

Clinical Forum

Puerto Rican Mothers' Beliefs and Home Literacy Practices

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Recent efforts to improve children's literacy outcomes have focused on developing an understanding of how parents support their children's literacy development at home. A growing number of investigations have demonstrated that successful literacy practices are accomplished in a variety of ways and are embedded in cultural models (cf. Heath, 1983; Lewis, 2001; Schechter & Bayley, 2002; Torres-Guzmán, 1998), meaning that members of cultures hold shared beliefs, goals, and strategies that guide their actions (Cole, 1996; D'Andrade, 1987; Holland & Quinn, 1987; Shweder, 1990; Strauss & Quinn, 1997; Valsiner & Litvinovic, 1996). This implies that parents' beliefs and practices vary between

cultures; for example, the beliefs and literacy practices of families from nonmainstream cultures often differ from those of parents from the mainstream culture (Carrington & Luke, 2003; Lewis, 2001). Schools in the United States are based on the cultural model of the mainstream culture. This model values independence and critical thinking in children and active parental involvement in children's education, including parental teaching of children's academic skills and parental engagement in the children's school.

Because of potential differences between school and family cultural models, it is essential that practitioners understand the beliefs and practices of the parents they serve and learn how the parents'

ABSTRACT: Purpose: The aims of this investigation were to examine the parenting beliefs and literacy practices of mothers of Puerto Rican descent and to determine if relationships existed between the mothers' beliefs and practices.

Method: Eighty-one mothers of bilingual children who attended Head Start programs participated in the project. As part of a larger project, the children were divided into 2 groups depending on the timing of when they were exposed to English. Children who were exposed to Spanish and English from birth were classified as having home English communication (HEC); children who were not expected to communicate in English until age 3 when they entered Head Start were classified as having school English communication (SEC). Trained home visitors used questionnaires to collect information from the

mothers on their background, beliefs about parenting and education, and home literacy practices.

Results: The results revealed that Puerto Rican mothers held both traditional and progressive beliefs. Additionally, differences between the mothers of children in the HEC and SEC groups were observed on some of the measures of beliefs and practices. Relationships between beliefs and practices were not observed.

Implications: The findings demonstrated that Puerto Rican mothers integrated aspects of both the Puerto Rican culture and the mainstream culture of the U.S. mainland into their views concerning child rearing and education. Implications for practice are discussed.

KEY WORDS: parental beliefs, literacy practices, bilingualism, Latino, multicultural issues

cultural model may vary from that of the school's. By building on parents' perspectives and home practices, practitioners can enhance parental involvement in their children's education (cf. Delgado-Gaitan, 1991, 2004; Gadsen, 1999; Hammer, 1998; Hammer, Nimmo, Cohen, Draheim, & Johnson, 2005; Nutbrown & Hannon, 2003).

Relatively little is known about Latino parents' cultural models of children's education and literacy development, which makes it difficult for speech-language pathologists (SLPs) to tailor their approach to Latino families. Research has shown that many Mexican American families believe that schools are responsible for children's education—a belief that is built on the idea that schools, not parents, have the knowledge and expertise required to teach children. Additionally, parents typically believe that because teachers are individuals whose authority must be respected, parents should not interfere with their children's schooling nor should they ask questions of their children's teachers. The parents' role is to support their children's education by teaching their children to respect teachers, be obedient, and behave properly (Casanova, 1987; Delgado-Gaitan, 2004; Hammer, Miccio, & Rodriguez, 2004; Rodriguez & Olswang, 2003; Zuniga, 1998).

With regard to literacy development, it has been shown that parents from Mexico and Central America who are living in the United States believe that

children learn to read by first learning letters and sounds and how they blend to form words. Furthermore, parents believe that the essential learning sequence—letters, sounds, syllables, words and finally, extended texts—comes about through systematic repetition and accurate practice at each step of the sequence. (Goldenberg, Reese, & Gallimore, 1992, p. 525)

This belief is thought to come from parents' experiences of learning to read in their native countries, which emphasize repetition and drill (Goldenberg et al., 1992).

