

**PARENT-CHILD INTERACTIONS:  
A DESCRIPTION OF BOOK-READING STRATEGIES**

**THESIS**

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**By**

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## ABSTRACT

### PARENT-CHILD INTERACTIONS: A DESCRIPTION OF BOOK-READING STRATEGIES

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The purpose of this pilot study was to research the book-reading strategies used by parents of typically developing children and children diagnosed with language disorders. Four dyads were used to complete this study. Results indicated that the parents used a variety of directive and less directive book-reading strategies. However, there were no clear differences between the strategies used by parents of typically developing children and parents of children with language disorders.



## CHAPTER I

### INTRODUCTION

The relationship between oral language development and literacy development is extremely important. Emergent literacy comprises the skills, knowledge, and attitudes that are requirements for orthodox forms of reading and writing (Sulzby & Teale, 1991) and the environments in which these skills are developed (Lonigan, 1994; Whitehurst, et al., 1988). In addition to normal cognitive functioning, elements of emergent literacy encompass language skills, concepts of print, knowledge of letters, linguistic awareness, phoneme-grapheme correspondence, and print awareness (Whitehurst & Lonigan, 1998). Concurrently, the same prerequisites that children learn for oral language development through naturalistic conversational interactions with adults are also necessary for literacy development (Montgomery, Windsor, & Stark, 1991; Stanovich, 1988).

Dickinson and Smith (1994) stated that considerable literacy-related development occurs prior to formal reading instruction, usually before entering school. Children are usually exposed to such things as correct orientation of a book, left to right print orientation, knowledge about letters and words (Clay, 1989), recognizing and reading environmental print (Dickinson & Snow, 1987; Kuby, Aldridge, & Snyder, 1994, Neumann & Roskos, 1993) and letter recognition (Chall, 1979). These basic skills are taught to children during their casual interactions with print in the home and other

familiar environments. Such interactions include the traditional reading of children's books, introduction to household labels and environmental print, as well as exposure to educational television and computer software programs (Dickinson & Snow, 1987; Kuby, Aldridge, & Snyder, 1994).

### *Language and Literacy*

Oral communication is a skill that is developed naturally. It is comprised of the development of the form, content, and use of language. The ability of learning oral communication allows for the acquisition of subsequent skills. The knowledge and internalization of language form, content, and use not only allows for oral communication, but also facilitates reading, writing, and spelling abilities (Paul, 2001).

There are several oral language skills that are necessary for success in the development of emergent literacy skills and later reading achievement. These skills consist of comprehension abilities of oral as well as written language forms, metalinguistic awareness, phonological awareness, and the ability to understand the application of syntax, semantics, and pragmatics to oral and written language comprehension tasks. These skills are also extremely necessary for success in school. Although these skills are three-fold, applicable to reading, writing, and oral language, each facet requires a different application of the abilities (Paul, 2001).

The function of oral communication is to regulate social interactions and to share information about concrete objects and events. However, the function of literacy is to regulate the process of thinking and to discuss abstract and decontextualized ideas. The

form of oral communication is repetitive and predictable, a process based on intonational patterns. Conversely, the form of literate language is comprised of concise syntax and semantics. The topic is usually very controlled and specific, although possibly unfamiliar (Westby, 1991). Metalinguistic awareness for oral communication relates to the ability to think about the forms and use of language. Metalinguistic skills necessary for reading include those that encompass the awareness of word boundaries, phonological awareness abilities, and discussion or thought about word meanings and forms (Paul, 2001; Turner & Cole, 1991).

Phonological awareness relates to the ability to relate the correct sound with the correct letter representation in oral communication. When applied to literacy, the skill of phonological awareness encompasses the ability to recognize that words are made up of sounds and that sound segments can make up words and are represented by specific predetermined letter-symbols (Paul, 2001). This combination of skills is necessary for the comprehension and decoding of oral and written language.

The ability to produce and comprehend narratives is the bridge between oral and literary language. Children are exposed to the skill of narrative language during conversations and other casual interactions with adults during the developmental process. The skill of narrative language is necessary for the comprehension and production of abstract and higher-level oral and written language forms, as well as writing abilities (Westby, 1991).

The development of oral language and the development of literacy are very similar but the acquisition of both abilities is quite different. While oral language develops as a result of an innate ability (Catts & Kamhi, 1999), literacy requires a more formal form of instruction. Children learn language naturally as they develop. However, children do not acquire literacy without some sort of formal reading instruction. For most children, this instruction does not occur until the formal schooling process begins. However, children are exposed to the prerequisite oral language skills necessary for later reading achievement prior to entrance to school programs (Paul, 2001).

#### *The Development of Oral Communication*

One of the current theories suggests that language acquisition is the result of social interaction. Children are exposed to numerous socially interactive experiences in which they are exposed to language and communication. The majority of these interactions are simultaneously playful and instructional. They usually take place surrounding a shared referent and are usually somewhat routinized events (Lund, 1986). While engaging in these natural interactions, adults casually expose their children to the building blocks of language. Children learn semantics, syntax, pragmatics, prosody, turn-taking skills, initiation and closure during conversational speech, phonemic awareness, and narrative discourse while interacting with adults (Paul, 2001).

The speech that young children are exposed to is their only source of information from which to learn the functions and application of oral language. Parents expose children to several types of language to facilitate their linguistic development. Several

studies conducted in the past have pointed out that mother's speech during the early period of a child's development affects the child's language development at a later point in life (Yoder & Kaiser, 1989). Although direct influences have not been established, interaction patterns of parents are of interest to language specialists interested in child language development.

Snow (1992) studied mothers' speech to children who were in the language-learning stages. It was determined that mothers' speech to young children is very simple and redundant compared to their normal speech. The modifications made by the mothers depended on the reactions of the children. The researchers also concluded that the difficulty of the task did not contribute to the speech modifications made by the mothers. The simplified speech that the mothers used is valuable in at least two ways (1) to keep the speech simple and to maintain the child's attention and (2) to aid the child in learning language.

O'Brien and Nagle (1987) confirmed that adult speech typically consists of short and simple utterances, simplicity of syntax and pragmatics, slower rate of speech, higher pitch accompanied by a broader frequency range, and a high occurrence of directives and questions when speaking to children. They examined parent-child triads during play interactions. It was concluded that children are exposed to different types of language environments depending on the context of the play situation.

The interactions between parents and children are ultimately effected by the expressive language ability of the child (Whitehurst, et al., 1988). Parents adjust the level

of their linguistic output to the level at which the child is able to maintain comprehension. The adult and the child engage in many joint-routines that are used as opportunities for the parent, or other communication partners, to model language for the child. During these interactions, the more experienced language user scaffolds the child's language development by progressively giving feedback to the child to facilitate language development. It is a natural phenomenon for parents to 'up the ante' as they feel that the child is ready for advancement in each area, including oral language development. Parents guide their children in particular ways that reflect the parent's beliefs and expectations about what it takes to successfully raise children (Abell, Clawson, Washington, Bost, & Vaughn, 1996). Parents scaffold by prompting and structuring responses to allow for the child to participate at the level of their skill (Abbeduto, Weissman, & Short-Meyerson, 1999).

Yoder and Kaiser (1989) studied toddlers and their mothers during free-play interactions. The researchers examined specific aspects of maternal speech to determine the effect on the language development of their children. The researchers also analyzed several aspects of the child's speech during the interaction period. Interactions between children and parents can either be child-driven or parent-controlled. Yoder and Kaiser (1989) discussed the direct maternal influence model. Directives, requests for known information such as test questions, and conversational dominance, characterize this model. Researchers have suggested that this type of interactive style may inhibit the language development of children (Newport, Gleitman, & Gleitman, 1977; Olsen-Fulero,

1982). Conversely, at least one researcher has reported that directives actually predict positive language development (Barnes, Gutfreund, Satterly, & Wells, 1983). This discrepancy may be a reflection of the differences in the contexts of the individual interactions between the parent and child.

Child-driven interactions consist of the parent being directed or influenced by initiations made by the child. Specific parts of the child's language determine the language styles of the parents. The researchers concluded that this type of interaction style prompted an increased amount of questions and responsive comments from the parent. Parents are more likely to use particular styles of language while engaging in particular play and/or instructional interactions. The authors concluded that the direct maternal influence model might not be relevant when explaining language development in children because of the numerous indirect influences that may contribute to the developmental process (Yoder & Kaiser, 1989).

Conti-Ramsden (1990) studied the nature of maternal responses to the language of children. They determined that mothers use simple recasts in responsive and regulative functions. Mothers used these strategies to acknowledge utterances and to request clarification. Sentence recasts are adult replies to children's utterances that consist of some of the child's words and then provide new syntactic and/or semantic information. The parent still maintains the basic idea of the child's utterance (Fey, Krulik, Loeb, & Proctor-Williams, 1999). Several studies have shown that simple recasts increase the

length and complexity of utterances of typically developing children. Recasts can facilitate the development of morphological and syntactic forms of language in children.

Barnes, Gutfreund, Satterly, and Wells (1983) studied syntactic, semantic, pragmatic, and discourse features to determine what factors significantly contribute to language development. They determined that extending children's utterances and the use of directives were positively associated with progress in language development. It was suggested that the use of extending/expanding and directives ultimately control the child's behavior and sustain involvement in conversational interactions. Yoder, Hooshyar, Klee, and Schaffer (1996) concur that expansions are facilitative to language development. They also reported that mothers of typically developing children and mothers of children diagnosed with Down's syndrome used similar styles of expanding their children's utterances. It was determined that mothers of typically developing children expanded fully intelligible utterances more often than mothers of children diagnosed with Down's syndrome.

Some factors, such as socioeconomic status and maternal age may affect the language interactions of children and their parents. De Cubas & Field (1984) compared the teaching interactions of black and Cuban teenage mothers and their infants. It was determined that maternal age was a significant factor in predicting the amount of verbalization with infants during interactional routines. As a result, babies born to teenage mothers may be at risk for less language interaction with their mothers. Socioeconomic factors, such as concentration on economic matters of the home may



interfere with mothers' ability to engage in language directed interactions with their children. The interactions that these children experience may not be the types that are facilitative of language development (Hoff-Ginsberg, 1991).

### *Language Development of Children Diagnosed With Language Disorders*

Research has determined that children who have difficulties acquiring the skills needed for oral communication will also have difficulties acquiring the skills necessary for literacy development (Aram & Hall, 1989; Bishop & Adams, 1990; Catts, 1991; Scarborough, 1991). These children may not present with obvious deviations in oral language abilities. However, difficulties with higher-level language skills needed for oral production and comprehension of written abstract, complex language forms may be present. Many of these children are being diagnosed as language-learning disabled in school settings subsequent to the realization that the difficulties with reading are related to linguistic development rather than being related to visual difficulties (Brady & Skankweiler, 1991; Catts & Kamhi, 1999; Goldsworthy, 1996). Several studies have compared the interactional styles of mothers with typically developing children and mothers with children who have been diagnosed with language disorders. Many of these studies have reported significant differences between these dyads (Conti-Ramsden & Dykins, 1991; Fey et.al., 1999; Wulbert, Inglis, Kriegsmann, & Mills, 1975).

Children who have been diagnosed with language disorders receive information in qualitatively and quantitatively different ways than typically developing children.

Although parents generally use the same scaffolding techniques during normal

conversational interactions and construct the same language environment as parents of typically developing children (Conti-Ramsden & Friel-Patti, 1984), the information may not be as facilitative for language development in these children.

Conti-Ramsden and Friel-Patti (1984) examined the discourse adjustments of mothers during conversation with children diagnosed with language disorders and to children who were developing typically. The children within the dyads were matched by linguistic age. It was reported that children diagnosed with language disorders initiated fewer conversational turns. Mothers of children with language disorders and mothers of typically developing children used approximately the same number of requestives, assertives, and directives when talking to their children. Mothers of typically developing children did exhibit more responsive utterances, specifically more choice answers and acknowledgements, than the mothers of children diagnosed with language disorders.

Historically, studies that have compared typically developing and children diagnosed with language disorders based on chronological age have determined that the speech of the mothers of the language-impaired children was significantly more directive in nature than that of the mothers with typically developing children. In earlier studies, this directiveness was considered not to be facilitative of language development (Bondurrent, 1977), rather than the effect of the bi-directional influence of the dyadic interaction between parent and child. Millet and Newhoff (1978) reported that significant differences did not exist between the amount of directions provided by parents to children

with language disorders. They also found that the mothers of children with language disorders used fewer semantically related responses when reacting to their child.

In a related study, it was concluded that mothers of children diagnosed with language disorders are more directive, less responsive, engage in less speech related activities, and use more non-specific references during interactions with their children (Evans & Schmidt, 1991). Mothers of typically developing children were more likely to use strategies such as extending the child's utterances (Barnes, Gutfreund, Satterly, & Wells, 1983) and using more responsive utterances and acknowledgements (Conti-Ramsden & Friel-Patti, 1984). Barnes et.al. (1983) concluded that parental use of extensions and directives, rather than questioning, contributes to child progress in the area of language development.

