Mexican American Mothers of Low and Middle Socioeconomic Status: Communication Behaviors and Interactive Strategies During Shared Book Reading

Barbara L. Rodríguez
The University of New Mexico, Albuquerque
Rachel Hines
Direct Therapy Services, Las Cruces, NM
Miguel Montiel
Progressus Therapy, Albuquerque, NM

Reading to young preschool children aids in their language acquisition, early reading performance, and later success in school (Snow, Burns, & Griffin, 1998). In a national survey, parents were asked if they read to their children every day. Children whose parents had at least a high school diploma or equivalent were more likely to be read to than those children whose parents had less than a high school diploma (U.S. Department of Education, 2006). In addition, European American children were more likely than African American or Latino1 children to have a family member read to them. These differences in children’s early literacy experiences are likely to contribute to disparities in their later reading performance.

ABSTRACT: Purpose: The aim of this investigation was to describe and compare the communication behaviors and interactive reading strategies used by Mexican American mothers of low- and middle-socioeconomic status (SES) background during shared book reading.

Method: Twenty Mexican American mother–child dyads from the Southwestern United States were observed during two book reading sessions. The data were coded across a number of communication behavior categories and were analyzed using the Adult/Child Interactive Reading Inventory (ACIRI; A. DeBruin-Parecki, 1999).

Results: Mexican American mothers used a variety of communication behaviors during shared book reading with their preschool children. Significant differences between the SES groups regarding the frequency of specific communication behaviors were revealed. Middle-SES mothers used positive feedback and yes/no questions more often than did low-SES mothers. Mexican American mothers also used a variety of interactive reading strategies with varying frequency, as measured by the ACIRI. They enhanced attention to text some of the time, but rarely promoted interactive reading/supported comprehension or used literacy strategies. There were no significant differences between the SES groups regarding the frequency of interactive reading strategies.

Conclusion: Parent literacy programs should supplement Mexican American mothers’ communication behaviors and interactive reading strategies to improve effectiveness and participation.

KEY WORDS: Latina, book reading, socioeconomic status, preschool, mothers

---

1Latino/a refers to a person of Hispanic, especially Latin American, descent. Mexican Americans are a subgroup within the Latino population who are of Mexican descent.
U.S. Latino students achieved higher average reading scores on the National Assessment of Educational Progress (NAEP) in 2007 than they did on the first assessment 15 years ago (Lee, Grigg, & Donahue, 2007). However, the improvement for Latino students did not result in narrowing the achievement gap with European American students. That is, the gap between European American and Latino students in 2007 was not significantly different from the gap in 1992 (Lee et al., 2007). Despite improved reading performance, the achievement gap between minority and nonminority student populations persists (Lee et al., 2007).

Policymakers and researchers have suggested that the achievement gap begins to develop before children enter school (e.g., Kober, 2001; Lee & Burkam, 2002; Neuman, 2006). A partial solution to narrowing the achievement gap may emerge as we gain an understanding of the differences in children’s early learning experiences as they relate to ethnicity and socioeconomic status (SES). Children’s early literacy experiences may be viewed, from the sociocultural perspective, as a socially mediated process that is embedded within their cultural community. According to sociocultural theory, children learn and develop literacy through interaction with more knowledgeable and experienced community members in a social, collaborative context (Rogoff, 1990; Vygotsky, 1978). As a result, children’s literacy experiences are culturally defined, and parent–child interactions vary between and within cultural groups.

Parent–child interactions around literacy are likely guided by culturally specific beliefs about the goals of development, views and uses of literacy, and circumstances in which children are raised (cf. Carrington & Luke, 2003; Gillanders & Jiménez, 2004; Heath, 1983; Rogoff, 1990; van Kleeck, 2003). However, most investigations of ethnic/minority families describing parent–child interactions around literacy confound the effects of poverty with ethnic/minority status (e.g., Morgan, 2005; Rush, 1999). The primary purpose of the current study was to examine the separate effect of SES on Mexican American children’s early literacy experiences. Specifically, the focus of this investigation was on the communication behaviors and interactive strategies that are used by Mexican American mothers of low- and middle-SES backgrounds during shared book reading with their preschool children.

**Shared Book Reading**

The importance of shared book reading is widely accepted among researchers and practitioners. A position paper issued by the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC; 1998) regarding appropriate practices for promoting literacy stated that “the single most important activity for building these understandings and skills essential for reading success appears to be reading aloud to children” (p. 198). The scientific evidence corroborates IRA’s and NAEYC’s recommendation by demonstrating that shared book reading influences preschool children’s vocabulary development (e.g., De Temple & Snow, 2003), abstract language development (e.g., van Kleeck, Gillam, Hamilton, & McGrath, 1997), and later literacy development (e.g., Bus, van IJzendoorn, & Pellegrini, 1995; Dunning, Mason, & Stewart, 1994; Longian, 1994; Scarborough & Dobrich, 1994). In addition, preschool children who are read to regularly by parents, siblings, or other individuals in the home tend to show an interest in books (Teale, 1984). Young children whose parents regularly converse and read with them also develop oral language skills earlier than do children whose home environments do not provide such opportunities (Burgess, Hecht, & Lonigan, 2002; Leseman & de Jong, 1998; Lonigan, 1994; Sénéchal, LeFevre, Thomas, & Daley, 1998).

Until recently, research on parent–child interaction patterns during shared book reading has focused primarily on families from European American, middle-class backgrounds. The primary conclusions drawn from this body of research are that book reading begins when children are quite young; book reading occurs frequently; and mothers support their children’s participation in book reading by establishing joint action routines (Ninio & Bruner, 1978), asking a relatively large percentage of wh-questions (e.g., Anderson-Yockel & Haynes, 1994), and modifying their interactions to match their children’s language development (e.g., Snow & Ninio, 1986; van Kleeck et al., 1997). However, book reading practices are known to differ between families of middle- and low-SES and families of different cultural backgrounds.

