to miscues during child-to-parent book reading. *Journal of Applied Developmental Psychology, 19*, 67-84.

Evans, M., & Carr, T. (1985). Cognitive abilities, conditions of learning, and the early development of reading skill. *Reading Research Quarterly, 20*, 327-350.

Evans, M., Shaw, D., & Bell, M. (2000). Home literacy activities and their influence on early literacy skills. *Canadian Journal of Experimental Psychology, 54*, 65-75.

Evans, M., Shaw, D., Moretti, S., & Bell, M. (2001, June). Parental coaching during shared book reading: A bidirectional process. In M. Evans (Chair), *More than classroom curriculum and cognition in learning to read.* Symposium conducted at the meeting of the Canadian Psychological Association, Quebec City, Quebec.

Ewers, C., & Brownson, S. (1999). Kindergarteners' vocabulary acquisition as a function of active vs. passive storybook reading, prior vocabulary, and working memory. *Journal of Reading Psychology, 20*, 11-20.

Fenson, L., Dale, P., Reznick, J., Bates, E., Thal, D., & Pethick, S. (1994). Variability in early communicative development. *Monographs of the Society for Research in Child Development, 59* (Serial No. 242).

Fitzgerald, J. (1993). Literacy and students who are learning English as a second language. *The Reading Teacher, 46*, 638-647.

Fitzgerald, J., Spiegel, D., & Cunningham, J. (1991). The relationship between parental literacy level and perceptions of emergent literacy. *Journal of Reading Behavior, 23*, 191-213.

Flood, J. (1977). Parental styles in reading episodes with young children. *The Reading Teacher, 30*, 864-867.

Gambrell, L., Pfeiffer, W., & Wilson, R. (1985). The effects of retelling upon reading comprehension and recall of text information. *Journal of Educational Research, 78*, 216-220.

Gauthier, S., & Madison, C. (1998). *Kindergarten Language Screening Test-2 (KLST-2).* Austin, TX: PRO-ED, Inc.

Gay, L. (1996). *Educational research: Competencies for analysis and application* (5th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.

Goodman, K. (1967). Reading: A psycholinguistic guessing game. *Journal of the Research Specialist, 4*, 126-135.

Goodman, K. (1976). Behind the eye: What happens in reading. In H. Singer & R. Ruddell (Eds.), *Theoretical models and processes of reading* (2nd ed., pp. 470-496). Newark, DE: International Reading Association.

Goodman, K. (1986). *What's whole in whole language?* Portsmouth, NH: Heinemann.

Goodman, Y. (1986). Children coming to know literacy. In W. Teale & E. Sulzby (Eds.), *Emergent literacy.* Norwood, NJ: Ablex.

Goodnow, J. (1988). Parents' ideas, actions, and feelings: Models and methods from developmental and social psychology. *Child Development, 59*, 286-320.

Graham, S., & Harris, K. (1994). The effects of whole language on children's writing: A review of the literature. *Educational Psychologist, 29*, 187-192.

Grolnick, W., & Slowiaczek, M. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development, 64*, 237-252.

Gunderson, L., & Anderson, J. (2003). Multicultural views of literacy learning and teachings. In A. Willis, G. Garcia, R. Barrera, & V. Harris (Eds.), *Multicultural issues in literacy research and practice* (pp. 123-144). Mahwah, NJ: Lawrence Erlbaum Associates.

Halle, T., Kurtz-Costes, B, & Mahoney, J. (1997). Family influences on school achievement in low income African American children. *Journal of Educational Psychology, 89*, 527-537.

Hannon, P., & James, S. (1990). Parents' and teachers' perspectives on pre-school literacy development. *British Educational Research Journal, 16*, 259-272.

Harp, B. (1996). *The handbook of literacy assessment and evaluation.* Northwood, MA: Christopher Gordon Publishers, Inc.