Parents' views, however, change over time. Reese and Gallimore (2000) found that Mexican American and Central American parents' views concerning literacy differed before and after they arrived in the United States, demonstrating that parental beliefs were not a "closed system." Instead, parents' belief systems evolved as a result of being exposed to the differing views of the U.S. educational system.

Latino parents, however, do not constitute a homogeneous group. The results from studies on Mexican American and Central American parents do not necessarily apply to other Latino groups. Therefore, it is imperative that the beliefs of parents from different regions be investigated (Torres-Guzmán, 1998). This investigation focuses on Puerto Rican parents living on the U.S. mainland, a group who has received little attention in the literature. The research that has been conducted on Puerto Rican parents has focused on their involvement in schools and their children's literacy (Hammer, Miccio, & Wagstaff, 2003; Hammer et al., 2005; Torres-Guzmán, 1998). Research is needed that examines Puerto Rican mothers' beliefs about their children's educational development.

In addition, knowledge is needed about Puerto Rican parents' involvement in their children's education and literacy development. There is a growing body of evidence that shows the benefits of home literacy practices on children's outcomes (Auerbach, 1995; Cairney & Munsie, 1995). In general, research on White and African American families of middle socioeconomic status (SES) and low SES demonstrates that parents' provision of home literacy activities supports children's language abilities (cf. Beals, De Temple, & Dickinson, 1994; Burgess, Hecht, & Lonigan, 2002; Bus, van Ijzendoorn, & Pelligrini, 1995; Payne, Whitehurst, & Angell, 1994; Speece, Ritchey,

Cooper, Roth, & Schatschneider, 2004; Whitehurst & Lonigan, 1998). The findings are inconsistent with regard to the relationship between parental practices and children's literacy abilities. Some researchers have found no or a small relationship between the home literacy environment and children's literacy abilities (Bus et al., 1995; de Jong & Leseman, 2001; Evans, Shaw, & Bell, 2000; Griffin & Morrison, 1997; Storch & Whitehurst, 2001). Others, however, have identified a direct relationship, in particular during the preschool years (Britto, 2001; Britto & Brooks-Gunn, 2001; Burgess et al., 2002; Gest, Freeman, Domitrovich, & Welsh, 2004; Scarborough, Dobrich, & Hager, 1991; Speece et al., 2004; Storch & Whitehurst, 2001).

Despite the importance of the home literacy environment, limited research has been conducted on the literacy activities of Latino, and in particular, Puerto Rican, families. Delgado-Gaitan (1990) and Teale (1986) found that literacy served a range of functions in the homes of Latino families. The Federal Interagency Forum on Child and Family Statistics (2005) documented that 42% of all Latino families read to their children daily as opposed to 64% of White families. Data from the U.S. Department of Education demonstrated that Latino parents infrequently attend school conferences, participate in school organizations, or volunteer in children's classrooms and schools (National Center for Education Statistics, 2003). Additionally, Hammer et al. (2003) found that Puerto Rican mothers who were living in poverty on the mainland United States read to their children a few times a week or less, taught their children literacy-related skills one time a week or less, engaged in literacy activities themselves approximately once a month, and averaged less than 10 books in their home. The researchers also found that mothers of children who were exposed to Spanish and English at home from birth engaged in more literacy-related teaching behaviors (e.g., teaching the alphabet, teaching letter names) than did mothers of children who were exposed to Spanish at home and were not expected to communicate in English until age 3 when they attended Head Start. In addition, Hammer and her colleagues found that parental home literacy practices during Head Start were not related to children's early literacy outcomes.

Some researchers argue that parents' practices are influenced by their beliefs (DeBarshye, 1995; Garcia Coll et al., 1996; Hoffman, 1988; LeVine, 1988; Neuman, Hagedorn, Celano, & Daly, 1995). For example, DeBarshye found a strong association between the beliefs and book reading practices of African American and White mothers from low-income backgrounds. Others have argued that the relationship between parental beliefs and practices is tenuous (Powell, Okagaki, & Bojczyk, 2004). Research that investigates the relationships between the beliefs of Puerto Rican mothers and their literacy practices has not been conducted.