**SES and shared book reading.** SES shapes children’s language learning environments (e.g., Hart & Risley, 1995; Hoff, 2003) and the nature of specific language learning activities, such as shared book reading. Variation arises, at least in part, from SES-related differences in the ways that mothers interact with their preschool children around books. The literature provides ample evidence that shared book reading experiences vary as a function of family SES. For instance, mothers of middle-SES background discuss more complex concepts (Eisenberg, 2002), elicit more words (Ninio, 1980), and use fewer directives (Hammer, 2001), and use more elaborated and varied language (Ninio, 1980; Peralta de Mendoza, 1995) while engaged in shared book reading with their preschool children when compared with mothers of low-SES background. SES differences are one factor that shapes children’s shared book reading experiences.

**Cultural background and shared book reading.** Several studies have examined the diversity of shared book reading interactions between various cultural/ethnic minority groups. For example, Heath’s (1983) landmark ethnographic study of African American and European American families living in rural Piedmont Carolinas documented that in the African American families that she studied, literacy was a group event. Individual reading among the children did not occur; rather, texts were read to groups of individuals. Children did not have their own books to read, but instead they experienced literacy through observation of adult events and through environmental print. Anderson-Yockel and Haynes (1994) observed African American and Caucasian working-class mother–toddler dyads reading an experimental book and a favorite book brought from home. Similarities in joint book reading behaviors between the two groups were found, but the African American mothers used significantly fewer questioning behaviors compared to the Caucasian mothers. Hammer, Nimmo, Cohen, Draheim, and Johnson (2005) observed African American and Puerto Rican mother–child dyads of low-income backgrounds living in Central Pennsylvania during two book reading sessions. Mothers read the text from the books, responded to their children, and asked questions frequently. African American mothers produced significantly fewer labels/comments than did Puerto Rican mothers. In addition, four book reading styles were identified: text reading, child-centered reading, labeling, and combination. Few research studies have examined the shared book reading interactions of Latino mothers or the separate effect of SES within a particular cultural group.
Latino Shared Book Reading Practices

A major gap in the shared book reading research is the lack of attention to the parent–child interactions of Latino mothers and variability within the Latino community as a function of SES. In fact, much of what we know about literacy practices in Latino families is derived from studies of families of low-SES background and thus is not representative of the entire community (e.g., Garcia Coll & Pachter, 2002; Leyendecker, Harwood, Comparini, & Yalçınkaya, 2005; Raikes et al., 2006). Although the proportion of low-SES families is higher in most U.S. ethnic minority communities (Magnuson & Duncan, 2002), limiting research in this way distorts the overall picture of what is occurring in Latino (Jiménez, 2003) and other ethnic minority communities in the United States.

A few studies have examined the parent–child shared book reading interactions of Latino dyads. Manyak (1998), for example, explored the storybook reading experiences of one Mexican immigrant mother and her 7-year-old son who were living in conditions of poverty. Four categories of interaction were noted: (a) child reading to his mother with little interaction except for the mother’s correction of miscues; (b) mother-directed exchanges that evaluated comprehension; (c) collaborative interpretation that merged together prior knowledge and experience with the information in the text to produce socially constructed interpretations; and (d) cultural transmissions, in which the mother emphasized or elaborated on events that evoked family traditions.

The interactive reading strategies used by Spanish-speaking Mexican immigrant mothers with their 3-year-old children during shared book reading were assessed by Boyce and her colleagues (2004). The Adult/Child Interactive Reading Inventory (ACIRI; DeBruin-Parecki, 1999), which is an observational tool for assessing joint reading behaviors, was employed to evaluate 12 literacy behaviors in the three broad categories of interactive strategies: enhancing attention to text, promoting interactive reading and comprehension, and using literacy strategies. During shared book reading, mothers in this study used several kinds of interactions: They enhanced their children’s attention to the printed text, promoted interaction or conversation with their children about what was in the books, and, somewhat less often, used more complex literacy strategies.

To our knowledge, only two studies have focused on the differences in book reading interactions of Latino mother–child dyads from low- and middle-SES backgrounds. The first, a study by Peralta de Mendoza (1995), examined differences in mother–child dyads from low- and middle-SES backgrounds living in Argentina during a joint book reading situation. A more complex and demanding maternal style and a verbally more competent child were found in the middle-SES group. Middle-SES mothers elaborated more on the picture named and demanded greater verbal participation from their children by asking them more questions. Peralta de Mendoza concluded that the style of the interaction was different depending on the SES of the mother–infant pair. The second, a study by Peralta and Salsa (2001), compared the strategies used during book reading situations by Argentinean mothers of low- and middle-SES backgrounds. Mothers from middle-SES backgrounds used a greater number of strategies that stimulated children to go beyond the immediate perceptual world and to develop and use representational abilities.

Although these findings provide evidence that SES influenced the storybook reading strategies that Argentinean mothers used with their young children (Peralta & Salsa, 2001), they cannot be generalized to English-speaking, Mexican American children growing up in the United States. This population represents a unique segment of the U.S. Latino population because they may be more acculturated (Waters & Jiménez, 2005) to mainstream culture; therefore, their book reading interactions may reveal distinctive interactions that are less characteristic of the language socialization practices of some traditional Latino families.