Haden, C., Reese, E., & Fivush, R. (1996). Mothers' extratextual comments during storybook reading: Stylistic differences over time and across texts. *Discourse Processes, 21*, 135-169.

Hayden, H., & Fagan, W. (1987). Fathers and mothers reading familiar and unfamiliar stories to their children. *Reading-Canada-Lecture, 5*, 231-238.

Haynes, W., & Shulman, B. (1994). *Communication development foundations, processes and clinical applications.* Englewood Cliffs, NJ: Prentice-Hall.

Heath, S. (1982). What no bedtime story means: Narrative skills at home and school. *Language in Society, 11*, 49-76.

Heath, S. (1983). *Ways with words.* Cambridge, United Kingdom: Cambridge University Press.

Heath, S., & Mangiola, L. (1991). *Children of promise: Literate activity in linguistically and culturally diverse classrooms.* Washington, DC: National Education Association.

Hoover-Dempsey, K., & Sandler, H. (1997). Why do parents become involved in their children's education? *Review of Educational Research, 67*, 3-42.

Huey, E. (1908). *The psychology and pedagogy of reading.* New York: Macmillan.

Janes, H., & Kermani, H. (2001). Caregivers' story reading to young children in family literacy programs: Pleasure or punishment? *Journal of Adolescent & Adult Literacy, 44*, 458-466.

Keppel, G., & Zedeck, S. (1989). *Data analysis for research designs.* New York: Norton.

Kerr, B., Mason, J., & McCormick, C. (1991). *Literacy discourse in shared reading events.* Urbana-Champaign, IL: University of Illinois, Center for the Study of Reading.

Kertoy, M. (1994). Adult interactive strategies and the spontaneous comments of preschoolers during joint storybook readings. *Journal of Research in Childhood Education, 9*, 58-67.

Kroeber, A., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions*. New York: Random House.

Leseman, P., & de Jong, P. (1998). Home literacy: Opportunity, instruction, cooperation and social-emotional quality predicting early reading achievement. *Reading Research Quarterly, 33*, 294-318.

Lionni, L. (1991). *Swimmy*. Logan, IA: Perfection Learning Company.

Lionni, L. (1992). *Mr. McMouse*. New York: Knopf.

Lipsey, M. (1990). *Design sensitivity: Statistical power for experimental research.* London: Sage.

Lynch, J. (2002). Parents' self-efficacy beliefs, parents' gender, children's reader self-perceptions, reading achievement, and gender. *Journal of Research in Reading, 25*, 54-67.

Lyytinen, P., Laakso, M., & Poikkeus, A. (1998). Parental contribution to child's early language and interest in books. *European Journal of Psychology of Education, 13*, 297-308.

Martin, L. (1998). Early book reading: How mothers deviate from printed text for young children. *Reading Research and Instruction, 37*, 137-160.

Mason, J. (1992). Reading stories to preliterate children: A proposed connection to reading. In Gough, P., Ehri, L., & Treiman, R. (Eds.), *Reading acquisition* (pp. 215-241). Hillsdale, NJ: Lawrence Erlbaum Associates.

Mason, J., & Allen, J. (1986). A review of emergent literacy with implications for research and practice in reading. In E. Rothkopf (Ed.), *Review of research in education: Vol. 13* (pp. 3-47). Washington, DC: American Educational Research Association.

Mason, J., & Dunning, D. (1986, April). *Toward a model relating home literacy with beginning reading*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Mattingly, I. (1984). Reading, linguistic awareness, and language acquisition. In J. Downing & R. Valtin (Eds.), *Language awareness and learning to read* (pp. 9-25). New York: Springer-Verlag.

McGillicuddy-DeLisi, A. (1982). Parental beliefs about developmental processes. *Human Development, 25*, 192-200.

McNaughton, S. (2001). Co-constructing expertise: The development of parents' and teachers' ideas about literacy practices and the transition to school. *Journal of Early Childhood Literacy, 1*, 40-58.