When studying Puerto Rican families' beliefs and practices, it is important to remember the following points. Puerto Rican parents may differ with regard to their level of education and employment, and parents within cultural groups may hold a range of beliefs. Additionally, parents vary with regard to their abilities to communicate in Spanish and English, which is often related to the length of time they have lived on the U.S. mainland. As a result, some parents may expose their children to Spanish and English from birth; others may expose their children to Spanish in the home. In this case, children are not expected to communicate in English until they attend school. Therefore, parents' beliefs may also differ as a function of their language usage with their children (Butler & Hakuta, 2004; Genesee, 2004; Oller & Eilers, 2002).

Given the need for more research on Puerto Rican families, the purpose of this investigation was to examine the beliefs and home literacy practices of Puerto Rican mothers who were living on the U.S. mainland and whose children attended Head Start. This study is part of a larger body of work that is being conducted by the authors of this paper. Rodriguez and Olswang (2003) have studied Mexican American mothers' beliefs about children's education. Hammer and Miccio have led a larger, longitudinal investigation of Puerto Rican children's language and literacy development that examined environmental and cultural contributions to children's outcomes. The point in development when children are expected to communicate in English was the key independent variable considered in that investigation. The reason for this is that researchers have asserted that children's language exposure at the time of school entry is a critical variable in investigations on bilingual children, and findings on bilingual development associated with nonschool settings do not readily apply to school-related outcomes (Butler & Hakuta, 2004; Genesee, 2004; Oller & Eilers, 2002).

As part of that investigation, a preliminary study by Hammer et al. (2003, which was discussed earlier in this paper) examined the reported home literacy practices of an initial cohort of Puerto Rican mothers whose children were attending their first year in Head Start. The current study expands on that work by studying parental beliefs about education as well as the home literacy practices of two cohorts of mothers and children who were attending Head Start for their second year. Specifically, the aims of this study were to (a) determine if the beliefs and practices of mothers who exposed their children to Spanish and English from birth differed from those whose children were not expected to communicate in English until they entered Head Start, and (b) investigate whether relationships exist between mothers' beliefs and practices. It is argued that mothers who chose to communicate with their children in Spanish and English before Head Start entry may have held beliefs and engaged in literacy practices that differed from those of mothers who raised their children in Spanish-speaking homes and did not expect their children to communicate in English until they entered Head Start. An understanding of the potential differences in beliefs and practices that exist within Puerto Rican bilingual families is beneficial for practitioners who work with families of bilingual children. A number of authors have argued that services are maximized when families' cultural models are taken into account (cf. Delgado-Gaitan, 2004; Gadsen, 1999; Hammer et al., 2005).

METHOD

Participants

Eighty-one Latino mothers whose children attended Head Start programs in Central Pennsylvania participated in this study, which was part of a larger longitudinal investigation of bilingual children's language and literacy development. The mothers were of Puerto Rican descent and spoke a Puerto Rican dialect of Spanish. In addition, their children passed the Denver II (Frankenburg et al., 1990) and a hearing screening (conducted by a Head Start nurse), had no parent or teacher concerns about their development, and were financially eligible to attend Head Start for 2 years. As part of the larger study, the children were divided into two groups based on maternal report concerning children's exposure to Spanish and English. Specifically, the mothers were asked to provide the ages at which their children were communicated to in Spanish and English on a regular basis. Children who were exposed to two languages in the home from birth were classified as having home English communication (HEC, $n = 51$). Children who were exposed to Spanish in the home from birth and were not expected to communicate in English until entry into Head Start at age 3 were classified as having school English communication (SEC, $n = 30$). Children in the SEC group who were reared on the U.S. mainland were likely to have had some exposure to English before their attendance in Head Start through television and interactions with individuals in their larger community (Hammer et al., 2004; Kohnert, Bates, & Hernandez, 1999); however, these children's first exposure to the expectation of communicating in English, following directions in English, and answering questions in English occurred when they entered Head Start.