The qualities of shared book reading interactions observed in some Latino families may correspond with the language socialization practices that are characteristic of Mexican American families. Traditional, or less acculturated, Mexican American families value quiet children (Coles, 1977) and believe that learning is accomplished through observation (Langdon, 1992). Adults structure the interactions by providing directives and modeling behaviors that their children are to learn without accompanying their actions with step-by-step directions (Laosa, 1980). Children observe and repeat actions that others have demonstrated (Delgado-Gaitan, 1992). During conversation, children are unlikely to initiate topics (Schieffelin & Cochran-Smith, 1984) and are unequal conversational partners with adults, and adults rarely pose known-information questions (Valdés, 1996). These language socialization practices may underlie the mother–child interactions around text that have been observed in some Mexican American families.

Research examining the English-speaking, Mexican American population is severely limited, leaving a gap in the research base and in the information that is available for designing culturally relevant intervention programs. The current investigation is an important preliminary step in addressing the need to examine mother–child shared book reading interactions in a sample of Mexican American mothers and to explore the separate effect of SES on these interactions. The present study focused on two specific research questions:

- What maternal communication behaviors and interactive reading strategies are evident when Mexican American mother–child dyads look at books together?
- What are the differences in the communication behaviors and interactive reading strategies of Mexican American mothers of low- and middle-SES background?

We hypothesized that the Mexican American mothers that we observed would display book reading interactions that correspond with the language socialization practices that are characteristic of Latino families (Coles, 1977; Delgado-Gaitan, 1992; Langdon, 1992; Laosa, 1980). Specifically, we expected the Mexican American mothers to structure the book reading interactions by employing directives/requests and attentional vocatives, and to display a greater number of descriptions and labels and fewer questions while interacting with their preschool children during shared book reading. In addition, we hypothesized that the Mexican American mothers would use interactive strategies that enhance attention to text and less frequently use strategies to promote interactive reading and comprehension and literacy as measured by the ACIRI.

We also hypothesized that there would be significant differences in the communication behaviors and interactive strategies employed by Mexican American mothers of low- and middle-SES background. We hypothesized that Mexican American mothers of middle-SES background would ask more questions, make more comments, and provide a greater number of descriptions and labels while reading books with their preschool children. We hypothesized that mothers
of low-SES background would use more directives/requests and attentional vocatives to structure book-reading interactions with their preschool children. In addition, we anticipated that Mexican American mothers of middle-SES background would use literacy strategies and promote interactive reading and comprehension with greater frequency, as measured by the ACIRI, than Mexican American mothers of low-SES background. We argue that Mexican American mothers of middle-SES background may be more acculturated to mainstream culture and therefore conform more closely to U.S. mainstream models and display communication behaviors and interactive strategies that are commonly observed in Caucasian mother–child dyads.

METHOD

Participants

Twenty Mexican American mother–child dyads participated in this study. The dyads were recruited from local day care centers, preschool programs, churches, and libraries located in an urban community in the Southwestern United States. The participants provided informed consent, for themselves and their children, in accordance with the University of New Mexico’s Institutional Review Board for Human Subjects.

The participants were selected to represent two different socioeconomic strata, which were defined in terms of parent education and occupation using Hollingshead’s Two Factor Index of Social Position (ISP; Hollingshead, 1983). The ISP is based on an individual’s education and occupation, and a classification is assigned for a range of scores. The range of scores that can be obtained using this measure include a low of 11 to a high of 77. Lower scores reflect a higher social position along the continuum. The dyads were placed in two groups, low-SES (LSES) and middle-SES (MSES), based on their ISP scores. The ISP scores for the mothers in the LSES group (n = 10) ranged from 47.0 to 69.0 (M = 52.70, SD = 7.13). The ISP scores for the mothers in the MSES group (n = 10) ranged from 19.0 to 37.0 (M = 28.10, SD = 4.79).

Mothers’ characteristics. The mothers were of Mexican American descent, and most (95%) were born in the United States. One mother was born in Mexico but moved to the United States when she was a child. Sixty-five percent of the mothers reported that they spoke English 100% of the time; the remaining 35% indicated that they spoke English approximately 90% of the time and Spanish 10% of the time. Mothers were between 25 and 42 years of age. Mothers in the LSES group had an average age of 28.4 (SD = 3.50); mothers in the MSES group had an average age of 29.0 (SD = 5.29). There was no significant difference between the two groups in mothers’ average age, t(18) = .229, p = .786.

The two groups of mothers did differ significantly in the number of years of formal education they had completed. Mothers in the LSES group had attained an average of 11.4 (SD = 1.34) years of formal education; mothers in the MSES group had attained an average of 14.3 (SD = 1.90) years of formal education, t(18) = 3.93, p = .001. None of the mothers had attended literacy training programs.

At the time of the study, 5 mothers in the LSES group were married and 5 were unmarried. Seven mothers in the MSES group were married, 1 was separated, and 2 were unmarried. Six mothers in the LSES group and 5 mothers in the MSES group did not work outside the home. Table 1 details the mothers’ characteristics.

Children’s characteristics. The dyads in each group included 5 boys and 5 girls. All of the children were first born and were between 24 and 36 months of age. The average age of the children in the LSES group was 30.3 months (SD = 3.56); the average age of the children in the MSES group was 29.3 months (SD = 4.29). There was no significant difference in the children’s age between the two groups, t(18) = .319, p = .579.

All of the children were English speakers and, according to parent report, were exposed to English 90% to 100% of the time. The mothers reported that the children were developing typically and that they did not have any concerns about their speech and language development. Six of the children in the LSES group were cared for during the day by family members, and 4 regularly attended day care programs. Five of the children in the MSES group were cared for during the day by family members, and 5 regularly attended preschool or day care programs in the community.

