Shared Reading Within Latino Families: An Analysis of Reading Interactions and Language Use

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Abstract

Storybook reading research with monolingual families suggests that adult strategies used during shared reading provide greater opportunities for children's verbal participation while facilitating their language and literacy skills. Research of this type with linguistic minority children is relatively uncommon. In the present study, 16 primarily Spanish-speaking Latina/o caregivers and their 7- to 8-year-old children participated in a home-based reading intervention in the families' primary language. Parents were taught shared reading strategies based on Whitehurst and colleagues' (1988) Dialogic Reading. Results show increases in parents' strategy use and overall verbal participation. Further, measures of children's productive language and relative participation increased significantly. This pilot study has implications for further research and intervention utilizing shared storybook reading within linguistic minority populations.

Extensive and methodologically-varied research shows that children's language and literacy development begins within the home and through family experiences long before children start formal instruction (Snow, Burns, & Griffin, 1998; Teale & Sulzby, 1986). Early home experiences with language provide naturally based and authentic opportunities for children to identify, understand, and use those components of language and emergent literacy skills (e.g., vocabulary, phonological processing skills, concepts about print) that form the basis for other necessary literacy skills (Tabors & Snow, 2001). Monolingual English research also shows that parent involvement has great

importance in stimulating, promoting, and supporting children's cognitive and linguistic development (Heath, 1983; Snow, Burns, & Griffin, 1998; Teale & Sulzby, 1986).

Shared storybook reading in parent–child dyads provides an ideal context for young children's linguistic development (Hargrave & Sénéchal, 2000; Sénéchal & LeFevre, 2002; Snow, Burns & Griffin, 1998; Zevenbergen & Whitehurst, 2003). The present study tested the effects of training parents to implement suggested reading strategies during shared reading interactions with their young children. Parents conducted these shared reading experiences largely in the primary language of the home, Spanish. Children participating in this study were learning English as a second language. Below we review research pertaining to gains made in children's language skills and parents' reading practices as a result of shared reading experiences, the importance of instructional methods that optimize children's social interaction, and current shared reading research with diverse families.

Child Language Gains

A large number of intervention studies using parent-guided reading strategies to elicit children's verbal communication vis-à-vis text show increases in children's verbal participation and linguistic sophistication, such as grammatical complexity and vocabulary knowledge (Lonigan, Anthony, Bloomfield, Dyer, & Samwel, 1999; McDonnell, Friel-Patti, & Rollins, 2003; Sénéchal & LeFevre, 2002; Whitehurst, et al., 1988; Whitehurst, Arnold, et al., 1994).

In a shared reading intervention study involving preschool-age children and their mothers, Arnold, Lonigan, Whitehurst, and Epstein (1994) found increases at posttest on standardized measures of children's language.[1] However, following an 8-week intervention, Crain-Thoreson and Dale (1999) found no statistically significant changes in measures of vocabulary with 32 children with language delays.[2] Although standardized measures of vocabulary and expressive language or productive language provide continuity and comparability with previous shared reading research, there are many disadvantages to depending exclusively on such measures. Crain-Thoreson and Dale in their study found after comparing children's language samples on video recordings taken before and after shared reading sessions were first implemented that children spoke more, made longer utterances, produced more different words, and participated more in shared reading interactions. Language examined through standardized measures alone may not reflect a child's improved performance in general spontaneous language. Perhaps including naturalistic samples of language such as those obtained from video recordings during reading interactions may enhance the evaluation of children's language gains as a result of parental changes (e.g., asking open-ended

questions, encouraging longer responses, tapping background knowledge) in shared reading practices.

Research demonstrates similar positive results with children having average to above average language skills (Arnold et al.,1994); children from low-income families (Lonigan et al., 1999; Whitehurst et al., 1994); children with atypical or delayed language development (Crain-Thoreson & Dale, 1999; Crowe, Norris, & Hoffman, 2004); and with samples of monolingual Chinese- and Spanish-speaking children (Chow & McBride-Chang, 2003; Valdez-Menchaca & Whitehurst, 1992).