Cross (1984) reviewed parent-interaction studies to determine the factors that were likely to facilitate language in children diagnosed with language disorders. The researcher's conclusion was that there were three main differences between the interaction styles of parents with their typically developing children and parents of children with language disorders: discourse contingencies, sentence types and functions, and input parameters. The parents of the children with language disorders were less likely to adjust their semantic wording during conversation, used fewer acknowledgements and more generally negative responses, were more directive and controlling, and used more imperative utterances.

Bloom (1978) has stated that the interaction styles of parents who have children exhibiting language disorders may be reflective of the styles parents of typically developing children would use with a child of the same language age. Clezy (1979) has reported that the interaction styles used by parents of children having language disorders may be reflective of the frustration that they experience during interactions with their child, and because of the knowledge that they have that their child is not developing language in a typical manner.

In 1985, Conti-Ramsden studied mothers in dialogue with their language-impaired children and concluded that the claim that the linguistic input to these children is directive and controlling is no longer accepted. As a result of changes in methodology, it became apparent that mothers of language-impaired children do not direct and control their children's language more than mothers of typically developing children of the same language age. The interaction between the mother and child diagnosed with a language disorder is based on how the child reacts to the mother and therefore, determines how the mother will react to the child. The mother adjusts linguistic input to the ability level of the child, resulting in a bi-directional influence.

As a result of this change in methodology, more recent studies (Bellaire, Plante, & Swisher, 1994; Carson, Perry, Diefender & Klee, 1999; Conti-Ramsden, 1990; Kelly, 1997; Liles, 1993; Moore, 1995; Moseley, 1990; Restrepo, Swisher, Plante, & Vance, 1992; Sommers, Kozarevich, & Michaels, 1994) have negated the conclusions of

previous studies of interactions between parents and typically developing children and parents with children who have been diagnosed with language disorders.

In a subsequent study, Conti-Ramsden (1990) examined the maternal recasts to typically developing children and children diagnosed with language disorders. It was found that mothers of children diagnosed with language disorders used more requestives, assertives, and directives and fewer cohesion illocutions consisting of responsiveness and regulatives when compared to mothers of typically developing children.

There were several studies (Bellaire, et al., 1994; Carson, et al., 1999; Kelly, 1997; Liles, 1993; Moore, 1995; Moseley, 1990; Restrepo, et al., 1992; Sommers, et al., 1994) whose results concurred with Conti-Ramsden (1985). These studies reflected the methodological change of matching children by their linguistic ages rather than by chronological ages to determine whether or not the differences in dyadic interactions are based on the language disorder or the parent-interaction styles.

Particular studies (Peterson & Sherod, 1982; Wulbert, Inglis, Kriegsmann, & Mills, 1975) have also suggested that the language environments of children diagnosed with language disorders significantly differs from that of typically developing children. Peterson and Sherod (1982) examined how the characteristics of mothers' language are associated with children diagnosed with language disorders. The participants in the study consisted of children diagnosed with Down Syndrome, children diagnosed with language disorders, and typically developing children. It was determined that the mothers of the children diagnosed with language disorders used more language that was irrelevant to

the free play interaction than the mothers of children with Down Syndrome as well as the mothers of the typically developing children. The researchers concluded that the patterns of maternal language were a *result of the impaired language patterns presented by the children, not a contributing factor to the language disorder*.

Several studies (Conti-Ramsden, 1985; Conti-Ramsden & Friel-Patti, 1984) concur with the conclusion that mothers respond to the child based on the child's linguistic age, not their chronological age. Conti-Ramsden and Friel-Patti (1984) examined the similarities and differences in the language between mothers and their typically developing children and mothers with children who have been diagnosed with language disorders. Fourteen dyads were included in each group. The children in each group were matched on the basis of mean length of utterance. These researchers observed each dyad engaging in a five-minute play interaction. Results concluded that the typically developing dyads produced significantly more topic-introducing utterances during the conversational exchange. However, mothers of the children diagnosed with language disorders used the same form and level of initiations when addressing their children as mothers of the typically developing children. In fact, the mothers of the language-impaired children initiated conversation more often than the mothers of typically developing children. The researchers reported that these results indicate that it is unlikely that a language disorder can be attributed to a deficient language environment.

*The Use of Book-Reading to Facilitate Language and Literacy Development*

There are several oral language skills that are necessary for success in the development of emergent literacy skills and later reading achievement. It is thought that reading books to children aids in the development of these language and pre-literacy skills (Paul, 2001).

As previously stated, research has shown that children acquire oral language development through naturalistic conversational interactions (Conti-Ramsden, 1985). Many of these interactions occur in the context of typical parent-child routines. Hoff-Ginsberg (1991) studied mother-child conversations during book-reading, mealtime, dressing, and toy play. Results from this study concluded that adult's speech contains the greatest lexical, semantic, syntactic, and rate of topic-continuing replies during book-reading interactions. This finding confirms that book-reading is a highly supportive activity for language facilitation. Research has also suggested that joint book-reading is a critical part in the development of children's emergent literacy skills (Bus, van Ijzendoorn, & Pellegrini, 1995; Goldfield, & Snow, 1984). Joint book-reading encourages children to ask questions, teaching them the initiation-response-evaluation sequence, which is used in the majority of elementary classrooms (Gray, 1995). These preliteracy skills are indirectly and directly taught to children during bedtime story sessions and other joint book-reading interactions (Hockenberger, Goldstein, & Hass, 1999). While these common interaction styles may be ideal for typically developing children, the same may not be said of children exhibiting language disorders.

Snow and Dickinson (1991) reported that emergent literacy skills develop as a result of “literacy socialization” experiences. During these interactions, the child listens to books that are read by the parent. Early experiences with books allow the child to experience forms of literary language and other skills that are used in many school classrooms. The child is exposed to decontextualized language and to the initiation-response-evaluation (IRE) format that teachers expect children to understand upon entrance into school. Early experiences with literacy are especially helpful when they involve opportunities for the child to engage in extended discussions about the book. Parents facilitate children’s development of literacy by allowing the child to participate, while encouraging the child to ask questions about the stories read to them and relating the story to real-life events (Scott-Jones, 1991). Scott-Jones (1991) studied children of Black families and literacy development. Results revealed that methods should be developed to help parents use the print that occurs in the environment to expose children to literacy. An opportunity to engage in this type of informal literacy instruction presents itself when the child is exposed to print on signs, labels, and packages that occur in everyday familiar contexts. These types of literary instructional materials are available to children of all socioeconomic levels.

In another study dealing with various social classes, Dickinson and Snow (1987) studied the pre-reading abilities of kindergarten children from low and middle class-families. The areas assessed included rhyming, letter writing, spelling, alphabet knowledge, decoding, sound isolation, story comprehension, environmental print,



vocabulary and print concepts, picture descriptions, definitions, phonemic awareness, print decoding, print production, literacy, single task measures, decontextualization, and narrative ability. The researchers concluded that certain language abilities develop as children learn literacy. It was also established that the literacy environments of children differ based on social classification. Parents that are classified as having a low socioeconomic status may not be able to afford traditional children's books to read to their children. Instead, they may teach their child literacy skills by exposing them to such things as household labels, comic books, environmental print, phone books, and magazines.

Literacy development in children diagnosed with disabilities has also been investigated. Katims studied children with handicaps who were exposed to literacy-rich environments to evaluate the efficacy of a preliteracy instructional program. Preschool and first grade children exhibiting cognitive, physical, emotional, behavioral, learning, and developmentally challenging conditions were participants in the study. The children were exposed to a well-stocked library center, daily group storybook reading, and regular visits to a classroom-writing center. The specific behaviors that were observed included browsing, silent studying, pretend-reading, and conventional or standard reading. It was determined that children with various handicaps are capable of developing preliteracy skills at very young ages (Katims, 1991).

Language and literacy development are also affected by parental interactions. Snow (1983) determined that there are three characteristics about parent-child

interactions that facilitate language and literacy development. They are the occurrences of semantic contingencies, scaffolding, and accountability measures. These characteristics facilitate the emergence of pre-literacy skills. During these early literacy experiences, children develop skills such as print awareness, correct orientation of a book, left to right reading organization, and knowledge of decontextualized language forms (Clay, 1989; Paul, 2001).

In a related study, Reese and Cox (1999) investigated how the quality of reading by adults when reading books to children affects children's emergent literacy. Forty-eight parent-child dyads were divided into groups and each group was asked to perform a specific reading style for an intensive six-week observation period. The goal of the observational period was to determine which style was most beneficial to language development. Pre-test and post-test language efficiency data was based on results of the Peabody Picture Vocabulary Test-Revised (Dunn & Dunn, 1981). The three interactive book-reading styles consisted of the describer style that focused on describing pictures during the reading, a comprehender style that focused on story meaning, and a performance-oriented style in which the parents were instructed to introduce the book and discuss story meaning upon completion. Results of the study determined that the describer style of reading is most beneficial for developing vocabulary and print skills. Specifically, the describer style benefits the child because it facilitates overall receptive language and print awareness when compared to the other styles that were analyzed.

### *Literacy Development of Children Diagnosed With Language Disorders*

Several studies (Aram & Hall, 1989; Bishop & Adams, 1990; Catts, 1991; Scarborough, 1991) have reported that children diagnosed with language disorders are more likely to exhibit difficulty acquiring literacy. This is not unusual considering that oral language skills form the foundation for the acquisition of literacy (Aram & Hall, 1989). The language disorders that children can exhibit may not be apparent in their oral language production, but they denote difficulty with more abstract language forms and functions. This difficulty with abstract and decontextualized language will eventually lead to difficulty acquiring literacy, and therefore achievement of reading success (Paul, 2001). In addition, several researchers (Feagans & Short, 1984; Roth & Spekman, 1986) have reported that higher-level language functions, particularly narrative discourse and figurative language, are deficiencies that are present in children identified as having reading-impairments.

One longitudinal study highlighted the link between early language difficulties with subsequent reading impairments. Bishop and Adams (1990) conducted a longitudinal follow-up study to assess the development of 8 1/2 –year old children who were diagnosed with specific language impairment between the ages of 3:9 and 4:2 years. A control group of thirty children was also included. When non-verbal ability was accounted for, the group of children diagnosed with language disorders did not differ significantly from the control group on reading accuracy, but was significantly less proficient in areas of reading comprehension. It was concluded that there is a correlation

between early language impairment and later literacy problems. The study also predicted that children with phonological disorders are at particular risk for reading and spelling difficulties due to lack of awareness of sound-symbol association.

Gillam and Johnston (1985) examined the development of print awareness in preschoolers who have been diagnosed with language disorders. The participants were shown high frequency environmental print in four different settings and prompted to label each item with the corresponding print, given non-print cues. The results revealed that the typically developing children were able to respond accurately to the print in each setting, while the children diagnosed with language disorders were not. They concluded that general language ability is correlated with print awareness in young children.

Catts (1991) was also interested in the long-term outcome of literacy development in children previously diagnosed with language disorders. He conducted a follow-up study to examine the early identification of dyslexia in children who had been previously diagnosed with language disorders. Results were determined by administering a battery of standardized language tests that assessed forty-one language-impaired children for comparison to current reading ability of the children. Results determined that the children with semantic and syntactic difficulties had impairments in reading abilities compared to the children that had presented with articulation disorders. It was also concluded that phonological processes were good predictors of reading achievement. Children that have been diagnosed with impairments in phonological processing are more likely to have difficulties with the acquisition of literacy.

Because of the language-rich interaction that occurs during joint book-reading, it is relevant to consider the interaction styles that mothers use when reading books to their children. Only *one* study has compared the joint book-reading strategies of parents with both a typically developing child and one with a diagnosed language disorder. Evans and Schmidt's (1991) study investigated two separate mother-child dyads during joint book reading. One dyad included a child diagnosed with a language disorder and one included a child who was typically developing. Results indicated that the mother of the child with a language disorder controlled more of the interaction. The strategies used by this mother consisted of using more attention-seeking words, more verbal requests, more closed questions, and additional prompted requests as compared to the mother of the typically developing child who followed her son's lead during the interaction.

### *Home Literacy Environments*

Researchers involved in literacy-based research are also interested in the effect of the home-literacy environment on literacy development. It is important to consider that children are exposed to different types of literary materials and practices. The experiences that children are exposed to are reliant upon the cultural and social structural factors within their family and community (Sulzby & Teale, 1991).

Teale (1979) was interested in the literacy experiences that children are exposed to in a typical home environment. As a result, the literacy materials in the homes of two and three-year-old children were examined. Every child in the sample was involved in some way with reading each day. Teale found that there were considerable differences in

the literary environments of the twenty-two families who participated in the study. Specifically, there were differences in the types of literacy activities as well as different schedules of activities, including overall frequency that the families engaged in literacy-related activities while participating in the study. As a result of the study, researchers became aware of several activities that are conducted in the home that expose children to literacy. Such activities included: daily living routines, such as obtaining food, shopping, cooking, paying bills; entertainment in the form of reading books or watching television; school-related activities like written letters that are sent home, consent forms, homework; and religious materials.