The mothers reported that book reading was a common activity in the home. All of the mothers in the MSES group reported that they read books to their children on a daily basis. Seven mothers in the LSES group indicated that they read to their children on a daily basis, 2 mothers read between 2–4 days per week, and 1 mother read to her child 1 day per week.

Procedure

The mother–child dyads participated in two audio- and video-recorded book-reading sessions that were conducted in their homes approximately 1 week apart. Two sessions were completed to obtain repeated readings of four children’s books and to gather a more representative sample of the dyads’ typical shared book reading interactions. During the first session, the mothers completed a brief
The dyads were presented with the same four books during the two book reading sessions, and they did not have access to the books between the sessions. The children’s books were entitled, *Old Bear* (Hissey, 1997), *I Was So Mad* (Mayer, 2000), *The Big Red Barn* (Brown, 1994), and *The Very Hungry Caterpillar* (Carle, 1987). The following instructions were given to each mother before each shared book reading session: “I would like for you to read each of these books to your child as you would typically read them to him/her. You may read the books in any order you choose and read them as long as you wish.” The mothers read each of the four books on both occasions. The average length of book reading sessions was 36 min, 36 s ($SD = 13$ min, 23 s) across the two observations.

**Measures**

The audio and video recordings were analyzed to obtain two measures of mothers’ interactive reading and communication behaviors observed during shared book reading. First, the videotapes of the shared book reading interactions were coded and analyzed using the ACIRI. Next, the audio recordings of the shared book reading interactions were transcribed verbatim by speech-language pathology graduate students using the Systematic Analysis of Language Transcripts (SALT; Miller & Chapman, 2000). The mothers’ extratextual utterances obtained from the transcripts were coded based on their content using the communication behavior coding system developed by Ninio (1980) and later implemented by Anderson-Yockel and Haynes (1994). Extratextual utterances were the mothers’ spontaneous utterances that were excursions beyond the book’s printed text. We focused on the mothers’ extratextual utterances because the majority of research on shared book reading interactions has focused only on the adults’ extratextual utterances, and our goal was to explore the variability found in a sample of Mexican American mothers’ utterances during shared book reading.

**Communication categories.** Only mothers’ extratextual utterances were analyzed, and the actual reading of the books’ text was not included in the research data. The audio recordings of the book reading sessions were transcribed verbatim. Complete and intelligible maternal extratextual utterances were coded into nine mutually exclusive communication categories. Table 2 provides a definition of the communication categories and examples of maternal extratextual utterances for each category.

**Interactive reading strategies.** The mothers’ interactive reading strategies were examined using the ACIRI. The ACIRI is an observational tool that was developed with a sample of ethnically diverse, low-income preschool children and their parents. It is designed to assess the literacy behaviors of adult–child dyads under natural conditions during shared storybook reading time. Boyce et al. (2004) used the ACIRI with a sample of low-income, Spanish-speaking, immigrant Latina mothers and demonstrated moderate internal consistency with alphas of .59 to .70.

The ACIRI evaluates 12 literacy behaviors in three categories: (a) enhancing attention to text, (b) promoting interactive

---

**Table 2. Communication categories for mothers’ extratextual utterances.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>wh-questions</td>
<td>wh-questions posed by the mother to elicit specific information from the child.</td>
<td>“Where are the frogs in here?”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“How many frogs are in there?”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Where is the cow?”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“What’s that called?”</td>
</tr>
<tr>
<td>Yes/No questions</td>
<td>Questions in which the mother wished to obtain a yes or no response from the child. Yes/No questions that were directives or requests were not included in this category.</td>
<td>“Is his daddy mad?”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Do you think they fell too?”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Do you like it?”</td>
</tr>
<tr>
<td>Directives/Requests</td>
<td>Statements or yes/no questions in which the mother directed the child to perform an action.</td>
<td>Turn the page.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Put your finger here.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Okay, put that one over there.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Can you count to ten?”</td>
</tr>
<tr>
<td>Labeling</td>
<td>Statements in which the mother provided the name of referents for the child.</td>
<td>“Look, that’s little critter.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It’s a puppy and a duck.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“There’s an airplane.”</td>
</tr>
<tr>
<td>Descriptions</td>
<td>Statements describing pictures, objects, or observable events.</td>
<td>“He’s painting all of those colors on the house.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“They are making a mess.”</td>
</tr>
<tr>
<td>Feedback</td>
<td>Statements that served to positively or negatively reinforce the child’s utterance or behavior.</td>
<td>“That’s right.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Okay, good.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“No.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“You forgot five, six, and seven.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Look.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Look at that.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“See.”</td>
</tr>
<tr>
<td>Attentional vocatives</td>
<td>Verbal attempts to gain the child’s attention.</td>
<td>“It’s called ______.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The Very Hungry ______.”</td>
</tr>
<tr>
<td>Pauses</td>
<td>Open-ended sentences, or cloze procedures, in which the mother waited expectantly for the child to respond.</td>
<td>“All done!”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“This is the last one.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I can’t see.”</td>
</tr>
<tr>
<td>Other</td>
<td>Extratextual utterances that did not meet the established criteria of the previous categories.</td>
<td></td>
</tr>
</tbody>
</table>

---

*Rodriguez et al.: Mexican American Mothers of Low and Middle SES* 275
reading/supporting comprehension, and (c) using literacy strategies. Each literacy behavior is scored on a 4-point scale, with 0 indicating that the behavior never occurred and 3 indicating that the behavior occurred during most of the interaction. Again, we focused solely on the mothers’ interactive reading strategies. Scores were calculated for each mother by combining items within each of the three broad categories: enhancing attention to text, promoting interactive reading and comprehension, and using literacy strategies. Enhancing attention to text includes attempting to promote and maintain physical proximity, sustaining interest and attention, and sharing the book with the child. Promoting interactive reading and comprehension includes soliciting questions about the book’s content, answering the child’s questions, and relating the book content to personal experiences. Using literacy strategies includes soliciting predictions, elaborating on the child’s ideas, and asking the child to recall information from the story.