Demographic information about the mothers and children is provided in Table 1. At the beginning of the investigation, the mothers averaged 25;9 (years;months) in age. Their children averaged 4;8 in age and were enrolled in their second year of Head Start. No differences were found between the two groups of mothers with regard to education ($p = .13$) and employment ($p = .07$). As a group, the mothers completed an average of 11.4 years of schooling, and approximately half of the mothers worked outside the home. The groups differed with regard to which generation of the family was the first to move to the U.S. mainland from Puerto Rico ($p = 0.004$). A larger percentage of mothers in the SEC group were the first to move to the

Table 1. Sociodemographic characteristics of the mothers and children in the study.

<i>Variable</i>	<i>SEC (n = 30) M (SD) or Percentage</i>	<i>HEC (n = 51) M (SD) or Percentage</i>
Mothers		
Age in years	28.93 (4.51)	27.44 (4.51)
Education in years	10.9 (1.9)	11.7 (1.5)
Working outside the home	40%	60%
Generational status		
Mother first generation to mainland	40%	8%
Mother's parents first generation to mainland	37%	63%
Mother's grandparents first generation to mainland	20%	24%
Children		
Age (years)	4.78 (.33)	4.83 (.47)

Note. SEC = school English communication; HEC = home English communication.

mainland; a larger percentage of mothers' parents in the HEC group were the first to live on the mainland.

Procedure

As part of the larger investigation, trained home visitors conducted two home visits annually with the mothers. The data that are presented in this study were collected during the children's second year in Head Start. Bilingual home visitors performed the home visits with the mothers who requested that the home visits be conducted in Spanish; bilingual or English-speaking home visitors conducted the home visits with the mothers who preferred that the home visits be conducted in English. All home visitors were members of the communities in which the mothers lived.

The purpose of the home visits was to gather home data through the use of questionnaires. During the visits, the home visitor read the items from the questionnaires to the mother and recorded the mother's responses on the appropriate forms. The data reported in this investigation involved the following questionnaires: a background information questionnaire, the Parental Modernity Scale (Schaefer & Edgerton, 1985), the Rank Order of Parental Values (Schaefer & Edgerton, 1985), and the Home Literacy Activities Questionnaire (Hammer et al., 2003). Through these questionnaires, the mothers provided demographic information and reported their beliefs and practices related to literacy and education. The questionnaires were translated into the Puerto Rican dialect of Spanish using a double translation or back translation procedure (Marín & Marín, 1991). This procedure involved two bilingual individuals who participated independently in the translation process. The English versions were translated into Spanish and then the Spanish versions were translated back into English. This process was repeated until the measures were deemed to be easily understandable in Spanish.

Questionnaires

Background information questionnaire. The background information questionnaire consisted of items that elicited demographic and language usage information, including number of years of education the mother had completed, maternal employment status, and generation that was the first to move to the mainland United States from Puerto Rico (e.g., the mother, the child's grandparents, the child's great grandparents). In addition, the age at which the targeted children were exposed to Spanish and English was recorded.

Parental Modernity Scale. The Parental Modernity Scale (Schaefer & Edgerton, 1985) was designed to determine mothers' traditional and progressive beliefs regarding child rearing and education. The scale contains 30 Likert-type questions that yield two subscores: traditional-authoritarian and progressive-democratic. The traditional-authoritarian subscale consists of 22 items that reflect authoritarian views toward the rearing and education of children (e.g., "The most important thing to teach children is absolute obedience to parents."). Authoritarian beliefs favor attitudes that children should follow adult directives rather than be self-directed. The progressive-democratic subscale consists of 8 items that reflect beliefs that children learn actively, should be treated as individuals, and should be encouraged to express their own ideas (e.g., "It's all right for my child to disagree with me.").

Mothers expressed agreement or disagreement with items on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The subscale scores are the sum of raw scores

assigned to all items composing each subscale. The traditional-authoritarian subscale yields a total raw score ranging from 22 to 110; the progressive-democratic subscale yields a total raw score ranging from 8 to 40. Split-half reliability for the Parental Modernity Scale was .90 and test-retest reliability was .84.