In a related study, Payne, Whitehurst, and Angell (1994) examined the home language environments of low-income families having children enrolled in Head Start programs. They distributed questionnaires to the parents of these children inquiring about their literacy-related behavior and their children's receptive and expressive language abilities. It was determined that there are differences in the home-literacy environments of low-income families that are related to child language ability. The study suggested that an individual child's language ability could be attributed to the child's language environment. Results concluded that there were very low correlations between adult reading practices and child language ability. Despite economic difficulties, these families are still focused on the importance of interactions, such as book-reading, that prepare their children for academic success.

Many studies have been conducted to determine children's literacy achievement based on their home environments. Stewart (1995) studied how children perceive literacy events that are conducted by their families. Two children from a low-income community were compared to two children from a small farm community. Data collection consisted of parent questionnaires, tape recordings, reports of academic achievement, and interviews conducted with the children. The majority of literacy events for the children from low-income homes were constructed in the form of deliberate events (41-76%), such as book-reading, and daily living events (13-49%), such as grocery shopping, making lists, and schedule planning. The children from the small farm communities were more likely to experience literacy through daily living events (41-68%). The second most likely way they experienced literacy was through communication literacy events (17-18%), such as spontaneous talk about reading and writing. The third way they were exposed to literacy was through deliberate events (13-23%). This study concluded that all of the parents involved in the study were supportive of their child's literacy development, but used different instructional strategies to expose the children to literacy. It was also apparent that the children described their home literacy experiences based on how they were being taught to read. Therefore, it was also suggested that each family that participated in the study offered an environment to their child that supported the acquisition of literacy and the opportunities for academic success.

Saracho (1997) was interested in using the home environment to support emergent literacy. The study examined fifteen families that participated in a parent

program to determine if a workshop approach would help parents develop skills that would support a facilitative literacy environment. The teachers involved in the workshop instructed parents and guardians in specific interaction methods to use with their children when reading particular books. Based on the parent-child interactions before and after instruction, the study concluded that parents are able to learn new techniques to use with their children to enhance their literacy experiences.

In a related study, Leseman and de Jong (1998) researched literacy in the home as it relates to the opportunity, instruction, cooperation and socio-emotional quality that can predict early reading achievement. The participants in the study consisted of 89 children from inner-city elementary schools in the Netherlands. The children were of varied socioeconomic and ethnic backgrounds, including Dutch, Surinamese, and Turkish. The researchers followed the children for a period of two years, conducting annual assessments of their reading and oral language abilities. There were several limitations of this study, including the way that home literacy was measured, the presence of a videocamera during the dyadic interaction and the fact that only one book was used for the observational period. However, the results still contribute to the knowledge base concerning this issue. It was apparent that the families differed considerably in their home literacy environments, which they largely attributed to cultural differences rather than socioeconomic status. Turkish mothers engaged in considerably less high-level utterances during the book-reading observations than the Dutch mothers. A more specific observation revealed more similarities between the mother's interaction styles.



Specifically, all of the mothers used explanations, evaluations, and narrative extensions to a considerable amount. Turkish mothers were less likely to make use of the pictures that were depicted in the story-books to enhance the story when compared to the Dutch and Surinamese mothers. The study concluded that the literacy practices of the parents were likely to determine the level of literacy that the children would be exposed to in the home.

#### *Rationale of This Pilot Study*

It can be hypothesized that young children who have been diagnosed with language disorders may receive linguistic information in qualitatively and quantitatively different ways than typically developing children. Children that have been diagnosed with language disorders may not internalize and learn linguistic information in the same way that typically developing children do, even though they are exposed to the same types of linguistic environments (Barnes, Gutfreund, Satterly, & Wells, 1983). This discrepancy in learning styles results in a bi-directional influence between the parent and the child with a language disorder. The parent simply reacts to the child's linguistic skills, and in turn, does not contribute to the language disorder, but is only reacting to the child (Clezy, 1979).

Since children with language disorders are at greater risk for reading disabilities, it is important to study the similarities and differences in the strategies that parents utilize while engaging in joint book-reading with language-impaired and typically developing children. The data obtained by this pilot study will provide speech-language pathologists

and educators with a knowledge base that will assist them in educating parents in facilitating emergent literacy skills and, thus, increase the literacy and receptive and/or expressive language levels of children diagnosed with language disorders.

This pilot study will examine the book-reading strategies exhibited by parents during dyadic interactions. The research questions to be answered include the following:

- (1) What are the joint book-reading strategies that mothers engage in with their typically developing children?
- (2) What are the joint book-reading strategies that mothers engage in with their children diagnosed with language disorders?
- (3) What are the home literacy environments of families with typically developing children?
- (4) What are the home literacy environments of families of children with language disorders?

## CHAPTER II

### METHODOLOGY

#### *Participants*

The participants consisted of four parent-child dyads. Two of the children were typically developing and two of the children were diagnosed with a language disorder, (See Table 1 and Table 2 for the participant characteristics). The children's chronological ages ranged from 2:1 years to 4:1 years. The families who participated in this study were selected from the central Texas area.

Two of the parent-child dyads had children who were typically developing and two of the dyads had children who were diagnosed with language disorders. Each child with a language disorder was matched to a typically developing child according to gender, social class, and linguistic age. Therefore, there were two different children with language disorders paired to two typically developing children. Since the children in both groups were matched according to linguistic age, there was a chronological age difference of two years between the children being compared in Group A (Typically Developing Child A and Language Disordered Child A) and a difference of ten months between the children in Group B (Typically Developing Child B and Language Disordered Child B). All of the children were required to pass a hearing screening before admittance into the study. The families were all monolingual English speakers.

Table 1. Participant Characteristics for Dyads A.

	Dyads A	
Characteristics	Typically Developing Dyad A	Language Disordered Dyad A
Gender	Male	Male
Chronological Age	2.1 years	4.1 years
Hearing	Passed	Passed
Attends Preschool	No	Yes
Maternal Education	Partial College (at least one year) or Specialized Training	Partial High School (10 <sup>th</sup> or 11 <sup>th</sup> grade)
Maternal Occupation	Home Maker	Janitor
Paternal Education	High School	Junior High School (9 <sup>th</sup> grade)
Paternal Occupation	Machinist/Operator	Janitor
*Social Class	Class 5	Class 5

\*Four Factor Index of Social Position (Hollingshead, 1975)

Table 2. Participant Characteristics for Dyads B.

	Dyads B	
Characteristics	Typically Developing Dyad B	Language Disordered Dyad B
Gender	Male	Male
Chronological Age	2.9 years	3.7 years
Hearing	Passed	Passed
Attends Preschool	Yes	Yes
Maternal Education	Partial College (at least one year) or Specialized Training	Partial College (at least one year) or Specialized Training
Maternal Occupation	Mental Health Worker	Home Maker
Paternal Education	Did not contribute to income	Partial College (at least one year) or Specialized Training
Paternal Occupation	Did not contribute to income	Plumber/Small Business Owner
*Social Class	Class 4	Class 4

\*Four Factor Index of Social Position (Hollingshead, 1975)

Each pair of children was matched as closely as possible according to receptive language age and/or mean length of utterance. Receptive language age was obtained to ensure appropriate language development for the typically developing children. This was done to ensure that the participants had equivalent or nearly equivalent skills in the area of receptive language. The researchers tried to match as closely as possible for receptive

language age as well, however this would have compromised the matching for gender between participants. It also may have not allowed for matching of Mean Length of Utterance (MLU). The child with a language disorder in Dyad A was diagnosed with an expressive and receptive language disorder. However, the child with a language disorder in Dyad B was diagnosed with only an expressive language delay. Therefore, his receptive language age was similar to that of the typically developing child in Dyad B.

### *Procedure*

Recruitment for the subjects was conducted by Head Start center directors, therapists at local health agencies, and elementary school administration and teachers in conjunction with the researchers. Notices were distributed to all parents of children between the ages of birth to six years at six different locations. Notices were sent to parents asking for their participation in a 45-minute diagnostic evaluation of their child, a 30-minute videotaped book-reading session, and a 10-minute interview regarding the child's home literacy environment.

Informed consent was obtained from the dyads before the procedures were implemented. After receiving consent, participants were contacted via telephone and asked a preliminary list of questions that addressed the language preferences of the child and family, any existing diagnoses, and an invitation for the parent to attend the testing of the child (see Appendix B for complete questionnaire).

During an initial session, the receptive portion of the Preschool Language Scale-3 (PLS-3) (Zimmerman, 1992) was administered to determine receptive language abilities.

Only one parent chose to attend a portion of the testing of their child. The other parents chose not to attend the testing of their children. Testing took place in a quiet room, either in a clinic, preschool, or home setting. To be included in the control group (Typically Developing), participants needed to score within the mean or one standard deviation above the mean on the PLS-3. To qualify for the experimental group (Language Disordered), participants needed to score a minimum of one and one-half standard deviation below the mean on the PLS-3 or exhibit a MLU that was not within normal limits. The Auditory Comprehension subtest of the PLS-3 was administered to determine each child's receptive abilities. Administration of this subtest lasted approximately one hour. The procedures outlined in the examiner's manual of the PLS-3 were followed (Zimmerman, 1992). The characteristics determined by the testing for each child are provided in Table 3 and Table 4.

A spontaneous language sample consisting of 50 spontaneous utterances was collected while interacting with the children to determine the participants' expressive language skills. The researchers engaged in spontaneous play, using the same toys, with each child on the floor of the testing room for approximately a 30-minute time period to obtain a spontaneous language sample. Spontaneous language samples were analyzed using the Systematic Analysis of Language Transcripts (SALT) (Miller & Chapman, 2000) software to determine the mean length of utterance in morphemes. The testing and spontaneous language samples were recorded using a Radioshack CTR-119 compact

desk-top cassette recorder, placed within 12-15 inches of the child. Each child was given a standard hearing screening at 25-dB level presented at 500 Hz, 1000 Hz, and 2000 Hz.

Table 3. Testing Characteristics of the Participants of Dyads A.

	Dyads A	
Characteristics	Typically Developing Dyad A	Language Disordered Dyad A
Chronological Age	2.1 years	4.1 years
Mean Length of Utterance (MLU)	1.35	1.22
Standard Deviation for Auditory Comprehension (PLS-3)	+ 1.0	- 2.0



Table 4. Testing Characteristics of the Participants of Dyads B.

	Dyads B	
Characteristics	Typically Developing Dyad B	Language Disordered Dyad B
Chronological Age	2.9 years	3.7 years
Mean Length of Utterance (MLU)	2.08	2.08 (MLU not within normal limits)
Standard Deviation for Auditory Comprehension (PLS-3)	+ 1.0	+ 1.0

A separate meeting was scheduled with each dyad for the book-reading interaction. Each dyad was videotaped reading three children's books in a quiet section of their home to minimize distractions. A Digital 8 camcorder was used for the recording. The instructions outlined in the Digital 8 manual were followed during the videotaping (Sony, 2001). The dyad was instructed to sit on the couch with the child either in their lap or immediately to their side (as they would normally read to their child). The video camera was placed within 5 feet of the dyad. The zoom function was used to enlarge the view of the parent, child and the book that was being read. The interaction was also audio taped using the Radioshack cassette recorder that was previously described. The tape recorder was placed within 15 inches of the dyad. Each dyad was given the same set of verbal instructions

prior to reading the first book. The participants were instructed to read three books to their children. The first book was one of their own that they were allowed to choose. The researchers provided the second book, The Very Hungry Caterpillar (Carle, 1969). For the third book, the researchers presented four books for the dyads to choose from. The options presented for the third book consisted of four popular children's books including Chicka Chicka Boom Boom (Martin & Archambault, 1989), Going on a Bear Hunt (Rosen & Oxenbury, 1989), Tuesday (Weisner, 1991), and Goodnight Moon (Brown, 1947). All of the verbal interactions during the reading of The Very Hungry Caterpillar (Carle, 1969) were coded and analyzed later. The mothers in each dyad were instructed to read to their child as they would read to them as they typically would on any other day and to try to ignore the researchers and the videotaping equipment. Furthermore, the dyads were instructed to ignore any distractions, such as the phone ringing or other children, while they read the books.

Next, the Four Factor Index of Social Position (Hollingshead, 1975) was administered to the parents. The protocol for the Four Factor Index of Social Position included asking a series of questions regarding level of education, occupation, and number of incomes contributed to the home. The researchers recorded answers to each question regarding the parent and her spouse or significant other. Information regarding a significant other was only recorded if the individual contributed to the income for the family. The participant's answers to the questions were given a numeric value. These numeric values were used to compute a formula that determined the social class of each

dyad. The researchers determined the following ranges of numeric values and their corresponding social class equivalents: Class 5: 8-19, Class 4: 20-31, Class 3: 32-43, Class 2: 44-55, Class 5: 56-66. Using this system, Class 1 is the highest social class and Class 5 is the lowest social class.