Reliability. Interrater reliability estimates were calculated for a randomly selected subset of book reading samples (25% of the samples). A graduate student in speech and hearing sciences who was unfamiliar with the goals of the current investigation was trained to use the communication behavior coding system and the ACIRI. Cohen’s kappa, a reliability statistic that corrects for chance agreement, was calculated for the communication behavior coding system (κ = .74) and for the ACIRI (κ = .71). Generally, a kappa greater than .60 is considered satisfactory (Cohen, 1960).

Data Analysis

Descriptive statistics were calculated for the coded communication behaviors and for the ACIRI scores. Because of the study’s small sample size, Box’s and Levene’s Tests (Tabachnick & Fidell, 1989) were completed and revealed that the assumption of multivariate normality was not tenable for the communication behaviors. The Mann Whitney U test, a nonparametric test, was used for the comparisons in communication behaviors between the LSES and MSES groups. A modified sequential Bonferroni correction (Holm, 1979) was applied to the alpha level to control the overall Type I error rate when multiple significance tests were carried out. The assumptions of multivariate normality for ACIRI data were met, and the parametric test, multivariate analysis of variance (MANOVA), was conducted for these data.

RESULTS

Analyses were organized around our two research questions:

- What maternal communication behaviors and interactive reading strategies are evident when Mexican American mother–child dyads look at books together?
- What are the differences in the communication behaviors and interactive reading strategies of Mexican American mothers of low- and middle-SES background?

Communication Behaviors and Interactive Reading Strategies Observed

Communication behaviors. All analyses of the mothers’ communication behaviors were conducted on the frequencies of the communication behavior codes in order to capture variations in both the amount and type of communication used. Moreover, as noted in past research, frequencies seem to be more predictive of child language outcomes than other language measures, such as proportions (see Hoff-Ginsberg, 1992).

Descriptive statistics revealed that, as a group, the Mexican American mothers we observed used a variety of communication behaviors and most frequently employed descriptions (M = 58.1, SD = 41.6), positive feedback (M = 52.1, SD = 46.6), and yes/no questions (M = 51.8, SD = 44.7) while reading books to their children. The Mexican American mothers infrequently used pauses (M = 1.5, SD = 3.9) while reading to their preschool children.

ACIRI. Means and standard deviations for the three ACIRI variables are shown in Table 3. Recall that each literacy behavior is scored on a 4-point scale, with 0 indicating that the behavior never occurred and 3 indicating that the behavior occurred during most of the interaction. The Mexican American mothers we observed enhanced attention to text some of the time (M = 2.36; SD = .36), infrequently promoted interactive reading and supported their children’s comprehension (M = 1.09; SD = .53), and rarely used literacy strategies (M = .49; SD = .30).

Differences Between LSES and MSES Groups

The second objective of the current investigation was to examine differences in the communication behaviors and interactive reading strategies of Mexican American mothers from LSES and MSES backgrounds.

Communication behaviors. Group differences in communication behaviors were examined in eight of the communication categories. Following Anderson-Yockey and Haynes (1994), pauses were excluded because of the nonoccurrence in the data. Table 4 shows the results of the modified sequential Bonferroni-corrected, Mann Whitney test (p < .006). Using this conservative approach, two significant differences between LSES and MSES mothers were found, both representing large effect sizes. The MSES mothers used yes/no questions more frequently than the LSES mothers (U = 16, p = .009, r = .57), and the MSES mothers used feedback more frequently than the LSES mothers (U = 9, p = .001, r = .69). There were no differences between LSES and MSES mothers in six communication categories, and these nonsignificant differences represented small-to-moderate effect sizes. Specifically, the mothers did not differ in their use of wh-questions (U = 22.5, p = .03, r = .46), directives/requests (U = 27.0, p = .089, r = .39), labeling (U = 19.0, p = .019, r = .51), descriptions (U = 22.0, p = .035, r = .47), attentional vocatives (U = 31.5, p = .165, r = .31), and other categories (U = 41.0, p = .529, r = .15). The effect sizes ranged from large (r = .69) for feedback to small (r = .15) for labeling.

Table 3. Descriptive statistics for scores in the three Adult/Child Interactive Reading Inventory (ACIRI; DeBruin-Parecki, 1999) categories.

<table>
<thead>
<tr>
<th>ACIRI category</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing attention to text</td>
<td>0.0</td>
<td>3.0</td>
<td>2.36</td>
<td>.36</td>
</tr>
<tr>
<td>Promoting interactive reading/</td>
<td>0.0</td>
<td>3.0</td>
<td>1.09</td>
<td>.53</td>
</tr>
<tr>
<td>supporting comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using literacy strategies</td>
<td>0.0</td>
<td>3.0</td>
<td>.49</td>
<td>.30</td>
</tr>
</tbody>
</table>
Two categories of communication behaviors, *wh*-questions and feedback, were further examined to detect differences between LSES and MSES mothers. *Wh*-questions were grouped into high cognitively demanding questions (e.g., inferencing and reasoning) and low cognitively demanding questions (e.g., labeling) to examine differences between the LSES and MSES groups. No significant differences were found in LSES and MSES mothers’ use of high-demanding questions, \( F(1, 18) = 3.96, p = .062 \). A significant difference was found in mothers’ use of low-demanding questions, \( F(1, 18) = 7.30, p = .015* \), where MSES mothers used them more frequently (\( M = 32.4, SD = 29.1 \)) than LSES mothers (\( M = 6.9, SD = 6.6 \)) (see Table 5). A significant difference was also noted in mothers’ use of positive feedback, \( F(1, 18) = 13.71, p = .002 \), where MSES mothers used positive feedback (\( M = 82.0, SD = 46.3 \)) more frequently than LSES mothers (\( M = 22.2, SD = 21.4 \)). There were no differences between LSES and MSES mothers’ use of negative feedback, \( F(1, 18) = 3.56, p = .075 \).