Increases in Parental Reading Strategies

Parent strategy use during shared reading recognizes that ". . . practice in using language, feedback regarding language, and appropriately scaffolded adult–child interactions in the context of picture book reading facilitate young children's language development" (Zevenbergen & Whitehurst, 2003, p. 3). The quality of shared reading interactions therefore is key to achieving desired gains in children's linguistic skills (Crain-Thoreson & Dale, 1999; Hargrave & Sénéchal, 2000; Lonigan et al., 1999; Zevenbergen & Whitehurst, 2003). Parents who merely read text to their children may not take full advantage of opportunities to discuss the meaning of text or introduce important concepts and vocabulary (Heath, 1982). DeTemple (2001) suggests that shared reading effectiveness is due to what parent–child dyads add to text during shared reading with extra-textual conversations, comments and questions facilitating decontextualized talk. For example, decontextualized discussions–those that are removed from the immediate text including conversations of past experiences, predictions, and inferences all provide greater opportunity for children's linguistic growth than typical shared reading with limited extra-textual interaction (DeTemple, 2001; Sénéchal & LeFevre, 2002). Typical shared reading tends to focus exclusively on reading directly from the text including perhaps limited question and answer exchanges involving brief responses.

Evidence indicates that decontextualized language during these interactions is as important to reading development as phonological awareness and decoding (Bialystok & Herman, 1999; Bus, 2001). In a descriptive study of mothers reading with their 3-year-olds, DeTemple (2001) found parents' decontextualized talk positively associated with later measures of early language and literacy including story comprehension, emergent literacy, and receptive vocabulary. Similarly, Britto and Brooks-Gunn (2001) found a strong association between children's expressive language and maternal decontextualized and expressive language during shared reading in their study of African American teenage mothers and their 7 children (all 36-month-olds).

Whitehurst and colleagues (1988) developed specific parent–child reading techniques known as dialogic reading to facilitate children's participation during shared reading and further their linguistic abilities. Dialogic reading strategies aim to encourage parents' use of evocative techniques to foster child talk, including maximally informative feedback from parent to child, and parent sensitivity to a child's progressive development. Several parent training studies have demonstrated positive effects of dialogic reading strategies while changing parent reading practices and increasing children's linguistic participation during these interactions (Chow & McBride-Chang, 2003; Sénéchal & LeFevre, 2002; Zevenbergen & Whitehurst, 2003).

After training 30 middle-class parents to use dialogic reading strategies in English with their young children, Whitehurst and colleagues (1988) found increases in parental strategy use and children's expressive language. Specifically, by postintervention parents in the experimental group implemented more open-ended questions, function/attribute questions, and expansions during shared reading interactions.

Importance of Social Interaction

Beyond specific linguistic aspects of talk surrounding shared reading interactions, the social nature of the activity is also a critical component. These interactions offer children contextual support for language development (Edwards & García, 1994; Vygotsky, 1978). The interactive nature of shared reading inherently reflects Vygotsky's (1978) previous work on children's zone of proximal development where a more competent other (e.g., parent, teacher, older peer) maximizes learning through interactive experiences until the child internalizes what they have learned via this social interaction (Edwards & García, 1994; Manyak, 1998).

Others further interpret this social interaction as a means of transmitting meaningful sociocultural practices and beliefs between adult and child (Manyak, 1998; Moll & Whitmore, 1994; Rogoff, Mosier, Mistry, & Artin, 1994). These interactive shared learning experiences ". . . allow children to participate in activities that would be impossible for them alone using cultural tools that themselves must be adapted to the specific activity at hand and thus passed along to and transformed by new generations" (Rogoff et al., 1994, p. 232). Modifying these tools as such provides diverse children with opportunities to tap unique cultural and familial "funds of knowledge" (Moll & Greenberg, 1990).

In a shared reading study of an immigrant family, Manyak (1998) taped and transcribed storybook reading events between a mother and her 3 children. Manyak found that cultural knowledge is transmitted during a reading interaction that occurs naturally within this family. He documented the importance of using storybook exchanges as a method of sharing important

elements of personal experience and cultural practice interwoven during discussions. Activities that draw upon students' prior knowledge, and familial and cultural experiences are associated with high levels of task engagement (Baca & Cervantes, 2004).

Shared Reading Within Non-English-Speaking Families

Although storybook reading has been an intensely studied area of family literacy within monolingual English learners in the United States, insufficient research exists on this practice with culturally and linguistically diverse families in the United States (Neuman, 1996). Working with a diverse group of children and their families, Neuman found gains in parental strategy use and children's emergent literacy by postintervention. The intervention involved formation of a book club for parents and their children where project facilitators also modeled reading practices and questioning strategies. Child outcomes in his study focused specifically on children's receptive vocabulary and concepts of print[3] rather than looking at child language gains made during reading interactions by postintervention. Such language gains were examined in a study of Korean-speaking preschoolers in the United States (Lim & Cole, 2002). This study discovered by postintervention that children whose mothers received shared reading training responded with increased talkativeness, more varied vocabulary, and longer utterances.[4]