Rank Order of Parental Values. Schaefer and Edgerton's (1985) revision of Kohn's (1977) Rank Order of Parental Values determines mothers' values concerning parenting and education. It involves rank ordering of self-directing, conforming, and social values in children. For example, self-directing values include "to think for him/herself," "to be curious about many things," and "to show interest in how and why things happen." Conforming values include "to be polite to adults," "to obey parents and teachers," and "to have good manners." Social values include "to be kind to other children" and "to be kind and considerate." There are 15 total items: 6 describing self-directing behaviors, 6 describing conforming behaviors, and 3 describing social behaviors. These are presented in three sets of 5 items each—2 conforming, 2 self-directing, and 1 social item. The respondent ranks each set of items from 1 to 5, with a rank of 1 indicating most valued.

Conforming, self-directing, and social scores are derived from this measure. The scoring procedure involves assigning a score to the mother's rank of each item. For example, an item that is ranked first receives a score of 5; an item that is ranked last receives a score of 1. The sum of scores for the items that comprise the conforming, self-directing, and social scales constitutes the raw score for each value scale. The conforming and self-directing scales yield raw scores ranging from 9 to 27; the social scale yields a raw score ranging from 3 to 15.

Home Literacy Activities Questionnaire. The Home Literacy Activities Questionnaire (Hammer et al., 2003) contains 71 items that address the frequency of children's literacy activities, mother-child literacy activities, and mothers' literacy activities. Mothers were asked to indicate how frequently they and their children engaged in the targeted behaviors 5 to 7 days a week, 2 to 4 days a week, 1 day per week, 2 to 3 days a month, 1 time a month, several times a year, and rarely or never. In addition, items were used to collect data on the presence of literacy materials in the homes.

Two scales containing items from the questionnaire were created using Snow, Burns, and Griffin's (1998) framework of the home literacy environment. These were labeled press for achievement and value placed on literacy. Cronbach's alpha (1951) was used to assess the scales' internal consistency (i.e., the extent to which items purporting to measure the same construct are correlated with one another). Value placed on literacy was a 14-item scale that assessed how often mothers engaged in various literacy activities (see Table 2). A typical item asked "How often do you look at books?; read the Bible?; use recipes?" Cronbach's alpha for this scale was .77.

The mothers' press for achievement scale included items that involved the frequency with which mothers taught their children early academic skills (e.g., teaching the alphabet, letter sounds, and coloring or writing activities). Cronbach's alpha for the press for achievement scale was .83.

In addition, two items were examined that reflected the final pieces of Snow et al.'s (1998) framework: the availability of reading materials and parent-child book reading. It should be noted that items that measured how frequently significant individuals read to children were combined to form a scale; however, the scale's reliability coefficient (i.e., Cronbach's alpha) was low. Because mothers reported reading to their children much more frequently than did other family members,

Table 2. Literacy-related items used to form scales.

Value placed on reading
The frequency with which the mother
read a book
read the Bible
read a newspaper
read a magazine
read church newsletters
read sale ads
checked out a book from the library
used a dictionary
used an encyclopedia
used recipes
made a grocery list
sent a card
sent a letter
paid bills
Press for achievement
Providing reading instruction: The frequency with which the mother
taught colors
taught shapes
taught the alphabet
taught letter sounds
taught to count
taught numbers
colored with the child
taught to write
Availability of reading materials
number of children's books in the home
Reading with children: The frequency with which the mother
read books to the child

it was decided that maternal reading to children was the key variable to consider. Therefore, one item was used to represent "book reading with children."

Analysis

A multivariate analysis of variance (MANOVA) was performed to determine whether differences existed between the two groups of mothers with regard to their beliefs and literacy practices. Two items on the Home Literacy Activities Questionnaire—number of children's books and maternal book reading to the child—were measured using an ordinal scale of measurement. Fisher's Exact Test was conducted for each of these two items to determine if group differences were observed. Additionally, Spearman correlation coefficients were calculated to determine if there were significant relationships among maternal beliefs and practices.

RESULTS

Maternal Beliefs

Parental Modernity Scale. Table 3 outlines the means and standard deviations of the scores that were obtained from the mothers' responses to the two subscales of the Parental Modernity Scale. The results revealed no significant differences between the groups on the two subscales: traditional–authoritarian, $F(1, 53) = 2.21, p = 0.14$, and progressive–democratic, $F(1, 53) = 2.97, p = 0.09$. Both groups scored relatively high on the two subscales, meaning that they held both traditional and progressive beliefs.