Significant differences in the number of complete and intelligible extratextual utterances produced by LSES and MSES Mexican American mothers were observed. While looking at books over two sessions, LSES mothers produced an average of 203 extratextual utterances, whereas MSES mothers produced an average of 507 extratextual utterances, \( t(18) = 2.77, p = .013 \). Although the dyads differed in the number of extratextual maternal utterances, there was no significant between-groups difference in the duration of book reading episodes. The average duration of book reading episodes for MSES mothers was 40 min, 37 s (SD = 13 min, 51 s); it was 32 min, 35 s (SD = 11 min, 38 s; \( t(18) = 1.435, p = .169 \)) for LSES mothers.

**ACIRI.** Figure 1 illustrates the average ACIRI scores for the mothers in the two SES groups. A MANOVA did not reveal significant differences between the LSES and MSES mothers’ ACIRI scores, \( F(1, 18) = 1.54, p = .249 \). Because of the nonsignificant omnibus MANOVA, follow-up comparisons were not completed.

---

### DISCUSSION

The purpose of this investigation was to expand the current knowledge base by describing the communication behaviors and interactive book reading strategies employed by Mexican American mothers during shared book reading with their preschool children and comparing the communication behaviors and interactive book reading strategies displayed by Mexican American mothers of LSES and MSES backgrounds.

**Communication Behaviors and Interactive Strategies Observed During Book Reading**

Although only tentative conclusions can be drawn due to the small sample size, the Mexican American mothers involved in this study used a variety of communication behaviors while they read books with their young children. They were observed to use

---

**Table 5.** Descriptive statistics and multivariate analysis of variance results for *wh*-questions and feedback subcategories for the LSES and MSES groups.

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>LSES</th>
<th>MSES</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>High-demanding questions</td>
<td>2.1</td>
<td>2.9</td>
<td>0.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Low-demanding questions</td>
<td>6.9</td>
<td>6.6</td>
<td>0.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Positive feedback</td>
<td>22.2</td>
<td>21.4</td>
<td>3.0</td>
<td>74.0</td>
</tr>
<tr>
<td>Negative feedback</td>
<td>3.7</td>
<td>3.4</td>
<td>0.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

*p < .05.
wh- and yes/no questions, directives/requests, labels, descriptions, feedback, and attentional vocatives. They most frequently provided yes/no questions, descriptions, and positive feedback. These results are similar to those of Anderson-Yockel and Haynes (1994), in which they found that African American and European American mothers used a variety of communication behaviors (e.g., descriptions, labeling) while reading books to their young children.

Our results also indicated that Mexican American mothers used a number of interactive shared book reading strategies, as measured by the ACIRI, and employed these strategies in varying degrees of frequency. The mothers frequently enhanced their children’s attention to the printed text, infrequently promoted interaction with their children about what was in the books, and rarely used more complex literacy strategies such as elaborating on their children’s ideas as they shared books, similar to parents who were observed in other studies (Boyce et al., 2004; DeLoache & DeMendoza, 1987; Sénéchal, 1997; Sénéchal, Cornell, & Broda, 1995).

The findings also correspond with what is known about the language socialization practices of traditional Mexican American families. The mothers we observed, as a group, provided feedback and descriptions more frequently than they did wh- or yes/no questions. Asking known-information questions occurs infrequently in traditional Mexican American families (Valdés, 1996), and Mexican American adults tend to structure the interaction by providing directives (Moreno, 1991) to their young children. Our observations revealed that directives/requests were communication behaviors that were frequently employed by the mothers to structure the book reading interaction. For example, mothers directed the child to comply with their demands (e.g., “Change the page.” “Put your finger here.” “Pick another one.”). In contrast, mothers almost never used open-ended statements (cued as pauses) in an attempt to elicit information from the child. Although there are general tendencies in the nature of adult–child interactions within the Mexican American community, differences are likely to exist as a function of SES (Buriel, 1993). Moreover, to study Mexican American mothers as a homogeneous group ignores the diversity within this community.

Differences in Communication Behaviors and Interactive Strategies Between SES Groups

We hypothesized that there would be significant differences between the SES groups in communication behaviors and interactive strategies. Using a conservative statistical approach, only two significant differences were noted. Mexican American mothers of MSES used yes/no questions and feedback more frequently than did mothers of LSES. Additional analyses revealed that there were significant differences between the two groups in their use of low cognitively demanding wh-questions and positive feedback. A closer examination revealed that positive feedback was used to a greater extent by MSES Mexican American mothers. This finding is comparable to Eisenberg’s (2002) finding that middle-class Mexican American mothers used more feedback than did working-class mothers. Also, the MSES Mexican American mothers were similar to the European American mothers in Anderson-Yockel and Haynes’ (1994) investigation in that they frequently asked yes/no questions. Laosa (1980) also found that SES was associated with differences in question use for mothers of European and Mexican descent.

Although some findings were not statistically significant, perhaps due to the conservative statistical measures taken, there were clinically important differences on some variables between the two groups. For example, the MSES group demonstrated the use of more wh-questions, labels, and descriptions. Perhaps the Mexican American mothers of MSES background were more acculturated to mainstream culture and therefore conformed more closely to mainstream models of interaction.