To determine the home literacy environment, parents were interviewed after the videotaping session. The interview lasted approximately 5 minutes. The investigator asked questions regarding the home literacy environment (Ezell, Gonzales, & Randolph, 2000) and reading behaviors of the parent. Specific questions addressed the amount of children's literature in the home and the frequency with which the child participates in reading activities within the home setting. The same instructions were given to each parent prior to the interview. See Appendix C for the complete Home Literacy Environment Questionnaire.

## CHAPTER III

### RESULTS

#### *Joint Book-Reading*

The parental and child variables selected for analyses during the book-reading interactions were adapted from Cole and Dale (1986), Neuman (1996), and Rabidoux (1994). Parental interaction strategies selected for analysis included the following: “yes/no” questions, “who” questions, open-ended questions, expanding, imitating, labeling, managing, predicting, and giving open phrases for the child to complete. Variables selected for analyses of the child interactions included initiating comments about the story, commenting on connections between the book and life, and predicting story events. Each variable was coded using the Systematic Analysis of Language Transcripts software (SALT) (Miller & Chapman, 2000). Refer to Table 5 and Table 6 for a complete list of parental and child interaction strategies and their descriptions.

Table 5. Definitions of Parental Book-Reading Strategies Used For Analysis.

Variable	Definition
Yes/No Questions:	Asked questions that required child to answer yes/no. (i.e. “Did he eat?”)

Who Questions:	Asked child questions regarding who references. (i.e. "Who ate the apple?")
What Questions:	Asked child questions that required reflective thought or opinion. (i.e. "What do you think he did?")
Open-ended Questions:	Asked questions that required an extensive answer. (i.e. "Tell me how the caterpillar felt?")
Expansions:	Provided additional information to the text. (i.e. "That's the sun. It is big, round and yellow.")
Imitations:	Imitated the child's utterances.
Bridging:	Connecting the text to personal experiences. (i.e. "You like watermelon like the caterpillar.")
Feedback:	Providing a correct or incorrect response to a child's production or response. (i.e. "Yes, you're right.")
Labeling:	Providing labels for pictures or events. (i.e. "That's a red bicycle.")
Managing:	Directing the child's attention to the reading activity. (i.e. "Let's finish the book, please.")
Predicting:	Asked child to give information about future events in the text.
Talks about pictures:	Makes comments about a particular picture in the book.
Talks about words:	Makes comments about a particular word in the book.

Open Phrases:	Provides open phrases for the child to complete. (i.e. “But the caterpillar was...”)
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\*Adapted from Cole & Dale (1986) and Neuman (1996)

Table 6. Definitions of Child Interactions Used For Analysis.

Variable	Definition
Initiates Comments:	Makes a comment about the story without being prompted.
Turn Pages:	Spontaneously attempts to turn the pages of the book during reading.
Bridging:	Comments on connections between the book and the child’s life (i.e. “I like strawberries too.”)
Predicting:	Predicts story events spontaneously or after being prompted to do so.
Imitates Letters/Numbers:	Repeats letters or numbers that are read or spoken by the adult/reader.
Imitates Words:	Repeats words that are read or spoken by the adult/reader.
Labeling:	Identifies and names objects in pictures in the book. (i.e. “That’s the sun.”)

\*Adapted from Rabidoux (1994)

The researchers watched each recording of the dyadic interactions during the reading of The Very Hungry Caterpillar (Carle, 1969) to chart the occurrence of each variable. To determine inter-rater reliability, two raters viewed the videotapes and coded

each variable individually. If there were any discrepancies between the codings, the thesis chair reviewed the tape and decided the correct code. Therefore, the inter-rater reliability was 100% between two raters for all of the variables for each of the participants.

Percentages of occurrence for each variable were determined for each of the dyads. The researchers calculated the total number of strategies used by each dyad. Following calculations, this yielded a percentage for each variable that was used by each dyad for comparison.

The results revealed that all of the parents in the dyads used a combination of different book-reading strategies. The strategies used by all parents were compared and contrasted. The parent in the Typically Developing Dyad A (Dyad A; TD) primarily used labeling (28%) and talking about pictures (16%). She also engaged in asking “yes/no” questions (12%), imitating (12%), and asking “what” questions (12%). This parent (Dyad A; TD) did not ask “who” questions, open-ended questions, “where” questions, expand, predict, talk about words, provide open phrases, or provide additional information during the reading of The Very Hungry Caterpillar (Carle, 1969).

The parent in the Language Disordered Dyad A (Dyad A; LD) primarily talked about pictures (23%) and used strategies to manage behavior (20%). She also asked “yes/no” questions (11%), “what” questions (10%), and expanded (10%). This parent (Dyad A; LD) did not imitate, predict, talk about words or provide additional information during the book-reading session.

It appeared that these parents read to their children in some ways that were similar and in other ways that were quite different. When comparing the strategies used by these two dyads, it became evident that both dyads asked “yes/no” questions, bridged information, provided feedback, labeled, managed, talked about pictures, and asked “what” questions. See Table 7 for a comparison of the percentages of the strategies used by the parents. The parent of the typically developing child (Dyad A; TD) seemed to imitate and label more often than the parent of the child with a language disorder. The parent of the child (Dyad A; LD) with a language disorder implemented “yes/no” questions, “who” questions, open-ended questions, expanded, bridged, asked “where” questions, provided feedback, managed behaviors, talked about pictures, provided open phrases, and asked “what” questions more often than the parent in Typically Developing Dyad A. See Figure 1 for a graphic representation of strategies used by Dyads A.



Figure 1. Comparison of strategies used by parents in Dyads A.

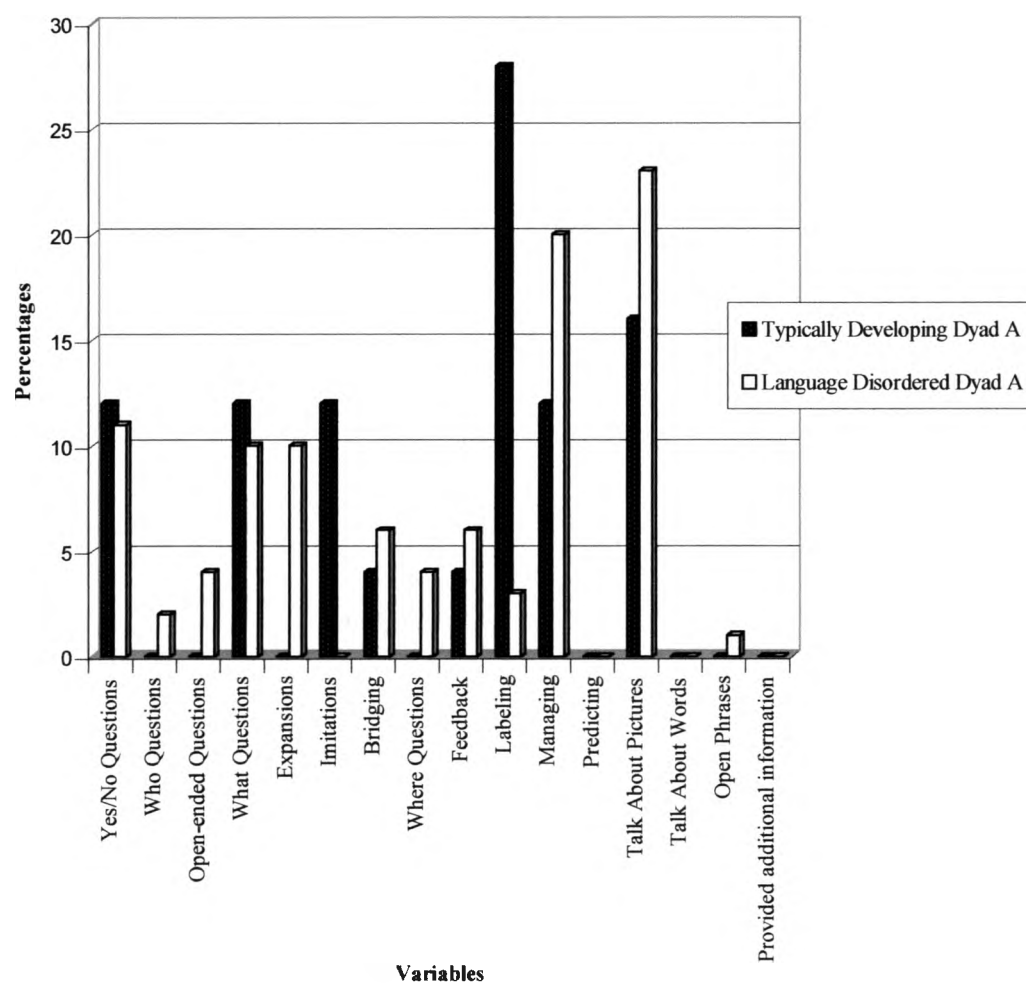


Table 7. Book Reading Strategies Used by Dyads A.

Variable	Dyad A Typically Developing	Dyad A Language Disorder
“Yes/No” Questions	12%	11%
“Who” Questions	0%	2%
Open-Ended Questions	0%	5%
Expansions	0%	10%
Imitations	12%	0%
Bridging	4%	6%
“Where” Questions	0%	4%
Feedback	4%	6%
Labeling	28%	3%
Managing	12%	20%
Predicting	0%	0%
Talk about Pictures	16%	23%
Talk about Words	0%	0%
Open Phrases	0%	1%
“What” Questions	12%	10%

Provided Additional Information	0%	0%
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The parent in the Typically Developing Dyad B primarily managed (43%), provided open-phrases (13%), and asked “what” questions (13%) while reading to her child. She also provided feedback (11%), asked open-ended questions (7%), and labeled (7%) items in the story. This parent did not ask “who” questions, “where” questions, expand, bridge information, predict, talk about pictures, talk about words or provide additional information when reading the book to her child.

The parent in the Language Disordered Dyad B primarily asked yes/no questions (30%) and provided feedback (20%). This parent also asked “what” questions (10%), provided additional information to the story (10%), and asked open-ended questions (7%). This parent (Dyad B; LD) did not use the strategies of asking “who” questions, expansion, labeling, prediction, talking about words, or providing open phrases. Refer to Table 8 for a comparison of the percentages of strategies used by the parents.

It appeared that both parents in these dyads implemented “yes/no” questions, open-ended questions, imitation, feedback, managing, and “what” questions. When comparing the strategies used by the two dyads, it was clear that the parent of the typically developing child (Dyad B; TD) labeled and provided open phrases. The parent of the child with a language disorder (Dyad B; LD) did not implement these same strategies. However, the parent of the child with a language disorder (Dyad B; LD) did

engage in bridging, asked “where” questions, talked about pictures, and provided additional information to the story whereas the parent of the typically developing child (Dyad B; TD) did not use these techniques. See Figure 2 for a graphic representation of the strategies used by Dyads B.

Figure 2. Comparison of strategies used by parents in Dyads B.

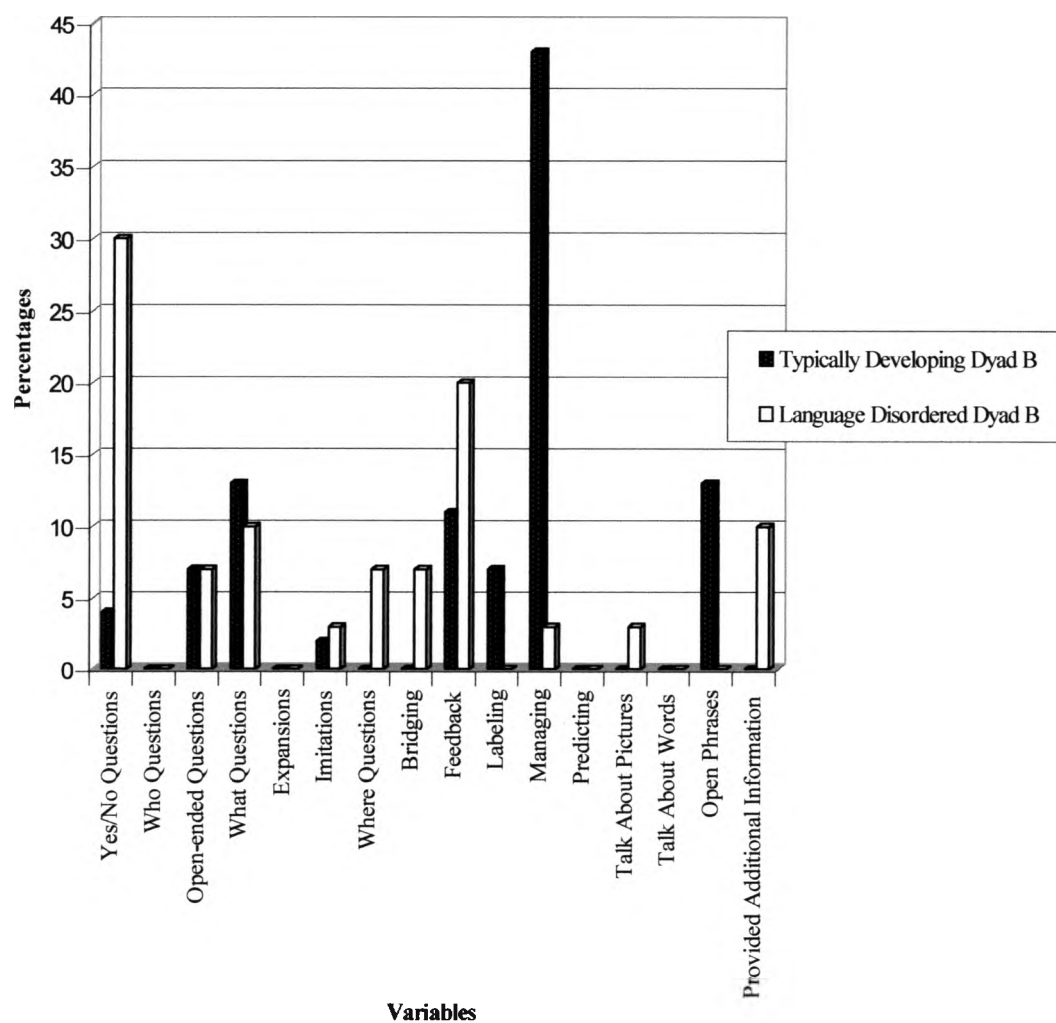


Table 8. Book-reading strategies used by Dyads B.