McNaughton, S. Kempton, M., & Turoa, L. (1994, June-July). *Tutorial configurations in an early writing activity at home*. Poster session presented at the 13th biennial meeting of the International Society for the Study of Behavioral Development, Amsterdam.

Moon, C., & Wells, G. (1979). The influence of home on learning to read. *Journal of Research in Reading, 2*, 53-62.

Morehead, A., & Morehead, L. (Eds.). (1981). *The new American Webster college dictionary*. New York: Penguin Books.

Neidecker, E., & Blosser, J. (1993). *School programs in speech-language: Organization and management* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Neuman, S. (1996). Children engaging in storybook reading: The influence of access to print resources, opportunity, and parental interaction. *Early Childhood Research Quarterly, 11*, 495-514.

Neuman, S. (1999). Books make a difference: A study of access to literacy. *Reading Research Quarterly, 34*, 286-311.

Neuman, S., Hagedorn, T., Celano, D., & Daly, P. (1995). Toward a collaborative approach to parent involvement in early education: A study of teenage mothers in an African-American community. *American Educational Research Journal, 32*, 801-827.

Ninio, A. (1980). Picture-book reading in mother-infant dyads belonging to two subgroups in Israel. *Child Development, 51*, 587-590.

Ninio, A., & Bruner, J. (1978). The achievement and antecedents of labelling. *Journal of Child Language, 5*, 1-15.

Panofsky, C. (1994). Developing the representational functions of language: The role of parent-child book-reading activity. In V. John-Steiner, C. Panofsky, & L. Smith (Eds.), *Sociocultural approaches to language and literacy: An interactionist perspective*. New York: Cambridge University Press.

Pellegrini, A. (1991). A critique of the concept of at risk as applied to emergent literacy. *Language Arts, 68*, 380-385.

Pellegrini, A., Brody, G., & Sigel, I. (1985). Parents' book reading habits with their children. *Journal of Educational Psychology, 77*, 332-340.

Pellegrini, A., Perlmutter, J., Galda, L., & Brody, G. (1990). Joint reading between Black Head Start children and their mothers. *Child Development, 61*, 443-453.

Purcell-Gates, V. (1995). *Other people's words: The cycle of low literacy*. Cambridge, MA: Harvard University Press.

Reid, D., Hresko, W., & Hammill, D. (1989). *Test of Early Reading Ability-2 (TERA-2)*. Austin, TX: PRO-ED, Inc.

Rogoff, B., Mistry, J., Goncu, A., & Mosier, C. (1993). Guided participation in cultural activity by toddlers and caregivers. *Monographs of the Society for Research in Child Development, 58*, (Serial no. 236).

Scarborough, H., & Dobrich, W. (1994). On the efficacy of reading to preschoolers. *Developmental Review, 14*, 245-302.

Seigel, L., & Gunderson, L. (in press). *Assessing the individual learning needs of students with linguistically and culturally diverse backgrounds*. Victoria, British Columbia: British Columbia Ministry of Education.

Senechal, M., LeFevre, J., Thomas, E., & Daley, K. (1998). Differential effects of home literacy experiences on the development of oral and written language. *Reading Research Quarterly, 33*, 96-116.

Senechal, M., Thomas, E., & Monker, J. (1995). Individual differences in 4-year-old children's acquisition of vocabulary during storybook reading. *Journal of Educational Psychology, 87*, 218-229.

Serpell, R. (1997). Literacy connections between school and home: How should we evaluate them? *Journal of Literacy Research, 29*, 587-616.

Shapiro, J., Anderson, J., & Anderson, A. (1997). Diversity in parental storybook reading. *Early Child Development and Care, 127-128*, 47-59.

Sigel, I. (1970). The distancing hypothesis: A causal hypothesis for the acquisition of representational thought. In M. Jones (Ed.), *Miami symposium on the prediction of behavior, 1968: Effects of early experience* (pp. 99-118). Coral Gables, FL: University of Miami Press.