The Mexican American mothers of LSES and MSES backgrounds we observed did not differ in their use of interactive strategies, such as enhancing attention to text, promoting interaction/ supporting comprehension, and using literacy strategies, as measured by the ACIRI. The ACIRI is an observational tool that was developed for use with 3- to 5-year-old children. The intent of the ACIRI is to describe interactive reading strategies and link the findings to curriculum goals and objectives (DeBruin-Parecki, 1999).

Three explanations for the lack of differences on the ACIRI between the SES groups are offered. First, the behaviors included on the ACIRI are less likely to be observed in dyads with young children (e.g., 2-year-olds). There are differences in parents’ extratextual talk during shared book reading that are related to children’s ages (e.g., Dickinson, De Temple, Hirschler, & Smith, 1992). Therefore, the behaviors included on the ACIRI may be more likely to occur in 4- and 5-year-old children. Second, the limited range of scores (0–3) on the ACIRI combined with the high variability within and across groups reduced the likelihood of finding differences between SES groups. Finally, although the ACIRI was originally developed with a sample of culturally diverse participants, the interactive reading behaviors assessed are based on mainstream, middle-class practices. Clinicians must exercise caution interpreting results from instruments like the ACIRI because the information collected may be a measure of the mismatch between home and school interactive reading behaviors.

The Mexican American dyads who participated in this investigation were similar to one another in a number of important variables (e.g., mothers’ age, children’s birth order, language use/exposure, children’s age, children’s gender). The uniformity in our sample allowed us to disentangle SES from other variables and examine its effect on maternal communication behaviors and interactive strategies. Because ethnic and minority families tend to be overrepresented among low socioeconomic strata in our society, the effects of poverty are often confounded with ethnic/minority status. The present study represents an important preliminary step in examining the separate effect of SES on social and cultural practices (e.g., book reading) within a cultural community (Garcia Coll, Meyer, & Brillon, 1995).
However, the data collected from this homogeneous sample of Mexican American mothers revealed substantial variability within the categories of communication behaviors and interactive strategies examined. Although this is common in book reading research (e.g., Anderson-Yockel & Haynes, 1994; Pellegrini, Perlmutter, Galda, & Brody, 1990), additional research is needed to understand the specific maternal, child, and/or familial factors that impact Mexican American mothers’ shared book reading behaviors.

Our results correspond with other research examining the language environments of families from different SES backgrounds. Hart and Risley (1995), for example, observed families who varied in SES. One of the differences among the families they observed was the amount of talking that occurred in the home. Families of LSES backgrounds spoke less often to their children than did families from higher SES backgrounds. We found that MSES Mexican American mothers used a significantly greater number of extratextual language environments of families from different SES backgrounds. Hart and Risley (1995), for example, observed families who varied in SES. One of the differences among the families they observed was the amount of talking that occurred in the home. Families of LSES backgrounds spoke less often to their children than did families from higher SES backgrounds. We found that MSES Mexican American mothers used a significantly greater number of extratextual utterances when compared to LSES Mexican American mothers. Laosa (1980) demonstrated that differences in maternal education accounted for differences in maternal teaching strategies between mothers of Mexican and European descent. Similarly, Hoff (2003) examined children’s language learning experiences and concluded that SES accounted for the differences in the nature of the input they heard from their mothers. Our investigation focused on SES variation in Mexican American mothers’ communication behaviors and interactive strategies during shared book reading because most of the studies of within-group variation among families of European descent have addressed SES (e.g., Hoff-Ginsberg, 1992; Tizard & Hughes, 1984).

Historically, the research on ethnic minority parents and children has employed comparative frameworks that are grounded in models that characterize differences as deficits (Garcia Coll & Pachter, 2002). Often, research focuses on differences that exist in the communication patterns between cultural groups (Anderson-Yockel & Haynes, 1994; Hammer et al., 2005). Although these investigations are important contributions to our understanding of cross-cultural differences, the emphasis on making comparisons between groups has failed to acknowledge the variation that exists within ethnic minority families (Roldan & Olswang, 2002). The results of the current investigation add evidence to the emerging body of literature that suggests that differences in SES lead to different patterns of communication for individuals within the same cultural group (e.g., Peralta de Mendoza, 1995; Martinez, 1988; Peralta & Salsa, 2001). From the sociocultural perspective, shared book reading is a practice that is shaped by social and cultural factors (Rogoff, 1990). Therefore, differences in social factors, such as socioeconomic conditions, influence the context of shared book reading interactions.

Limitations

Some caution must be exercised when interpreting these findings. First, the relatively small number of participants and the conservative statistical procedures employed limited the study’s power. Moreover, the sample of mothers and children was selected following stringent selection criteria. This approach allowed us to examine a single variable, SES, and its contribution to Mexican American mothers’ communication behaviors and shared book reading strategies. However, the uniformity in the sample limits generalization of the results to the broader U.S. Latino population, which differs among themselves with regard to other variables such as circumstances of arrival to the United States, place of origin, and home language (Portes & Rumbaut, 2001). Second, the Mexican American mothers who participated in this study likely represent an acculturated subsample of the population. Nineteen of the twenty mothers were born in the United States, and all of the mothers reported that English was the primary language of the home. Thus, these results cannot be generalized to families who are recent arrivals to the United States or to Spanish-speaking families who are likely to be less acculturated because the degree of English proficiency is positively related with level of acculturation (Espinoza & Massey, 1997). Third, we relied on mothers’ reports of their book reading with their children, which may be subject to social desirability influences, and could belie intention versus behavior. These data are in sharp contrast with the data reported by the Federal Interagency Forum on Child and Family Statistics (2007), which indicated that 45% of all Latino families read to their children daily. Nonetheless, appropriate caution should be exercised in interpreting and generalizing these results.