Given the scarcity of linguistic minority studies in the United States, we have examined studies of monolinguals in other languages outside of the United States where findings are relevant. For example, in a study involving 86 Chinese-speaking kindergartners and their families in Hong Kong, Chow and McBride-Chang (2003) investigated the implementation of interactive parental reading strategies. The authors found gains in children's receptive language and literacy skills after 8 weeks of intervention in comparison with a control group. Similarly, Fung, Chow, and McBride-Chang (2005) trained parents to use dialogic reading techniques in Chinese with their young children who had moderate to severe hearing loss. Increases in parents' use of dialogic strategies in addition to use of picture cards resulted in improvements in children's vocabulary scores. In a public daycare in Mexico, Valdez-Menchaca and Whitehurst (1992) implemented a storybook reading intervention program for 20 2-year-olds with below-average language abilities whose parents were from low-income backgrounds. A teacher at the daycare in this study rather than a parent implemented all adult–child shared reading interactions. Children in the intervention group demonstrated growth on standardized language posttests and on some measures of language production.

Although evidence is encouraging, additional research is necessary to investigate changes in parental reading practices in conjunction with children's verbal participation during storybook reading intervention within non-

monolingual English speaking families in the United States. Therefore, the purpose of this pilot study was to determine whether training mostly Spanish-speaking families to implement shared reading strategies in the home language[5] will increase parents' use of these reading strategies and verbal participation. Furthermore, we investigated whether such training would result in increases in quantity and variety of child language during storybook reading interactions in the home language. This pilot study was a first step toward future research investigating the relationship of parents' strategy use during shared reading with the development of children's later language, fluency, and reading comprehension skills.

Method

Participants

Families who indicated interest in additional information about reading with their children were recruited from among those whose children were participants of a larger longitudinal project (Project *La Patera*).[6] The sample included families of 22 students between 7 and 8 years of age (16 boys and 6 girls) who all identified themselves as Latina/o or Hispanic and most as primarily Spanish speakers. Two families preferred not to be videotaped and therefore were excluded from the present analysis. After initiating the study, four additional families were dropped: two indicating lack of time, and two due to poor audio quality.

Therefore, final sample for analysis ($N = 16$) consisted of 13 boys and 3 girls. Three of these students were previously retained and one identified for special services. Predominantly mothers participated ($n = 15$), along with one father, a grandmother, and both parents for one child. Two families spoke primarily English in the home with their child and thus interventions were conducted in English. Remaining families were primarily Spanish-speaking with interventions conducted in Spanish. Forty-two percent of parents indicated reading with their child everyday while 32% reported reading several times a week, indicating that families already engaged in shared storybook reading. Most families (60%) reported an average annual income of less than $20,000 while a majority of families (80%) reported completing at least a few years of primary education (first through sixth grade).

Research Sites

Participating families lived in three communities in southern California, and the children attended seven different elementary schools in three districts. Families were offered the choice of meeting with researchers in either the parent's home or at a local public library. More than 75% of families chose to

meet in their home. Other researchers (e.g., Lim & Cole, 2002; Tabors, 2001) have suggested that home visits are more practical and facilitate ecological validity compared to meeting in a laboratory setting.

Procedures

The intervention was implemented by two teams including a graduate and undergraduate bilingual researcher each. Families were visited every other week for a total of five 1-hour sessions and phoned alternate weeks to address questions regarding reading strategies and logistical problems with materials or scheduling.

During the first visit, researchers introduced the family to the project and interviewed parents about their family literacy practices. Parents were asked to read to their child a book they had previously read. This shared reading interaction was videotaped by the researchers. The second, third, and fourth visits were training visits in which researchers explained each strategy, provided examples and gave parents a handout explaining the strategies for future reference. Parents were therefore introduced to six shared reading strategies over three separate sessions—two during each home visit—all in the same order with all families.

Shared reading strategies were based on Whitehurst and colleagues' Dialogic Reading program (Whitehurst et al., 1988) and were chosen by the first author, who developed the training materials. The six strategies were introduced in this order: making connections with books, praising and encouraging child's responses, asking quality questions, expanding child's responses, making predictions, and introducing new vocabulary (see Table 1 for descriptions and examples).

Materials

Researchers provided parents with three books at the end of each of four sessions beginning with the first visitation to read to their child before the next session, for a total of 12 books. One of these books was a bilingual book that was consistent across participants. Families were also provided with reading and support materials in their preferred language (English or Spanish) and were told they could read other books within their home, from school or from the library. Therefore, the books families chose to read during the week varied with the exception of the one bilingual text provided by the project. The four bilingual books were,

1. Ancona, G. (1994). *The Piñata Maker/El Piñatero*. New York: Harcourt Brace.
2. Bofill, F. (1998). *Jack and the Beanstalk/Juan y los Frijoles Mágicos*. San Francisco: Chronicle Books.