Variable	Dyad B	Dyad B
	Typically Developing	Language Disorder
“Yes/No” Questions	4%	30%
“Who” Questions	0%	0%
Open-Ended Questions	10%	0%
Expansions	0%	0%
Imitations	2%	3%
Bridging	0%	7%
“Where” Questions	0%	7%
Feedback	11%	20%
Labeling	7%	0%
Managing	43%	3%
Predicting	0%	0%
Talk about Pictures	0%	3%
Talk about Words	0%	0%
Open Phrases	13%	0%
“What” Questions	13%	10%
Provided Additional Information	0%	10%

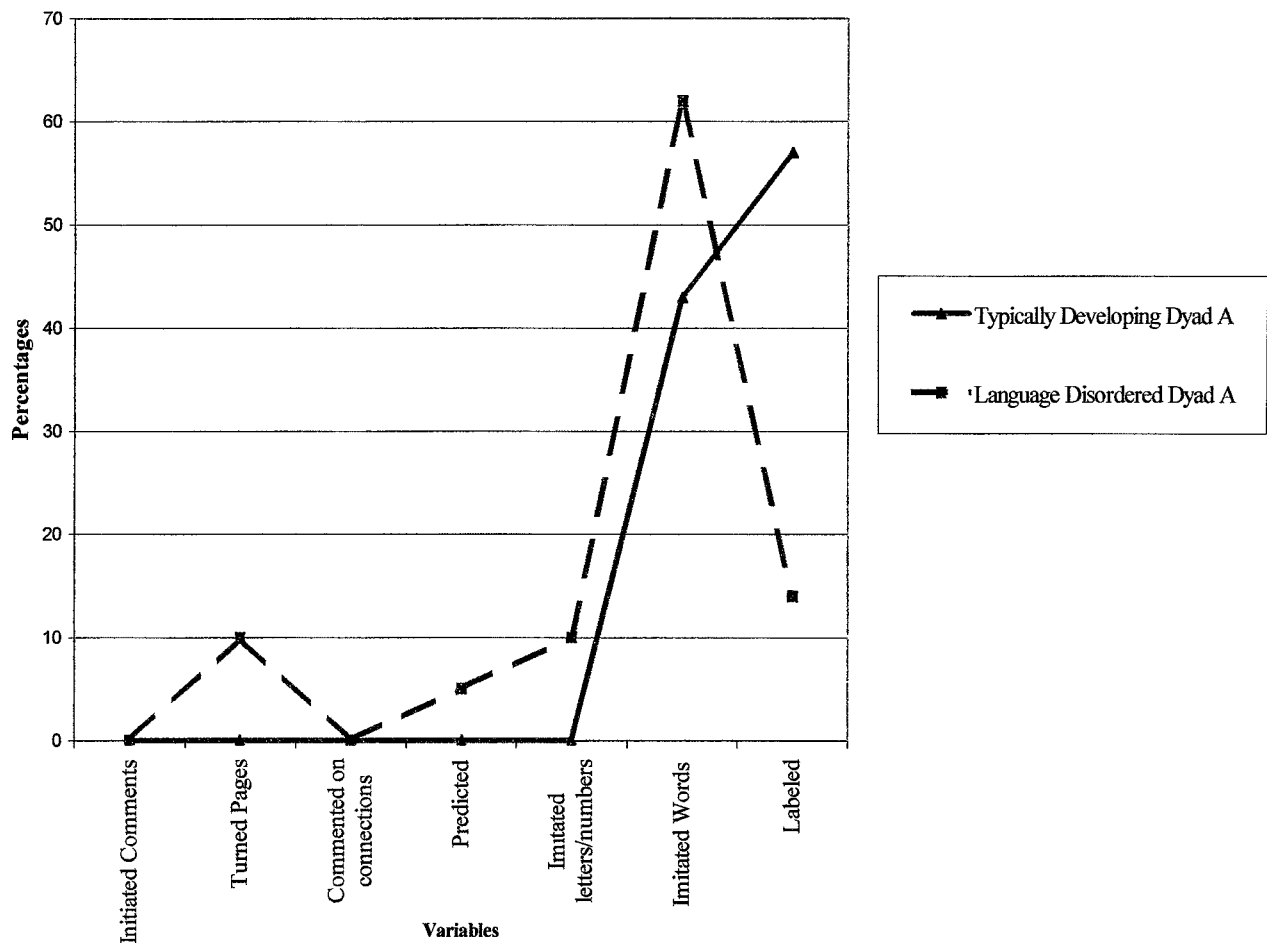
Overall, both of the parents of the children with language disorders (Dyads A and B; LD) seemed to ask more “yes/no” questions, bridged information, asked “where” questions, and provided more feedback than the parents of the children who were typically developing. Both of the parents of the children who were typically developing (Dyads A and B; TD) appeared to label more often than either of the parents of the children with language disorders.

The interactions of the children in each dyad were also analyzed to compare the interaction styles of the children during the book-reading session. The child in Dyad A, who was typically developing (Dyad A; TD), primarily labeled illustrations (57%). He also imitated words (43%) often. This child did not attempt to initiate comments about the story, turn pages, implement bridging, use prediction, or imitate letters or numbers.

The child in Dyad A, diagnosed with a language disorder (Dyad A; LD), primarily imitated words (62%) during the reading of the stimulus book. He also labeled illustrations (14%), imitated letters/numbers (10%), attempted to turn the pages of the book (10%), and predicted story events (5%). This child did not initiate comments about the story or implement bridging during the story. In summary, the child (Dyad A; LD) turned pages of the book, predicted story events, imitated letters/numbers, and imitated words more often than the typically developing child (Dyad A; TD). Although this child was diagnosed with an expressive and receptive language disorder (Dyad A; LD), his pragmatic language skills seemed to be quite developed. He appeared to understand that he should be very interactive during the joint book-reading situation. Therefore, he used a

wider variety of strategies for interaction during joint book-reading than the typically developing child. However, the strategies that this child used were less complex than some of the strategies used by the typically developing child. Whereas this child imitated more often than the typically developing child (Dyad A; TD), imitation is an appropriate interaction for a child of his linguistic age. Therefore, though it may appear that this child used a broader variety of interaction strategies, the strategies that he used were of an imitative nature. The typically developing child labeled more frequently than the child diagnosed with a language disorder, therefore this child was more spontaneously interactive during joint book-reading. See Figure 3 for a graphic representation of strategies used by the children in Dyads A.

Figure 3. Comparison of strategies used by children in Dyads A.



The child in Dyad B, who was typically developing (Dyad B; TD), primarily imitated words (32%) and labeled illustrations (27%) during the reading. He also attempted to turn pages of the book (18%) and initiated comments about the book (14%). This child did not use bridging or prediction while engaging in the story.

The child in Dyad B, diagnosed with a language disorder (Dyad B; LD), primarily interacted during the book-reading by initiating comments about the story



(64%). He also implemented bridging (9%), imitated words (9%), and labeled illustrations (9%). He did not attempt to turn pages of the book, predict story events, or imitate letters or numbers during the story. A comparison of the strategies that these children used revealed that neither of the children predicted story events. The typically developing child in Dyad B attempted to turn pages of the book, imitated letters/numbers, imitated words, and labeled illustrations more often than the child diagnosed with a language disorder. However, the child diagnosed with a language disorder (Dyad B; LD) initiated more comments about the story and commented on connections between the book and his life more often than the typically developing child. See Figure 4 for a graphic representation of strategies used by Dyads B. Refer to Table 9 for a comparison of book-reading strategies implemented by all of the dyads.

Figure 4. Comparison of strategies used by children in Dyads B.

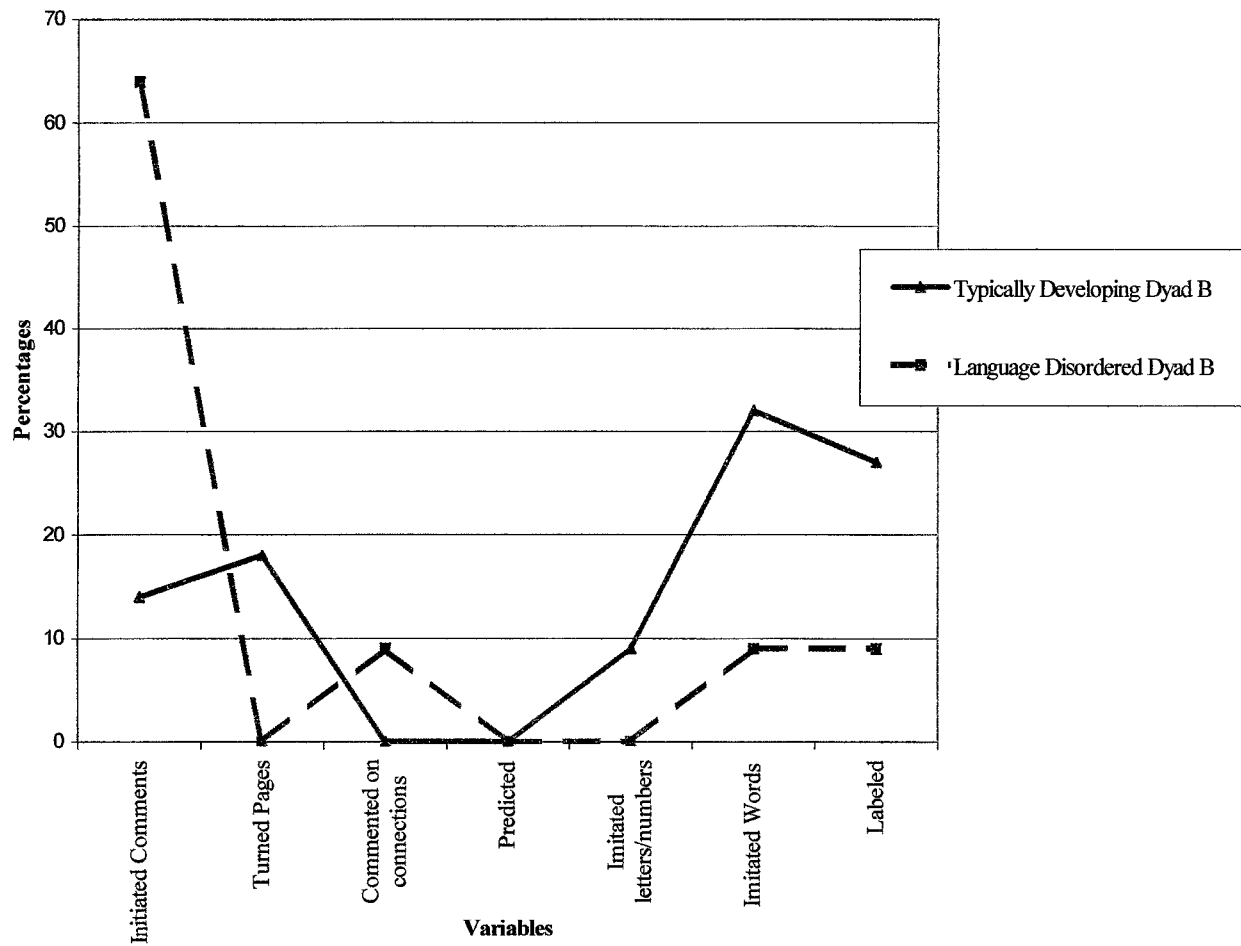


Table 9. Book-reading strategies used by Dyads A and B.