Implications

Despite these limitations, there are several important implications of this study. The results serve as a reminder that families of Mexican descent are not monolithic. SES is an important predictor of the communication behaviors and interactive strategies that mothers of Mexican descent adopt in sharing books with their preschool children. Our findings provide preliminary support in dispelling the misperceptions that Mexican American families do not read often and do not talk during these activities or that English-speaking Mexican American families will exhibit the same kinds of interactions as European American families. The Mexican American mothers in our study did provide a considerable amount of talk during book reading, and they used a number of the same strategies that have been observed in other populations.

This study provides preliminary evidence that mothers’ communication behaviors and interaction strategies during shared book reading correspond with the language socialization literature on Mexican American families. As a result, parents who participate in family literacy programs based on European American language socialization practices encounter programs that may be incongruent with their patterns of interaction, and consequently, the program’s outcome may be less than optimal.

Family literacy programs are designed to teach parents how to facilitate preschool children’s language and literacy development in ways that may be foreign to parents of culturally and economically diverse backgrounds (Janes & Kermani, 2001; Purcell-Gates, 2000). For instance, a commonly implemented “dialogic reading” intervention (Whitehurst et al., 1994) teaches parents to prompt children with questions and praise and expand their contributions about a book’s content. These strategies parallel the practices that have been observed in parent–child interactions of middle-class European American families. A lack of attention to the differences between a program’s inherent interaction practices and those of families of diverse backgrounds may result in poor intervention outcomes (Janes & Kermani, 2001) and limited parent participation (Kummerer, Lopez-Reyna, & Hughes, 2007). Speech-language pathologists (SLPs) are encouraged to develop culturally relevant intervention programs that consider cultural differences in practices that support children’s literacy development (van Kleek, 2006). Children from culturally and economically diverse backgrounds continue to be at increased risk for poor literacy outcomes. Ogbu
and Matute-Bianchi (1986) asserted that children from diverse back-grounds enter formal educational programs unfamiliar with class-room discourse because their home experiences do not match the schools’ practices. Classroom discourse patterns differ from the familiar everyday discourse patterns across a number of dimensions (Westby, 1985). For example, the everyday discourse patterns that children from diverse cultural and economic back-ground experience focus on social relationships and everyday objects and situations, whereas classroom discourse patterns focus on planning and transmitting information, and on abstract or unfamiliar objects and situations. Moreover, the literacy and book reading practices found in schools are based on practices of the mainstream culture (Carrington & Luke, 2003).

SLPs are encouraged to incorporate and build on the literacy practices of families from nonmainstream cultures in order to minimize the dissonance between home and school practices and to improve children’s literacy outcomes. We found a significant difference in the amount of talk during shared book reading between mothers in the LSES and MSES groups. The lower amount of talk may mark the beginning of a trajectory of lower amounts of adult interaction during shared book reading activities. One strategy to narrow the gap between children’s home and school experiences is to increase the amount of parent–child interaction that takes place during the shared book reading event.

Integrating families’ knowledge and resources may enhance the quality and effectiveness of the services we provide. Clinicians are encouraged to engage in culturally competent collaborations with families in order to learn about their knowledge and resources, or “funds of knowledge” (González, Moll, & Amanti, 2005), and integrate these funds of knowledge in intervention programs. Often, families’ funds of knowledge remain hidden to practitioners and are overlooked when designing and implementing intervention.

Clinicians will need to learn about individual children’s home literacy experiences in order to build on the funds of knowledge they bring to school. For example, the LSES Mexican American mothers asked fewer yes/no questions and provided less positive feedback, and mothers from both groups rarely used literacy strategies (i.e., soliciting predictions, elaborating on children’s ideas), which may have been affected by the children’s age. Clinicians may build on the families’ strengths by supporting mothers to continue posing questions and offering positive feedback, increasing the amount of “talk,” and modeling various literacy strategies to facilitate children’s emergent literacy development (e.g., letter identification, relating children’s personal experiences to book’s content). We concur with van Kleeck’s (2006) suggestion that clinicians explicitly inform parents of the classroom discourse that is vital to children’s success in school. By building on Mexican American mothers’ current communication and interactive patterns, clinicians acknowledge the families’ funds of knowledge and provide them with strategies to supplement, and not replace, their current practices, thereby bridging the gap between home and school practices (Delpit, 1995).


REFERENCES


Received July 23, 2007
Revision received January 7, 2008
Accepted September 12, 2008
DOI: 10.1044/0161-1461(2008/07-0053)

Contact author: Barbara Rodriguez, University of New Mexico, Department of Speech & Hearing Sciences, 901 Vassar N.E., Albuquerque, NM 87131. E-mail: brodrig@unm.edu.
Mexican American Mothers of Low and Middle Socioeconomic Status: Communication Behaviors and Interactive Strategies During Shared Book Reading

Barbara L. Rodríguez, Rachel Hines, and Miguel Montiel

Lang Speech Hear Serv Sch 2009;40;271-282; originally published online Oct 24, 2008;
DOI: 10.1044/0161-1461(2008/07-0053)

The references for this article include 10 HighWire-hosted articles which you can access for free at: http://lshss.asha.org/cgi/content/full/40/3/271#BIBL

This article has been cited by 1 HighWire-hosted article(s) which you can access for free at:
http://lshss.asha.org/cgi/content/full/40/3/271#otherarticles

This information is current as of September 2, 2012

This article, along with updated information and services, is located on the World Wide Web at:
http://lshss.asha.org/cgi/content/full/40/3/271