Table 1

Dialogic Reading Strategies and Examples

Strategy	Strategy description and example
Making connections	Making connections between books and past or current personal experience of child, parent, friend, etc. Mother: *Hay veces que nuestro maestro el señor Jurado da las clases al aire libre.* (Sometimes our teacher Mr. Jurado holds class outside.) [+ rdg] Mother: *¿Y en tu escuela no te dan la clase al aire, al aire libre?* (And at your school they don't hold class outside, do they?) Child: No. Mother: *Ah, es que antes, antes daban la clase al aire libre pero ahora tienen salones.* (It's just that before they taught class outside and now they have rooms.)
Praising and encouraging	Any type of verbal encouragement or praise toward child's verbalization. Positive reinforcement. Father: *¿Que pasó después?* (What happened after?) Child: *Después ah la fue a vender.* (After ah he went to sell it.) Father: *La fue a vender muy bien.* (He went to sell it very good.)
Quality questions	Any question requiring an elaborate or complex response; encouraging child to consider ideas in the story and connect them as the story moves along, a.k.a. "open-ended questions." Mother: *Juan ató una cuerda al cuello de la cabra y se fue al mercado.* (Juan tied a cord to the goat's neck and he went to the market.) [+ rdg] Mother: *¿Para que fue al mercado?* (What did he go to the market for?)
Expansion	Expanding or building on the child's utterance with new ideas. Adding more detail; completing response or utterance. Mother: *¿Y ahora en que crees que va a pensar el tío Nacho?* (And now what do you think Uncle Nacho is going to think?) Child: *Um, pensar en su nuevo sombrero.* (Um, thinking about his new hat.) Mother: *Um, pensar en su nuevo sombrero porque ya este ya no sirve y tiene el otro.* (Um, thinking about his new hat because now this now it's useless and he has another one.)
Making predictions	A question (or comment) regarding what might happen in the story or to the characters before finishing the story. Mother: He gave the goat to the farmer and then he returned to his house. [+ rdg] Mother: What do you think is going to happen next?
New vocabulary	Defining or clarifying the meaning of a new word (can be combination of questioning, explanation, examples, relating to pictures or other strategies). Father: *Y la planta desapareció en un santiamén.* (And the plant disappeared in the twinkling of an eye.) [+ rdg] Father: *. . .o sea al instante.* (. . . or that is in an instant.)

Note. The symbol [+ rdg] is a postcode used to represent verbatim text reading in transcripts. Text written in italics is in Spanish. Translated text is provided in parentheses.

3. Rohmer, H. (1989). *Uncle Nacho's Hat/El Sombrero del Tío Nacho*. San Francisco: Children's Book Press.
4. Keister, D. (1995). *Fernando's Gift/El Regalo de Fernando*. San Francisco: Sierra Club.

Families were also given a calendar to keep track of their reading (e.g., title of material read, number of minutes read). Calendars and books were returned to researchers at the beginning of each session and replaced with new books and calendars.

Observation and Coding

Videotaped observations

During the first and last sessions, parents were asked to read to their child for approximately 10 minutes while a researcher videotaped the interaction. Due to the intrusive nature of video-recording, we made accommodations where necessary to make the families more comfortable. For example, during the postintervention observation families were given the choice of reading one of the bilingual books introduced during the intervention or a familiar book in the home (e.g., library or school book, bible). Also, families were encouraged to read and interact as they normally would during shared storybook reading.

Transcription

Videos were transcribed using a system based on Codes for the Human Analysis of Transcripts, a standardized transcription format developed for the Child Language Data Exchange system (MacWhinney, 2000). Transcripts provided a variety of information for linguistic analysis, such as child and parent code-switching, however, for the purpose of this study we focused only on variables of interest. Bilingual undergraduate assistants were trained in transcription, using examples from a preliminary pilot family, and were provided with a manual of transcription guidelines and conventions specific to this study. In order to determine transcription reliability, a trained bilingual undergraduate assistant independently transcribed four minutes each from four randomly selected video samples (two preintervention and two postintervention) (Crain-Thoreson & Dale, 1999; Miles & Huberman, 1984). Transcription reliability was nearly perfect (98% agreement). Minor spelling errors accounted for the 2% no agreement.