Variable	Dyad A (TD)	Dyad A (LD)	Dyad B (TD)	Dyad B (LD)
“Yes/No” Questions	12%	11%	4%	30%
“Who” Questions	0%	2%	0%	0%
Open-Ended Questions	0%	4%	10%	0%
Expansions	0%	10%	0%	0%
Imitations	12%	0%	2%	3%
Bridging	4%	6%	0%	7%
“Where” Questions	0%	4%	0%	7%
Feedback	4%	6%	11%	20%
Labeling	28%	3%	7%	0%
Managing	12%	20%	43%	3%
Predicting	0%	0%	0%	0%
Talk about Pictures	16%	23%	0%	3%
Talk about Words	0%	0%	0%	0%
Open Phrases	0%	1%	13%	0%
“What” Questions	12%	10%	13%	10%
Provided Additional Information	0%	0%	0%	10%

### *Home Literacy Environments*

Similarities and differences between the home literacy environments of the typically developing children and the children diagnosed with language disorders were noted after analyzing parental responses to the Home Literacy Questionnaires. The mother of the typically developing child in Dyad A (Dyad A; TD) reported that they had eleven out of the eighteen, or 61%, of the reading materials that were sampled during the interview in their home. Reading materials in this home included magazines, cookbooks, a dictionary, video games for entertainment, check writing/paying bills, Bible or religious materials, children's books, children's books with audio cassettes, telephone books, and grocery lists. The family reported owning approximately 21-30 children's books. This child looked at books everyday with the parent or a sibling and looked at books several times a week on his own. He had never asked about letters, numbers, or words and the mother indicated that she did not think the child could read single letters, numbers, or words. The parent (Dyad A; TD) reported rarely telling stories to this child. She reported engaging in stories about the past and humorous anecdotes. This mother started reading to this child when he was approximately one year old (refer to Table 10 for comparisons of these variables across all dyads).

The mother of the child with a language disorder in Dyad A (Dyad A; LD) reported that they had thirteen out of eighteen, or 72%, of the reading materials that were sampled during the interview. Reading materials in this home included magazines, a dictionary, video games for entertainment, comic books, check writing/paying bills,

novels, “How To” books, Bible or religious materials, computer books, children’s books, children’s books with audio cassettes, telephone books, and grocery lists. There were approximately 21-30 children’s books in this child’s home. This child looked at books everyday with the parent or a sibling and looked at books several times a week on his own. This child had asked questions about letters, numbers, or words while looking at a book or environmental signs. The mother (Dyad A; LD) indicated that she thought the child could read single letters and numbers. However, in her opinion, he could not print any letters or numbers. She reported telling stories to this child about once a week. The stories consisted of fairy tales, folk tales, stories about the past, stories about recent events, religious stories, and humorous anecdotes. This mother started reading to this child when he was approximately two years old (refer to Table 10 for comparisons of these variables across all dyads).

Generally, it appeared that the typically developing child (Dyad A; TD) was exposed to joint book reading one year earlier than the child with the language disorder (Dyad A; LD). Also, the parent of the typically developing child reported that she rarely told stories to the child. However, the mother of the child with a language disorder stated that she told a wide variety of stories to this child once a week. It is also interesting to note that the typically developing child had not inquired about single letters, numbers, or words while looking at environmental signs or labels, yet the child with a language disorder had made these inquiries. The typically developing child could not read any

single letters, numbers or words; however, according to the parent, the child with a language disorder could do this.

The mother of the typically developing child in Dyad B (Dyad B; TD) reported that they had fifteen out of the eighteen, or 83%, of the reading materials that were sampled during the interview. Reading materials in this home included newspapers, magazines, cookbooks, a dictionary, video games for entertainment, check writing/paying bills, novels, Bible or religious materials, computer books, preschool educational software, internet, children's books, children's books with audio cassettes, telephone books, and grocery lists. There were more than 30 children's books in this child's home. This child looked at books several times a week with the parent or a sibling and looked at books several times a week on his own. This child had asked questions about letters, numbers, or words however; the mother indicated that she did not think the child could read single letters, numbers, or words. The parent in this dyad (Dyad B; TD) reported telling stories everyday to this child that consisted of fairy tales, stories about the past, stories about recent events, religious stories and humorous anecdotes. This mother started reading to this child when he was approximately eight months old (refer to Table 10 for comparisons of these variables across all dyads).

The mother of the child with a language disorder in Dyad B (Dyad B; LD) reported that they had thirteen out of the eighteen, or 72%, of the reading materials that were sampled during the interview. Reading materials in this home included newspapers, magazines, cookbooks, check writing/paying bills, novels, Bible or religious materials,

preschool educational software, cell phones with numbers, internet, children's books, children's books with audio cassettes, telephone books, and grocery lists. There were more than 30 children's books in this child's home. This child looked at books everyday with the parent or a sibling and also looked at books everyday on his own. This child had asked about letters, numbers, or words. The mother of this child (Dyad B; LD) indicated that she thought her child could read some single letters and numbers. The parent in this dyad reported telling stories to this child everyday. The stories included folk tales, stories about the past, stories about recent events, religious stories, and humorous anecdotes. This mother started reading to this child when he was a fetus (refer to Table 10 for comparisons of these variables across all dyads).

Overall, it was evident that each of the children in Dyads B were exposed to similar types of literacy materials in the home. Both of the dyads had over thirty children's books in the home and looked at books several times a week or everyday. Both of these children (Dyads B) asked about single letters, numbers, or words while looking at environmental signs; however, the mother of the typically developing child reported that the child could not write any single letters, numbers or words, whereas the mother of the child diagnosed with a language disorder reported that this child could do this. Both mothers in Dyads B indicated that they told a variety of stories to their children everyday. Both of these mothers also began reading to their children very early in life. The mother of the typically developing child began when he was eight months old and the mother of the child with a language disorder began reading to him when he was a fetus.

Table 10. Parental responses from each dyad to some of the questions on the Home Literacy Environment Questionnaire.

Variable	Dyad A (TD)	Dyad A (LD)	Dyad B (TD)	Dyad B (LD)
How often child looks at books with parent or siblings	Everyday	Everyday	Several times a week	Everyday
How often does child look at book on his own	Several times a week	Several times a week	Several times a week	Everyday
Does child read any letters/numbers/words	No	Single letters or numbers	No	Single letters or numbers
Does child print any letters/numbers/words	No	No	No	Single letters or numbers
What age was child when parent began reading to them	One year old	Two years old	8 months	Fetus
Resources Available to Borrow Books	80%	80%	80%	80%
Frequency of Borrowing Books	Never	A couple of times a week	A couple of times a week	About once a week



Frequency of Telling Stories	Rarely	Once a week	Everyday	Everyday
Types of Stories	33%	100%	83%	83%
Amount of Hours Child Watches Television	0 hours	2 hours	2 ½ hours	2 hours

After comparing the typically developing children in both of the dyads (Dyad A and Dyad B; TD) to both of the children that were diagnosed with language disorders (Dyad A and Dyad B; LD), different patterns were noted. It appeared that the typically developing children did not appear to have more reading materials in their homes when compared to the children with language disorders. The children that were diagnosed with language disorders had the same percentage of reading materials in their homes. The parents reported an assortment of traditional as well as non-traditional reading materials in their homes. More traditional reading materials included children's books, comic books, novels, newspapers, and magazines. Non-traditional literary materials included things such as check writing/paying bills, video games, cookbooks, telephone books, and grocery lists (see Figure 5).

Each dyad pair had similar amounts of children's books in their homes. The typically developing child and the language-disordered child in Dyads A both had 25-30

children's books in their homes. The children in Dyads B had more than thirty children's books in their homes. Therefore, the typically developing children and the children diagnosed with language disorders had similar amounts of children's books in their homes (see Figure 6).

The parents reported that each child that was diagnosed with a language disorder asked about letters, numbers, or words everyday. The typically developing child in Dyad A asked about these things everyday as well. However, the typically developing child in Dyad B only asked about these issues several times a week (see Figure 7).

The parents of the typically developing children in Dyad A and B reported telling stories to their children rarely and everyday, respectively. Whereas the mothers of the children with language disorders reported that they told stories to their children once a week (Dyad A) and everyday (Dyad B). Therefore, it appeared that the mothers in Dyads B told stories to their children more often than the parents in Dyads A. This may have been a result of the children in Dyads B having more advanced expressive language skills than those in Dyads A. These children (Dyads B) also had age appropriate receptive language skills. Perhaps these parents (Dyads B) were more likely to tell stories to their children more often because of these more advanced language skills. It is also possible that the more advanced language skills of these children had been affected by the frequency that they had been told stories.

Figure 5. Comparison of the amount of reading materials in the homes of Dyads A and Dyads B.

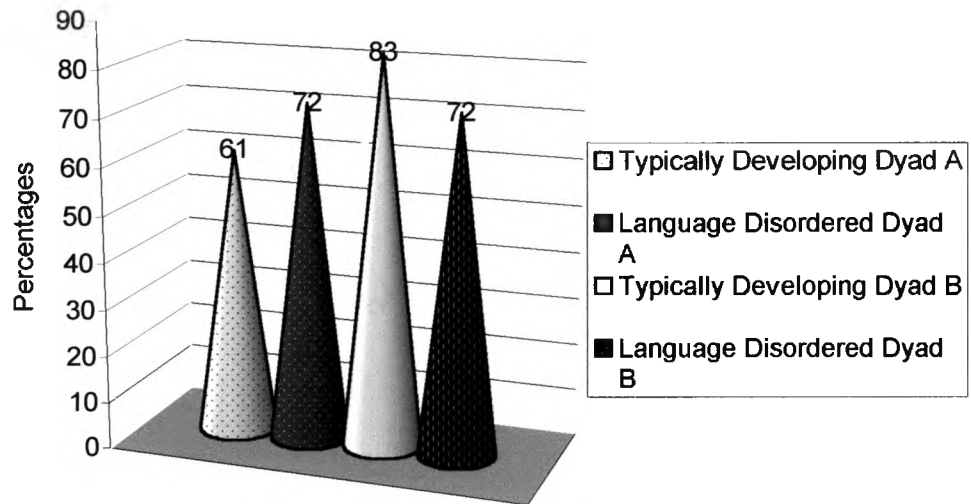


Figure 6. Number of children's books in the homes of Dyads A and Dyads B.

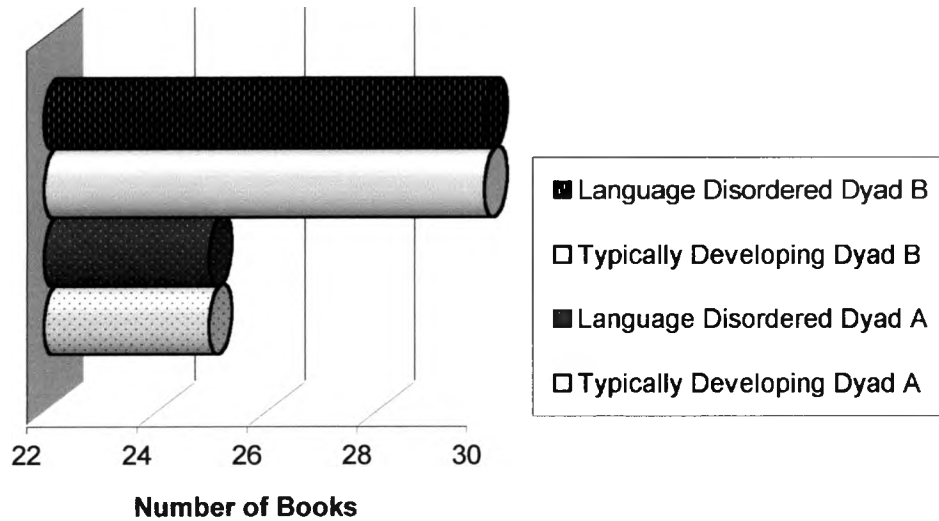
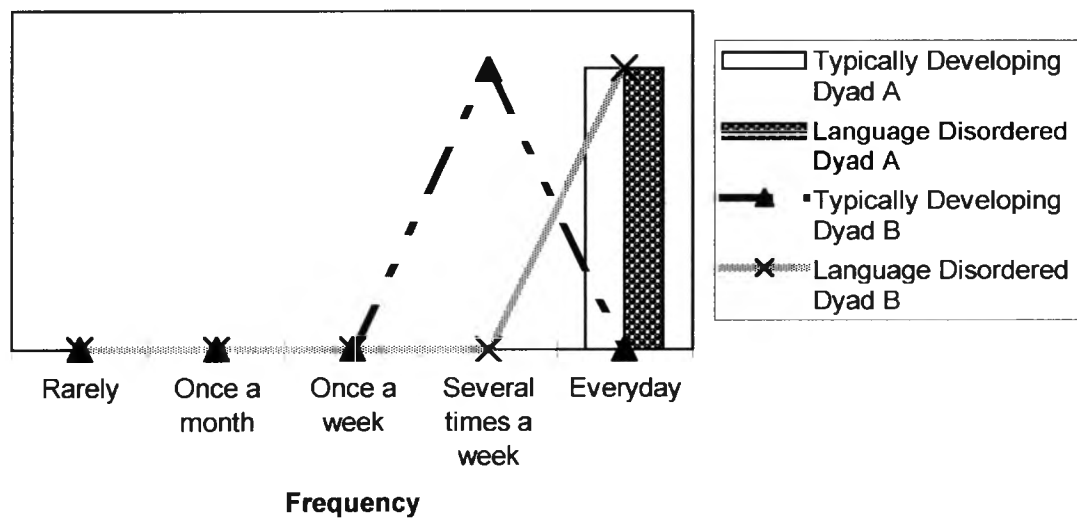


Figure 7. Frequency of children in Dyads A and Dyads B asking about letters, numbers, or words while looking at books or environmental signs.