Sigel, I. (1993). The centrality of a distancing model for the development of representational competence. In R. Cocking & K. Renninger (Eds.), *The development and meaning of psychological distance* (pp.141-158). Hillsdale, NJ: Lawrence Erlbaum Associates.

Sigel, I., & McGillicuddy-DeLisi, A. (1984). Parents as teachers of their children: A distancing behavioral model. In A. Pelligrini & T. Yawkey (Eds.), *The development of oral and written language in social context* (pp. 71-92). Norwood, NJ: Ablex.

Sigel, I., McGillicuddy-DeLisi, A., Flaugher, J., & Rock, D. (1983). *Parents as teachers of their own learning disabled children* (ETS RR 83-121). Princeton, NJ: Educational Testing Service.

Smith, F. (1982). *Understanding reading* (3rd ed.). New York: Holt Reinhart & Winston.

Snow, C. (1983). Literacy and language: Relationships during the preschool years. *Harvard Educational Review, 53*, 165-189.

Snow, C. (1991). The theoretical basis of the home-school study of language and literacy development. *Journal of Research in Childhood Education, 6*, 1-8.

Snow, C. (1993). Linguistic development as related to literacy. In L. Eldering & P. Leseman (Eds.), *Early intervention and culture: Preparation for literacy* (133-147). Amsterdam: Unesco Publishing.

Snow, C., Burns, M., & Griffin, P. (1998). *Preventing reading difficulties in young children.* Washington, DC: National Academy Press.

Sonnenschein, S., & Munsterman, K. (2002). The influence of home-based reading interactions on 5-year-olds' reading motivations and early literacy development. *Early Childhood Research Quarterly, 17*, 318-337.

Sonnenschein, S., & Schmidt, D. (2000). Fostering home and community connections to support children's reading. In L. Baker, M. Dreher, & J. Guthrie (Eds.), *Engaging young readers: Promoting achievement and motivation* (pp. 263-284). New York: Guilford.

Sorsby, A., & Martlew, M. (1991). Representational demands in mothers' talk to preschool children in two contexts: picture book reading and a modeling task. *Journal of Child Language, 18*, 373-395.

Stahl, S., Duffy-Hester, A., Stahl, K. (1998). Everything you wanted to know about phonics (but were afraid to ask). *Reading Research Quarterly, 33*, 338-355.

Stevenson, H., & Newman, R. (1986). Long-term prediction of achievement and attitudes in math and reading. *Child Development, 57*, 646-659.

Stipek, D., Milburn, S., Clements, D., & Daniels, D. (1992). Parents' beliefs about appropriate education for young children. *Journal of Applied Developmental Psychology, 13*, 293-310.

Sulzby, E. (1985). Children's emergent reading of favorite storybooks: A developmental study. *Reading Research Quarterly, 20*, 458-481.

Sulzby, E., & Edwards, P. (1993). The role of parents in supporting literacy development in young children. In B. Spodek & O. Saracho (Eds.), *Yearbook in early childhood education. Vol. 4. Early childhood language and literacy* (pp. 156-177). New York: Teachers College Press.

Sulzby, E., & Teale, W. (1991). Emergent literacy. In R. Barr, M. Kamil, P. Mosenthal, & P. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 727-758). New York: Longman.

Teale, W., & Sulzby, E. (1986). Emergent literacy as a perspective for examining how young children become writers and readers. In W. Teale & E. Sulzby (Eds.), *Emergent literacy: Writing and reading* (pp. vii-xxv). Norwood, NJ: Ablex Publishing.

Thal, D., & Katich, J. (1996). Predicaments in early identification of specific language impairment: Does the early bird always catch the worm? In K. Cole, P. Dale, & D. Thal (Eds.), *Assessment of communication and language* (Vol. 6, pp. 1-28). Baltimore: Paul H. Brooks.