Coding

The Computerized Language Analysis (CLAN) program, written by Leonid Spektor (n.d.) at Carnegie Mellon University, was used to analyze language data. Utterances demonstrating parents' strategy use were indicated on transcripts by means of postcodes reflecting each strategy. Ultimately, two

highly trained coders reviewed each transcript independently and achieved 80% reliability while later reaching agreement on discrepant codes. Verbatim reading was also indicated by postcodes in order to eliminate it from analyses of parent language. One utterance could be categorized by multiple codes, including multiple strategies (e.g., quality questions and predictions were commonly found together).

Analysis

Parent strategy use and verbal participation

A frequency count indicated total number of strategies used during pre and postintervention as well as frequency of individual strategies. Descriptive statistics including means and standard deviations were calculated for the total number of strategies and for each of the strategies during both sessions. Parents' total number of turns was counted for each session, as well as their mean length of turn (MLT) measured in words.

Child verbal participation

Total number of different words (word types) and total number of words (word tokens) produced, which was considered an indicator of lexical development (Menyuk, 1988), was calculated using the frequency word count feature of CLAN. From these frequency counts, a type–token ratio was determined by calculating total number of word types divided by total number of word tokens. This ratio is generally used as a rough measure of lexical diversity (MacWhinney, 2000; Miller, 1991). These measures illustrate both the quantity and variety of child talk (McDonnell et al., 2003).

Child's MLT measured in words was also computed (Miller, 1991). Although mean length of utterance (MLU) measured in morphemes is often used in analyses of storybook reading sessions (Crain-Thoreson & Dale, 1999; Dale, Crain-Thoreson, Notari-Syverson, & Cole, 1996; Lim & Cole, 2002; Poston, 2002), participants in these studies were typically under the age of 5. Therefore, for our sample of 7- and 8-year-olds beyond the period of simple sentence development, MLU would not be an adequate measure. Child's relative participation was computed by dividing the number of child turns by the sum of child and adult turns (Crain-Thoreson & Dale, 1999). A value of .50 would reflect equal participation by the two speakers. Again, this is a measure in which utterances would typically be used but for the purposes of this study, mean length is measured in turns.

Analyses compared pre- and postintervention scores on the above measures of language use, using paired samples *t*-tests. Specifically difference between pre- and postintervention totals on both total strategies used and individual strategies were analyzed, using paired samples *t*-tests. Subsequently, growth on measures of child language (number of words, number of different

words, number of turns, MLT, type–token ratio, and child relative participation) were similarly compared, using paired samples *t*-tests. In one family, the child read the book to the parent; therefore we conducted the above analyses with and without this dyad to determine if this anomaly significantly altered our findings, and there were no significant differences between results with and without this dyad included. Therefore, these interactions were included with the others, and the parent's use of strategies throughout the shared reading were analyzed just as the others were.

Results

Parent Strategy Use and Verbal Participation

Paired samples *t*-tests were used to determine whether significant increases occurred in parents' total strategy use from pre- to postintervention. (See Table 2 for descriptive statistics regarding pre- and postintervention strategy use.) During preintervention parents used a mean of 5.4 strategies ($SD = 9.3$), while four parents employed zero targeted strategies. Postinterventions revealed a mean of 14.5 strategies ($SD = 11.9$).[7] Only one parent implemented zero strategies during postintervention. Difference between these means was statistically significant, $t(15) = -3.33$, $p <. 01$. Significant increases were found for three individual strategies: making connections, $t(15) = -2.80$, $p < .05$; making predictions, $t(15) = -2.76$, $p < .05$; and quality questions, $t(15) = -2.18$, $p < .05$. No parent used making connections or making predictions at preintervention. Making connections and quality questions had the greatest total number of instances during postintervention in addition to showing significant increase from pre- to postintervention. However, half of the sample did not use making connections at postintervention, while all but one parent (the least responsive parent) used at least one quality question at postintervention.

Parents took significantly more turns during the shared reading interaction at postintervention than at preintervention, $t(15) = -2.76$, $p < .05$ (see Figure 1 for parent and child turns), but increase in MLT was not significant at $\alpha = .05$ level.

Child Verbal Participation

Significant differences in child productive language were found between pre- and postintervention (see Table 3). Average number of turns, word types, word tokens, and MLT increased significantly, $p < .05$. No statistically significant increase was found on child relative participation although means indicate overall growth in participation, and type–token ratio decreased slightly.