## CHAPTER IV

### DISCUSSION

#### *Joint Book-Reading*

The purpose of this pilot study was to determine the strategies that parents use while reading to their children who are typically developing and to children who have been diagnosed with language disorders. A secondary purpose was to determine the characteristics of the home literacy environments of both groups.

Parents use several interactions as opportunities to increase their child's receptive and expressive language skills. One of these interactions is that of joint book-reading. Paul (2001) stated that reading books to children can aid in the facilitation of language and literacy development. Children who have been diagnosed with language disorders have decreased expressive and receptive language skills that affect their ability to communicate orally. A strong foundation in oral language development is necessary for the development of pre-literacy and literacy skills. Therefore, children who have been diagnosed with language disorders are at risk for having difficulties in acquiring the skills for literacy. However, researchers have stated that natural interactions, such as joint book-reading, can facilitate language development as well as literacy development (Conti-Ramsden, 1985). A related study by Hoff-Ginsberg (1991) determined that adult speech during book reading contained the greatest lexical, semantic, syntactic, and rate of

topic-continuing replies during book reading. Therefore, book reading is a highly important context for the facilitation of language. Facilitating language development will in turn facilitate literacy development. Language and literacy development are vital for academic success.

It has been reported that children who have language disorders receive information in qualitatively and quantitatively different ways than do typically developing children (Conti-Ramsden & Friel-Patti, 1983). Therefore, it can be hypothesized that particular scaffolding techniques or interaction strategies that may facilitate language development in typically developing children may not equally facilitate language development in children who have been diagnosed with language disorders.

Due to the highly language-oriented context of book-reading and the fact the children with language disorders are at risk for difficulties in acquiring literacy, the researchers of the current study analyzed the interactions of the parents of typically developing children and children with language disorders during joint book reading to compare the language interaction strategies that the parents used. The results of this study suggest that the parents of children with language disorders appeared to use different strategies than did those of typically developing children. They tended to ask more “yes/no” questions, “where” questions, bridged information, provided feedback, and talked about pictures during the book-reading session. This may have been a result of the parents understanding the individual needs of their children to maximize the development of language or in response to each child’s linguistic needs. The parents of the typically

developing children seemed to label more often and asked “what” questions more frequently than the parents of the children with the language disorders.

Numerous studies have reported differences in the interaction styles between parents of typically developing children and children with language disorders (Cross, 1984; Bondurrent, 1977; Wulbert, Inglis, Kriegsman & Mills, 1975). However, many of these studies compared interaction styles of these parents with typically developing and language-disordered children of the same chronological age. According to Conti-Ramsden (1985), it is not an accurate measure to compare these children based on chronological age. They should be matched and analyzed according to linguistic age so that a more accurate comparison can be made as to the differences in the interaction styles of the parents with these children. Therefore, in this study, the children in each dyad pair were matched as closely as possible according to receptive language abilities and/or mean length of utterance. This allowed for analysis of the parents’ interaction styles based solely on the linguistic ages of the children, not on their chronological age. A comparison of the dyads revealed that there were similarities and differences in the interaction styles of the parents of typically developing children and the parents of the children with language disorders. It appeared that both of the parents of the typically developing children implemented different strategies when reading to their children. One parent used a directive approach (Dyad A; TD) and the other parent implemented a less directive approach (Dyad B; TD). Both of the parents of the children with language disorders engaged in less directive strategies during the book-reading sessions.

Only one study has compared the reading styles of one parent with a typically developing child and one parent with a child with a language disorder (Evans & Schmidt, 1991). The findings of Evans and Schmidt's study concluded that each dyad displayed distinctive interaction styles. These children were grouped according to mean length of utterance and expressive vocabulary. Evans and Schmidt concluded that the parent of the child with a language disorder in their study used more directive strategies than the parent of the typically developing child in their study. They stated that the parent of the child with a language disorder asked more closed ended or "yes/no" questions than the parent of the typically developing child. The findings of the current study did not concur with the findings of the Evans and Schmidt study. In this study, each parent of the children with language disorders used a less directive approach rather than the directive strategies observed by Evans and Schmidt.

According to Whitehurst, et al. (1988), interactions between parents and children are ultimately affected by the language abilities of the child. Parents adjust the level of their linguistic output to the level at which the child is able to maintain comprehension. The adult and the child engage in many joint routines that are used as opportunities for the parent to model language for the child. During these interactions, the more experienced language user scaffolds the child's language development by giving feedback to the child to facilitate language development. Parents scaffold by prompting and structuring responses to allow for the child to participate at their level of skill (Abbeduto, Weissman, & Short-Meyerson, 1999).



During the analyses of the joint book-reading strategies, it appeared that the parents responded to their child's linguistic/comprehension skills. If the child did not seem to comprehend, the parent appeared to use the strategies of expansion, labeling, bridging, talking about pictures, and talking about words to increase the child's comprehension and/or maintain their interest in the story. The parents also engaged in bridging to relate the story to the child's life experiences to increase comprehension and/or maintain interest. During the book-reading interaction, it appeared that each parent used the opportunity to expose the child to a variety of language forms by using various combinations of strategies. However, the parents of the typically developing children (Dyad A and Dyad B; TD) did not appear to use the same interaction styles. One of them used a directive approach (Dyad A) while the other seemed to engage in a less directive approach (Dyad B). This may be accounted for by the ages of the typically developing children in this study. These children were 2.1 years (Dyad A) and 2.9 years (Dyad B) at the time of this study. These different interaction styles may be accounted for by the mean length of utterances (MLU) of the typically developing children. The typically developing child in Dyad A had an MLU of 1.35 and the child in Dyad B had a MLU of 2.08. The difference in the language abilities of these children may have accounted for the different parental interaction styles. The parents of the children with language disorders did use similar interaction patterns. However, they did not appear to use remarkably different strategies than those used by the parents of the typically developing children in this pilot study.

The parent in Dyad A with the typically developing child seemed to use a combination of strategies; however, the majority of the strategies she used were directive in nature. She asked more yes/no questions, imitated, labeled, and managed behaviors. She implemented less of the non-directive strategies such as bridging, providing feedback, and asking of open-ended questions. This appeared to be a reflection of the interaction behaviors of the child, which consisted of only imitating words and labeling. This child (Dyad A; TD) did not use many spontaneous interactions during the reading, which may have resulted in the parent being more directive during the reading of the book. The bi-directional interaction characteristics of this dyad may have been influenced by the chronological age of the child. Since the child was 2.1 years old at the time of the study, it may have been more appropriate for the parent to use directive strategies in order to keep the child engaged.

The parent in Dyad B with the typically developing child implemented a more non-directive book-reading approach, although she did manage behavior quite often during the session. She appeared to ask more open-ended questions, provided open phrases, and asked “what” questions. The child in this dyad was more involved in the book-reading interaction. He (Dyad B; TD) initiated comments, imitated letters/numbers, imitated words, and labeled during the interaction. This suggests that there was a strong bi-directional influence during this book-reading session. The parent appeared to use less directive strategies that enabled the child to have a more active role in the book-reading interaction. She may have done this in response to the child’s interaction strategies or responses.

The parent in Dyad A with the child who was diagnosed with a language disorder seemed to implement a less directive joint book-reading interaction style. Although this parent did use some of the directive strategies, she engaged in a broader variety of the less directive interaction strategies. The strategies that she engaged in included asking “who” questions, open-ended questions, expanding information, bridging, asking “where” questions, providing feedback, talking about pictures, and asking “what” questions. The child with a language disorder in Dyad A appeared to be very involved in the book reading. He used a variety of strategies. He (Dyad A; LD) initiated comments about the story, turned pages, predicted information, imitated letters/numbers/words, and labeled during the reading. This child seemed to be very interactive in the reading session. His interaction style may have been an influence on or a result of the less directive nature in which his mother handled the joint book-reading situation. It should also be noted that this parent-child dyad was involved in the Hanen (Manolson, 1985) therapy program at the time the information for this study was collected.

The parent of the child with a language disorder in Dyad B appeared to use a combination of directive and less directive book-reading strategies. Even though she appeared to use a less directive style, overall, she used a combination of both styles. The child in this dyad seemed to initiate comments about the story often. He also commented on connections between the book and his life, imitated words, and labeled. Perhaps this child interacted in these ways in response to the less directive strategies that the parent used, such as bridging information, asking “where” questions, providing feedback, asking “what” questions, and providing additional information.

Bloom (1978) stated that the interaction styles of parents who have children exhibiting language disorders may be reflective of the styles that parents of typically developing children would use with a child of the same language age. The findings of this study suggest that the parents in each dyad used similar strategies; however, there were a select group of strategies that were used more by the parents of the children diagnosed with the language disorders than by the parents of the typically developing children of the same linguistic age. Overall, it appeared that both of the parents of the children with language disorders seemed to use more of the yes/no questions, bridging, “where” questions, and provided feedback more often than the parents of the children who were typically developing. According to the literature, these strategies form a combination of directive and non-directive book-reading and interaction strategies. Whereas, asking “yes/no” questions has been stated as being directive in nature and not facilitative of language development (Bondurrent, 1977), the other strategies used often by these parents are of a less directive nature.

Clezy (1979) reported that the interaction styles or strategies used by parents of children who have language disorders may be reflective of the frustration that they experience during interactions with their children. These researchers hypothesize that the parents of the children with language disorders in this study appeared to be reacting to the level of engagement and/or comprehension exhibited by their children during the joint book-reading. These parents may have felt that they needed to expand and bridge information for the children to increase comprehension of the material and/or keep their children engaged in the book-reading. They may have used expansions to further provide

additional information to their children to increase their knowledge about a particular aspect of the story. The parents may have chosen to incorporate yes/no questions to decrease the linguistic demands expected of the children's responses. By doing this, the parents may have been able to assess the level of comprehension of the children more easily. The parents appeared to vary the strategies that they used when the children seemed to lose interest in the reading.

According to the results of this study, it appeared that the interactions between mothers and their children were bi-directional in nature during joint book-reading as they are during dyadic conversations in free play (Conti-Ramsden, 1985). When the parent used a less directive approach, the child was more interactive. Yet, if the parent was more directive during the book-reading, the child did not appear to interact as frequently. The mother appeared to adjust linguistic input to the ability level of the child, resulting in a bi-directional interaction (Conti-Ramsden, 1985). The current study concurs with several others (Conti-Ramsden & Friel-Patti, 1984; Conti-Ramsden, 1985) in concluding that mothers appear to respond to their children based on the child's linguistic and/or cognitive age, not their chronological age. This study also concurs with Snow's (1992) conclusions that the modifications made by mothers depend on the reactions of children. The simplified speech that mothers sometimes used was valuable in at least two ways: (1) to keep the speech simple and to maintain the child's attention and (2) to aid the child in learning language.

### *Home Literacy Environments*

The secondary purpose of this study was to determine the characteristics of the home literacy environments of typically developing children and children diagnosed with language disorders. Due to the risk of literacy impairments of children with language disorders, it was important to the researchers to study the home literacy environments of the children in the study. Children experience literacy in a multitude of different ways. Experiences that children have depend on the cultural and social factors of their family and community (Teale & Sulzby, 1986). Social class was controlled in this study to limit the social factors that may affect the literacy experiences of the children involved in this study.

Overall, Dyads A (TD and LD) had similar home literacy environments. However, the parent of the typically developing child began reading to him when he was one-year-old and the parent of the child diagnosed with a language disorder began reading to him when he was two-years-old. Perhaps, the parents of the child with the language disorder felt that he did not understand language well enough to comprehend literary material. There was also a notable difference in the amount and types of stories told by the parents to these children. The mother of the typically developing child (Dyad A; TD) indicated that she rarely told stories to this child and the stories that she did tell him consisted of stories about the past and humorous anecdotes. However, the mother of the child diagnosed with a language disorder (Dyad A; LD) told stories to the child about once a week. Her stories consisted of fairy tales, folk tales, stories about the past, stories about recent events, religious stories, and humorous anecdotes. It appears that the mother

of the child with a language disorder may have chosen to use oral narratives to expose this child to literacy. This could have allowed this mother to have control over the complexity of the language to which the child was exposed. She may have provided these types of oral narratives in response to the child's interactions. The child's parent (Dyad A, LD) also indicated that she thought he could read some single letters, numbers, or words. This is interesting because the typically developing child (Dyad A; TD) of approximately the same linguistic age did not have these skills. This may be attributed to the exposure this child (Dyad A; LD) has had to an academic setting.