Torgesen, J., & Wagner, R. (1998). Alternate diagnostic approaches for specific developmental reading disabilities. *Learning Disabilities Research & Practice, 13*, 220-232.

Torr, J., & Clugston, L. (1999). A comparison between informational and narrative picture books as a context for reasoning between caregivers and 4-year-old children. *Early Child Development and Care, 159*, 25-41.

Trelease, J. (1995). *The read-aloud handbook* (4th ed.). New York: Penguin Books.

van Kleeck, Gillam, R., Hamilton, L., & McGrath, C. (1997). The relationship between middle-class parents' book-sharing discussion and their preschoolers' abstract language development. *Journal of Speech-Language-Hearing Research, 40*, 1261-1271.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Weinberger, J. (1996). A longitudinal study of children's early literacy experiences at home and later literacy development at home and school. *Journal of Research in Reading, 19*, 14-24.

Wells, G. (1981). Some antecedents of early educational attainment. *British Journal of Sociology of Education, 2*, 181-200.

Wells, G. (1982). Story reading and the development of symbolic skills. *Australian Journal of Reading, 5*, 142-152.

Wells, G. (1985). Preschool literacy-related activities and success in school. In D. Olson, N. Torrance, A. Hildyard (Eds.), *Literacy, language and learning* (229-255). New York: Cambridge University Press.

Whitehurst, G., Epstein, J., Angell, A., Payne, A., Crone, D., & Fischel, J. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology, 86*, 542-555.

Whitehurst, G., & DeBaryshe, B. (1989). Observational learning and language acquisition: Principles of learning, systems, and tasks. In G. Speidel & K. Nelson (Eds.), *The many faces of imitation in language learning* (pp. 251-276). New York: Springer/Verlag.

Whitehurst, G., Falco, F., Lonigan, C., Fischel, J., DeBaryshe, B., Valdez-Menchaca, et al. (1988). Accelerating language development through picture book reading. *Developmental Psychology, 24*, 552-559.

Yaden, D., Smolkin, L., & MacGillivray, L. (1993). A psychogenetic perspective on children's understanding about letter associations during alphabet book readings. *Journal of Reading Behavior, 25*, 43-68.

APPENDICES

Appendix A

Parents' Perceptions of Literacy Learning Interview Schedule
(Anderson, 1995a)

Parent's Name_____
Parent's sex_____
Child's Name_____
Child's sex_____
Date: _____
Child's date of birth (D)___(M)___(Y)____
Site_____
Older siblings (Sex and age)_____
Younger Siblings (Sex and age)_____

Languages spoken in home
_____
_____
_____

Highest education (parents)
_____

Languages spoken by child
_____
_____
_____

1. A child learns to read by first learning the letters of the alphabet and their sounds, then words, then sentences and then stories.	SA	A	N	D	SD
2. Teaching a child to recognize isolated words on sight is a suitable technique for teaching her to read.	SA	A	N	D	SD
3. A child needs workbooks and basal readers (show examples) to learn how to read.	SA	A	N	D	SD
4. This book (show book; e.g. The Giving Tree) is suitable to read to very young (e.g. 3, 4 & 5 year old) children.	SA	A	N	D	SD
5. A child benefits from hearing favorite stories that she has memorized read again and again.	SA	A	N	D	SD
6. You should not encourage a child to join in sometimes while you read a book with which he is familiar for is it better that the child listen to the story without interruption.	SA	A	N	D	SD
7. You will be teaching your child a bad habit if you point to the print as you read.	SA	A	N	D	SD
8. You are helping a child learn to read by encouraging her to discuss what is being read.	SA	A	N	D	SD

9. It is necessary to check a child's understanding by asking him questions at the end of each story.	SA	A	N	D	SD
10.You should permit your child to read familiar books by retelling the story from memory using the pictures.	SA	A	N	D	SD
11.Real reading begin only when a child begins to say the words as they are printed on the page.	SA	A	N	D	SD

Writing sometimes refers to handwriting or penmanship. In the following questions, Writing refers to the process of composing, of getting thoughts or ideas on paper, of writing notes, stories, and so forth.