Table 2

Descriptive statistics for Parent Strategy Use (N = 16)

Strategies	Preintervention				Postintervention					
	Min	Max	*M*	*SD*	Min	Max	*M*	*SD*	*t*	*p*
Total	0	33	5.38	9.26	0	42	14.5	11.9	-3.33**	.01
Making connections	0	0	0	0	0	15	3.06	4.37	-2.80*	.01
Praise and encourage	0	5	0.87	1.54	0	8	1.69	2.73	-1.17	.26
Quality questions	0	14	2.31	3.93	0	9	4.25	2.79	-2.18*	.05
Expanding response	0	15	1.88	4.03	0	11	2.38	3.2	-0.39	.71
Making predictions	0	0	0	0	0	4	1.13	1.63	-2.76*	.01
New vocabulary	0	3	0.31	0.79	0	16	2.00	4.32	-1.61	.13

 * Difference between pre- and postintervention means is significant at the .05 level.
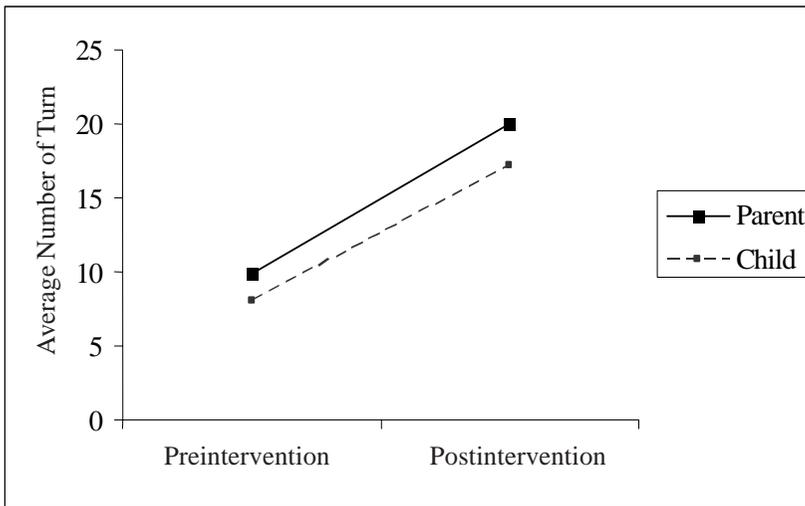** Difference between pre- and postintervention means is significant at the .01 level.

Figure 1. Number of parent and child turns during pre- to postintervention.

Table 3

Descriptive Statistics on Child Language Variables (N = 16)

Measure	Preintervention		Postintervention			
	M	SD	M	SD	t	p
Number of turns	8.06	10.13	17.19	11.32	-2.7*	.02
Word types	21.63	31.15	46.38	31.1	-2.93**	.01
Work tokens	35.56	62.42	81.63	63.32	-2.5*	.03
Mean length of turn	2.64	2.71	4.41	2.56	-2.59*	.02
Type–token ratio	0.62	0.41	0.61	0.23	0.09	.93
Child relative participation	0.31	0.2	0.43	0.15	-1.91	.08

* Difference between pre- and postintervention means is significant at the .05 level.
** Difference between pre- and postintervention means is significant at the .01 level.

Discussion

A diverse body of research indicates that monolingual parents of both typically and atypically developing children can learn to include a variety of strategies in their shared storybook reading designed to enhance opportunities for their children's linguistic growth (e.g. Baker, Mackler, Sonnenschein, & Serpell, 2001; Crowe et al., 2004; Zevenbergen & Whitehurst, 2003). Moreover, evidence strongly indicates that children respond to parents' use of these strategies with increased productive language, including overall quantity of words and turns as well as increased lexical diversity (e.g., Crain-Thoreson & Dale, 1999; McDonnell et al., 2003; Whitehurst et al., 1994). The present study provides further evidence in support of these findings, and specifically supports the effectiveness of implementing a shared reading intervention in a linguistic minority population.

In this study, parents altered their language use in a highly specific context, and their children's language production increased, that is, children responded to change in parents' behavior. Parents were taught shared reading strategies in the home language based on Dialogic Reading strategies (Whitehurst et al., 1988), and showed statistically significant treatment effects as indicated by

growth in frequency of strategy use at postintervention. Their children made significant gains in home language quantity and variety (predominantly Spanish) during shared storybook reading interactions, as hypothesized.

Parent Verbal Participation

Parents and adult family members in this sample began the intervention using minimal strategies during the shared reading interaction with their child, essentially reading the text directly without any interactive conversation or dialogue with their child. Perhaps parents felt that shared storybook reading was a unidirectional activity, whereby the parent must act as "teacher" rather than bring the child into the learning experience. By postintervention, strategy use combined with children's responses indicated that parents learned to create joint attention through the use of explicitly trained strategies and their children in turn increased their verbal participation.