Dyads B were similar in their home literacy environments as well. It is interesting that both children in Dyads B had asked questions about single letters, numbers, and words in the environment; however, only the child with the language disorder (Dyad B; LD) to write single letters and numbers as reported by the parent. Even though both of these children attended a preschool program, only the parent of the older child who was diagnosed with a language disorder reported that he demonstrated this advanced skill. It may have been that the preschool program that he attended had exposed him to this pre-writing skill.

When comparing the home literacy environments of the typically developing dyads to the dyads with the children with language disorders, there were few notable differences. All of the parents in the study reported that they had a similar number of reading materials and children's books in their homes. The parents of the children with language disorders reported telling more stories, or oral narratives, than the parents of the typically developing children. The parents may have done this so that they were able to

control the linguistic complexity and therefore maintain the child's interest in the story.

Therefore, this study further concurs with Conti-Ramsden (1985) in that there is a strong bi-directional interaction that occurs between a mother and child. The mother appears to respond to the child based on linguistic abilities.

Neither of the parents of the typically developing children reported that their child could read any letters, numbers, or words. This may have been a result of the young chronological ages of the typically developing children in this study. Both of the parents of the children with language disorders reported that they thought their children were able to read single letters, numbers, or words. This may be a result of these children being exposed to preschool or Mother's Day Out programs.

Both of the parents of the typically developing children (Dyad A and Dyad B; TD) stated that these children watched zero hours of television each day. However, the parents of the children with language disorders (Dyad A and Dyad B, LD) indicated that their children watched an average of two hours of television each day. Although not a part of this study, it would be interesting to track the daily routines of these families to conclude if there are any similarities or differences between the routines of the dyads.

### *Limitations of the Study*

There are several limitations to this study. First, seeking parental participation for the study was difficult. There are several reasons why parents might not have expressed interest in the study. They may have been intimidated at being videotaped and since no remuneration was offered, they may have felt that their participation would be too time intensive. Another limitation was that only four participants qualified for this study,



which resulted in two matched pairs. For this reason, statistical procedures could not be applied to the data due to limited power. Therefore, due to the limited sample size, trends or patterns that were observed between these dyads should not be generalized. All of the children involved in this study were males. As a result, the patterns that are discussed from the analyses of this research cannot be generalized to females.

Another limitation was that the researchers were unable to control for ethnicity when matching the dyads due to limited parental interest in participation. Each dyad had two children of different ethnicities. In addition, the testing procedures that were used to determine the participants for the study may have been compromised. The researchers collected spontaneous language samples at Head Start Centers, a private clinic, and in the home of one dyad. A more reliable and valid language sample might have been obtained within a more naturalistic environment like the child's home. Another limitation was the use of a standardized test with the children which due to the psychometric test properties might be biased toward culturally diverse children. The researchers did obtain thorough spontaneous language samples to determine linguistic abilities of the children, which is a criterion referenced measure and therefore least biased toward culturally diverse children to determine the child's linguistic abilities. Although two of the children in the study were from different ethnicities, these children were not bilingual or bi-dialectal.

Another limitation was the fact that one parent (Dyad A; LD) was enrolled in a special education program and was receiving parent training (Manolson, 1985) on how to stimulate language and literacy development.

The Hawthorn Effect could have influenced the data obtained via video-taped joint book-reading sessions. The parents may have been intimidated and may have made changes in the ways that they interacted with their children. In addition, researchers were not able to control the amount of time between the initial contact with the families and the first meeting to collect the data for the study. The lapse in time between these contacts may have affected the data collected. The schedules of the researchers and the participants in the study were not able to allow for this variable to be controlled in the study.

#### *Conclusion and Future Research*

In conclusion, the results of this study indicate that parents use a combination of directive and non-directive strategies during book-reading interactions. However, the most obvious pattern observed was that each parent appeared to demonstrate a bi-directional interaction style during the book-reading. The parents appeared to react to their child based on their child's response to them.

Since children with language disorders are at greater risk for reading disabilities, it is important to study the similarities and differences in the strategies that parents utilize while engaging in joint book-reading with language-impaired and typically developing children. The data obtained from this pilot study and future studies like it could provide speech-language pathologists and educators with a knowledge base that will assist them in educating parents in facilitating emergent literacy skills and, thus, increase the literacy and receptive and/or expressive language levels of children diagnosed with language disorders.

Further research is warranted to determine whether or not significant differences exist between these two populations in the ways that these parents read to their children; therefore more dyads need to be studied. Studies should be conducted to determine whether or not parents of children with language disorders use different strategies to read to their children. Perhaps, if a study is done to determine the types of strategies that parents use with children with language disorders and typically developing children, researchers would be able to determine strategies that are facilitative of language development. It would also be interesting to research the bi-directional nature of book-reading interactions and to determine the importance of the bi-directional influence on the facilitation of language and literacy development. Eventually, researchers could determine effective strategies that facilitate language and implement efficacy studies with children that have been diagnosed with language disorders to track improvement in expressive language, receptive language, and literacy skills.

## APPENDIX A

### Consent Form

Comparing Parent-Child Interactions During Book-Reading: An Analysis of strategies used with typically developing children versus children diagnosed with language disorders.

You are invited to participate in a study of the strategies and/or methods that parents use while reading to their children. I am a graduate student at Southwest Texas State University at San Marcos, Department of Communication Disorders. This study is a part of a Master's Thesis project. We hope to learn if significant differences exist between the reading strategies used by parents of typically developing children and those used by parents of children diagnosed with language disorders. You were selected as a possible participant in this study because your child attends a Head Start, Home Spun, or elementary school in the San Marcos area. You will be one of twenty subjects chosen to participate in this study.

If you decide to participate, we will complete two home visits. During the first visit, we will test your child, by administration of a preschool language test, to verify the presence and/or absence of a language disorder. You will also fill out a questionnaire to determine your occupation, educational level, and socioeconomic status. During the second visit, we will videotape you reading three books to your child. You will be asked to read one book chosen by your child from your home, one book provided by the researchers, and you and your child will be asked to choose a third book from a selection provided by the researchers. Your child will receive a gift book as a "thank you" for participating in the study. Also during the second visit, you will be asked a series of questions about your home literacy environment.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. The only individuals having access to the records will be Dr. Diana Gonzales, Meredith Potts, and any research assistants assigned to work with me on this project.

Your decision whether or not to participate will not prejudice your future relations with Southwest Texas State University. If you decide to participate, you are free to discontinue participation at any time without prejudice.

If you have any questions, please ask us. If you have any additional questions later, Dr. Diana Gonzales will be happy to answer them. She can be reached at the Department of Communication Disorders, Southwest Texas State University, 601 University Drive, San Marcos, Texas 78666-4616 or call her at (512) 245-2035.

You will be offered a copy of this form to keep.

You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form, should you choose to discontinue participation in this study.

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Signature of Parent or Legal Guardian

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Date

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Signature of Witness

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Date

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Signature of Investigator

---

Date

## APPENDIX B

### Initial Questionnaire (Conducted over the phone)

Parent Identification # \_\_\_\_\_  
 Child Identification # \_\_\_\_\_  
 Date: \_\_\_\_\_

#### **Preliminary Questions After Receiving Consent**

Hello, my name is Meredith Potts. I am a graduate student at SWT working under the supervision of Dr. Diana Gonzales. I am calling you about the study that you indicated that you were interested in participating in. Before we can figure out if your child will qualify to participate in the study, I would like to ask you a few questions.

- 1.) What is your child's date of birth? \_\_\_\_\_
- 2.) Which language or languages does your child speak? \_\_\_\_\_
- 3.) What language or languages is used with your child at home?  
\_\_\_\_\_
- 4.) Which language do you (the parent) think that your child comprehends best? \_\_\_\_\_
- 5.) Which language does your child speak the most? \_\_\_\_\_
- 6.) Which language(s) do other family members use with the child? \_\_\_\_\_
- 7.) Has your child ever been diagnosed with a language disorder/language delay, or any other special need?  
\_\_\_\_\_ If so, when and by whom? \_\_\_\_\_
- 8.) Has your child's hearing ever been tested?  
\_\_\_\_\_
- 9.) If so, when and by whom? \_\_\_\_\_
- 10.) Would you like to be present during the testing of your child? \_\_\_\_\_

If yes, what is a good time for you on a Tuesday or Thursday?

Verbal agreement for Dr. Gonzales to call them: \_\_\_\_\_

Explain process: \_\_\_\_\_

Directions to home:

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## APPENDIX C

Home Literacy Environment Questionnaire  
(Adapted from Ezell, Gonzales, & Randolph, 2000)

Research ID Number: \_\_\_\_\_  
 Child's ID Number: \_\_\_\_\_ Date of Evaluation: \_\_\_\_\_  
 Date of Birth: \_\_\_\_\_ Age: \_\_\_\_\_

Please answer each question as completely as possible.

1. What types of reading materials do you have in your home at this time (Check all items that apply).

<input type="checkbox"/> newspapers	<input type="checkbox"/> novels	<input type="checkbox"/> children's books
<input type="checkbox"/> magazines	<input type="checkbox"/> "How To" books	<input type="checkbox"/> children's books
<input type="checkbox"/> cookbooks	<input type="checkbox"/> Bible or religious materials	<input type="checkbox"/> with audio tapes
<input type="checkbox"/> dictionary	<input type="checkbox"/> computer books	<input type="checkbox"/> internet
<input type="checkbox"/> video games for entertainment		<input type="checkbox"/> telephone books
<input type="checkbox"/> Preschool educational software		
<input type="checkbox"/> comic books	<input type="checkbox"/> cell phones with numbers	<input type="checkbox"/> grocery lists
<input type="checkbox"/> check writing/paying bills		

2. About how many children's books do you currently have in your home?

No	1 to 10	11 to 20	21 to 30	More than
Books	Books	Books	Books	30 Books

3. Does \_\_\_\_\_ like to sit and look at books with you or an older sibling?

☐ Yes ☐ No

4. How often do you or an older sibling look at books (hard copy, software books) with \_\_\_\_\_? (Circle one)

Rarely	About once	About once	Several times	Everyday
	a month	a week	a week	



5. Has your child ever asked to look at a particular book again and again?

\_\_\_\_ Yes

\_\_\_\_ No

If yes, which book is  
it? \_\_\_\_\_

6. How often does \_\_\_\_\_ look at books on his/her own? (Circle one)

Rarely

About once  
a month

About once  
a week

Several times  
a week

Everyday

7. Has your child ever asked about letters, words, or numbers while looking at a book or environmental signs?

\_\_\_\_ Yes

\_\_\_\_ No

8. In your opinion, does your child read any letters, numbers, or words?

\_\_\_\_ No

If yes, which letters, numbers, or words? \_\_\_\_\_

\_\_\_\_ Yes

\_\_\_\_ Single Numbers/

\_\_\_\_ Letters

\_\_\_\_ Words

\_\_\_\_ Letters/words

9. How often does \_\_\_\_\_ scribble or draw? (Circle one)

Rarely

About once  
a month

About once  
a week

Several times  
a week

Everyday

10. In your opinion, does your child print any letters, numbers, or words?

\_\_\_\_ No

If yes, which letters, numbers, or words? \_\_\_\_\_

\_\_\_\_ Yes

☐ Single Numbers/  
☐ Letters  
☐ Words

11. What resources are available to you for borrowing books and video games? (Circle all that apply)

☐ Friends      ☐ Library      ☐ Preschool  
☐ Church      ☐ Relatives      ☐ Other  
☐ Renting      ☐ Downloading

12. How often do you borrow books from those sources?

Never    About once    A couple of times    About once    More than once  
           a month        a month                a week        a week

If never, why don't you borrow books from these resources?

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13. How often do you tell stories to your child? (Circle one)

Rarely            About once    About once    Several times    Every day  
                       a month        a week        a week

14. What types of stories do you tell your child? (Check all items that apply)

☐ Fairy Tales  
☐ Folk Tales      If yes, name the folktales \_\_\_\_\_  
☐ Stories about past \_\_\_\_\_  
☐ Stories about recent event \_\_\_\_\_  
☐ Religious stories  
☐ Humorous Anecdotes

15. How many hours does your child spend a day watching television?

0      ½ hour   1 hour   1 ½ hours   2 hours   2 ½ hours   3 hours   3 ½ hours  
4 hours      More than 4 hours

16. How many hours does your child spend a day playing video games?

0      1 hour      2 hours      3 hours      4 or more hours

17. How many hours a day does your child spend on a computer?

0      1 hour      2 hours      3 hours      4 or more hours

18. What age was your child when you began reading to him/her? \_\_\_\_\_

19. How long has your child attended a preschool program?

\_\_\_\_\_

20. Please list the names of any favorite books your child owns. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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