12. It is necessary for a child to know the letters of the alphabet, and the sounds of the letters of the alphabet before she begins to write.	SA	A	N	D	SD
13. A child should learn to print neatly the letters of the alphabet before attempting to print messages, notes, stories and so forth.	SA	A	N	D	SD
14. It is necessary for a child to have lots of experience copying words, then sentences, and finally stories before she attempts to write on her own.	SA	A	N	D	SD
15. A child should be encouraged to write only easy words and short sentences when he begins to write.	SA	A	N	D	SD
16. A child's early scribblings are related to later development in writing stories, messages, etc.?	SA	A	N	D	SD
17. A child needs workbooks to learn how to write.	SA	A	N	D	SD
18. A child can begin to write before she has learned the correct spelling of the words.	SA	A	N	D	SD
19. You SHOULD correct your child if she writes "kt" for the word "cat".	SA	A	N	D	SD
20. A child's confusion of "b" and "d" or "p" and "q" in printing indicates a major problem.	SA	A	N	D	SD
21. A child can begin to write (e.g. notes, stories) before she knows how to read.	SA	A	N	D	SD
22. Learning to read and learning to write are similar to learning to talk in that children learn these skills gradually.	SA	A	N	D	SD
23. Only gifted children learn to read and write before receiving formal instruction in preschool or elementary school.	SA	A	N	D	SD
24. Reading to, and with children helps them learn to write.	SA	A	N	D	SD
25. Children learn important things about reading and writing before they begin formal reading programs at preschool or elementary school.	SA	A	N	D	SD

These activities help children learn to read and to write:

26. talking to them.	SA	A	N	D	SD
27. taking them on outings.	SA	A	N	D	SD
28. having them pretend to write grocery lists with you.	SA	A	N	D	SD
29. reading to them.	SA	A	N	D	SD
30. Schools should be totally responsible for teaching children to learn to read and to write.	SA	A	N	D	SD
31. It is very important that children see their parents reading and writing.	SA	A	N	D	SD
32. Children have be certain age before they can begin to learn to read and write.	SA	A	N	D	SD
33. Children need training in hand-eye coordination recognizing shapes, and so forth before they begin to learn recognizing shapes, to read and to write.	SA	A	N	D	SD

SA = Strongly Agree
A = Agree
N = Neither agree or disagree
D = Disagree
SD = Strongly Disagree

What are the five most important things you are doing to help your child learn to read and to write?

Appendix B

Letter Identification Task
(Clay, 1979a)

A	F	K	P	W	Z
B	H	O	J	U	
C	Y	L	Q	M	
D	N	S	X	I	
E	G	R	V	T	
a	f	k	p	w	z
b	h	o	j	u	a
c	y	l	q	m	
d	n	s	x	i	
e	g	r	v	t	g

Please detach here and return the bottom portion to the Preschool

I, _____ consent/do not consent to participate AND I consent/do not consent

to the participation of _____ in the research project entitled "The Emergence and
(Child's name)

Mediation of Multiple Literacies in Young Children from Diverse Backgrounds" as proposed by Jim Anderson in the attached letter.

Parent's signature _____ Date: _____
Telephone #: _____

This is to acknowledge that I have received a copy of the consent form and all the attachments for my own records.
Signature: _____
Date: _____

****

I, _____ consent/do not consent to participate AND I consent/do not consent

to the participation of _____ in the research project entitled "The Emergence and
(Child's name)

Mediation of Multiple Literacies in Young Children from Diverse Backgrounds" as proposed by Jim Anderson in the attached letter.

Parent's signature _____
Date: _____ Telephone number: _____

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Signature: _____
Date: _____