Overall, parents used more strategies during postintervention reading sessions than during preintervention sessions. This increase was demonstrated in two ways: (a) Parents demonstrated growth in frequency of strategy use after completing intervention training, and (b) specific strategies were used more often than others after parents completed training. Two strategies met both of these criteria: making connections and asking quality questions. In both cases, the frequency of the use of strategies increased from preintervention to postintervention *and* they were the most frequently used strategies at postintervention. We hypothesize that these strategies were the most successful because they were also the most rewarding: Making connections provides an avenue for communication that transcends the text itself and elicits decontextualized language and multi-turn interactions, and quality questions provides a framework for encouraging elaborate child responses.

Making connections allowed parents to generate ongoing associations between personal experiences and knowledge with the storybook text. Even though parents did not make any connections with text at preintervention, by postintervention their implementation of this strategy dramatically increased. Parents who actively made connections perhaps found sharing their own personal stories a natural activity, one they already practiced in other contexts. We also observed that children responded to parents' sharing in this nature by engaging with the parent, as evidenced by case notes the multiturn interactions that tended to follow making connections strategy use by the parents. Making connections also provided opportunities for sharing cultural knowledge and experiences during shared reading, as other researchers have suggested (Manyak, 1999).

Quality questions provided parents with a framework for eliciting elaborate responses. This strategy showed the second greatest increase in frequency following making connections. We provided parents with key words for

creating quality questions, such as "why" and "how" prompts. For example, during a videotaped shared reading episode a parent asks her son what happens in the jungle. The son replies, "There are a lot of monkeys and animals there that make a lot of noise." Perhaps children's multiword, elaborate responses to quality questions were reinforcing to the parents, many of whom had expressed initial frustration with their child's lack of engagement during story time.

Those strategies used least by parents included praising and encouraging children's responses and making predictions regarding text. By postintervention both strategies were used less by parents when compared with other strategies. These results could be attributed to the time and manner in which the project teams introduced these strategies to families. For example, during the first training visit we taught parents to praise and encourage their children's responses during storybook reading right after introducing the making connections strategy. Many families enjoyed making connections after this session and used it more often. Their interest in making connections made more of an impression on them and their subsequent reading behavior. Perhaps parents did not see praising and encouraging their child's responses as a concrete method of prompting language given that no child response was necessary after its use. We did explain that the strategy would motivate their child to continue sharing and dialoging about text in future conversations. We introduced making predictions about text during the last training session. By this point families had previously learned four strategies. Learning and practicing two strategies per session could have been overwhelming for some families. During each visit we encouraged parents to continue using other strategies previously reviewed. More time spent on both strategies could have allowed parents to better understand these strategies and put them to use during storybook reading episodes.

Child Verbal Participation

Our results showed children displaying significantly more productive language use by postintervention. Specifically, they used on average significantly more word tokens at postintervention, as well as a greater number of word types. They also took more turns, which were lengthier as measured in number of words per turn (i.e., MLT). The increase in word tokens and number of turns indicates an overall increase in total quantity of language produced, and similarly the increase in MLT shows that within each turn, they used more words. Furthermore, increased number of word types reflects a wider variety of lexical items. While this does not imply that the size of their vocabulary increased from pre- to postintervention, it does indicate that they accessed a greater number of different words. Thus, an increase in both quantity and variety of language was evident at postintervention, with the exception of the least responsive parent.

Although child participation relative to parent participation did not change significantly by postintervention for the whole sample, data indicate that both parent and child participation increased. In other words, both participated more at postintervention but the proportion of participation remained relatively the same when averaged across the whole sample.

These results show that overall, parents and children talked more when prompted by parents' strategy use, resulting in active and engaging dialogue regarding text. Prior to intervention, conversations focused almost exclusively on pure reading of text and/or merely commenting on immediate facts regarding text. Parents' use of shared reading strategies promoted engaging conversations with their child, reflecting the interactive and social nature of the reading activity. Facilitating such conversations helped parents stimulate their child's conversations about text more than without this assistance (Vygotsky, 1978).

Content of Parent–Child Dialogues

The present study demonstrated that dialogues surrounding shared reading interactions by postintervention became more decontextualized, in that they established a relationship between the story and real life (Bialystok & Herman, 1999; Bus, 2001; DeTemple, 2001). Decontextualized talk usually involves longer utterances, inferences and predictions, and more complex language than labeling or yes/no questioning and has been found to support children's language during shared reading (DeTemple, 2001; Britto & Brooks-Gunn, 2001). In this shared reading intervention, increased verbal participation at postintervention provided more opportunities for decontextualized talk to occur.

Through these dialogues, parents had greater opportunities to share cultural and familial information with their children. For instance, in an example of making connections, a parent mentioned having had classes outside, "*al aire libre,*" when she was a little girl as was discussed in the story. In one example a father explains to his son the concept of "*siesta*" or nap by relating his experience. Everyone used to take naps during the day when he was a child in Mexico. These examples show how well parents adopted shared reading to suit their own purposes much like in Manyak's (1998) study. As Manyak said, "Families . . . transformed it [shared reading] in accordance with their goals and sociocultural realities" (p. 26). As evidenced here, parents adopted these strategies while integrating their own experiences and knowledge of the world.

By increasing parent and child verbal participation, this shared storybook reading intervention increased opportunities for home language use. Further, it offered an opportunity to preserve native language practices by creating semi-structured opportunities to converse in Spanish, and it fostered

opportunities for cultural transmission by using culturally relevant books. Providing books in the native language allows families to infuse their own cultural traditions and modify this more mainstream cultural practice as their own (Manyak, 1998).

Limitations and Future Research

This study has several limitations that would need to be addressed in a follow-up study or other future research. Like others (e.g., Crowe et al., 2004; McNeill & Fowler, 1999) this study did not measure the generalization of children's verbal ability beyond the context of shared storybook reading. Further research that includes pre- and postintervention measures of linguistic skills such as vocabulary or reading achievement (e.g., Baker et al., 2001) would provide more robust insight into the impact of intervention on both linguistic and metalinguistic growth. Changes in measures of child and parent language cannot be directly attributed to the intervention, as we did not maintain a control group, and the variety in type of text may have influenced parents' use of strategies. The families were also self-selected from a larger sample, and selection bias as well as attrition bias may have influenced the final sample. However, results suggest that further research with bilingual children would again yield positive results similar to those found in monolingual research.

While little research exists on shared storybook reading practices within Latina/o families in the United States and in their home language, evidence from this study shows positive effects. Most parents in this sample were monolingual Spanish speakers, and expressed a desire to participate in their child's academic career that they felt unable to satisfy due to differences in language of the home and language of instruction. Parents successfully learned and demonstrated use of strategies during shared reading despite a variety of obstacles, such as limited educational experiences (perhaps resulting from limited Spanish literacy). While differing levels of success were evident for parents on various strategies, they showed significant increases in strategy use on average and children showed subsequent increases in overall quantity of language produced as well as variety. Thus, this study shows that the intermediary step of training parents to use strategies can be successful in a linguistic minority household. The children's increase in productive language is likewise an intermediary step toward targeting specific reading skills such as vocabulary or comprehension.

The possibility of increased academic skills through primary language shared reading, such as improved listening comprehension and critical thinking, looks promising for educators and deserves much more investigation. Theories of cross-linguistic transfer suggest that literacy skills learned explicitly or implicitly in a primary language would transfer to a second language

(Cummins, 1991; Durgunoglu, Nagy, & Hancin-Bhatt, 1993). Regardless of the language of the reading and dialogue, implementation of shared reading strategies has the possibility to enhance children's comprehension, vocabulary and other reading skills that will aid their academic progress.

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Endnotes

[1] In their study, Arnold, Lonigan, Whitehurst, and Epstein (1994) used the following tests to measure changes in children's language: Expressive One-Word Picture Vocabulary Test; the Illinois Test of Psycholinguistic Abilities (two subtests); and the Peabody Picture Vocabulary Test-Revised.

[2] Crain-Thoreson and Dale (1999) administered the Peabody Picture Vocabulary Test-Revised and the Expressive One-Word Picture Vocabulary Test.

[3] Neuman administered the Concepts of Print Test (Clay, 1979) to examine children's knowledge of print conventions.

[4] Lim and Cole (2002) examined group differences in children's language performance following intervention by conducting a repeated measures analysis of variance. Statistically significant effects were found between their treatment and control groups for children's mean length of utterance, number of utterances, and number of unique words favoring the treatment group.

[5] Home language in this study refers to the language used most often in the home between parent and child participants. Throughout this paper, we also refer to the home language as the child's native or primary language. In most cases, Spanish was the native or primary language for children in this study. Only two families spoke

predominately English at home and therefore their home, primary or native language is considered English.

[6] Project *La Patera* is a field-based longitudinal research project directed by Drs. Michael Gerber and Judith English at the University of California, Santa Barbara, which is investigating cross-linguistic transfer of phonological skills to English word reading by a large cohort of Spanish-speaking elementary (K–4) children.

[7] In both pre- and postanalyses one parent implemented an extremely high number of strategies accounting for the large standard deviations. This parent had previously worked as an instructional aide in her child's school for a number of years.