Rank Order of Parental Values. Significant differences were found between the groups on two of the three subscales of the Rank Order of Parental Values: conformity, $F(1, 39) = 3.97, p = 0.05$, and self-directing, $F(1, 39) = 5.63, p = 0.02$. Although mothers in both groups scored high on these three subscales, mothers of the children

Table 3. Maternal beliefs about parenting and education.

Questionnaire	Group		F	p
	HEC (n = 51)	SEC (n = 30)		
Parental Modernity Scale			df (1, 53)	
Traditional–Authoritarian				
<i>M</i>	83.67	87.95	2.21	0.14
<i>SD</i>	10.58	10.56		
Progressive–Democratic				
<i>M</i>	29.87	32.50	2.97	0.09
<i>SD</i>	6.42	4.29		
Rank Order of Parental Values			df (1, 39)	
Conformity				
<i>M</i>	20.40	18.63	3.97	0.05* ⁺
<i>SD</i>	2.40	3.28		
Self-directing				
<i>M</i>	14.72	17.15	5.63	0.02* ⁺⁺
<i>SD</i>	2.83	3.71		
Social				
<i>M</i>	9.76	8.89	1.53	0.22
<i>SD</i>	2.07	2.35		

*Significant at $p < .05$.

⁺ $d = -0.30$. ⁺⁺ $d = 0.34$.

in the SEC group scored significantly lower on the conformity subscale and significantly higher on the self-directing subscale than did mothers of the children in the HEC group. The effect sizes for these behaviors were -0.30 and 0.34 , indicating a small effect. There were no differences between the groups on the social subscale, $F(1, 39) = 1.53, p = 0.22$. Both groups scored high on this subscale.

Home Literacy Practices

The results revealed significant differences between the two groups of mothers' (HEC and SEC) press for achievement, $F(1, 69) = 7.38, p = 0.008, d = -0.31$ (indicating a small effect; see Table 4). Mothers of the children in the HEC group taught their children various early literacy skills (e.g., teaching the alphabet, letter sounds, and coloring or writing activities) 2–4 times per week, whereas mothers of the children in the SEC group taught their children these skills 1 day per week, on average. In addition, mothers of the children in the HEC group read to their children more frequently (i.e., 2–4 times per week) than did mothers of the children in the SEC group (i.e., once a week; $p = 0.03$). The effect size for this variable was 0.48 , which indicates a medium effect.

The two groups of mothers did not differ with regard to the value they placed on reading, $F(1, 69) = 1.78, p = 0.18$, and the availability of children's books ($p = 0.31$). Mothers in both groups engaged in the various reading/writing activities a couple of times a month on average. Children had approximately 6–10 books available to them in their homes.

Relationship Between Maternal Beliefs and Literacy Practices

The analyses revealed no significant correlations among mothers' beliefs and their literacy practices. Thus, mothers' beliefs about child rearing and education were not related to their reported literacy activities in the home.

DISCUSSION

This study investigated the reported literacy beliefs and practices of Puerto Rican mothers whose children attended Head Start.

Comparisons were made between mothers whose children were exposed to Spanish and English from birth (HEC) and mothers whose children were not expected to communicate in English until age 3, when they entered Head Start (SEC). Relationships between mothers' beliefs and practices were also examined.

The findings revealed that Puerto Rican mothers in both groups reported holding strong traditional and authoritarian beliefs about their children's education. That is, mothers believed that schools have the primary responsibility for educating children, parents should not question their teachers' practices out of respect for the professional, and obedience is important to teach children. At the same time, the mothers of children in both groups displayed beliefs that were progressive. For example, parents believed that they should teach their children new skills, and that children should be allowed to have their own views. These results complement those of Rodriguez and Olswang (2003), who found that Mexican American mothers held both traditional and progressive views.

These findings may lead one to believe that the mothers held contradictory views; however, we argue that this is not the case. It is not inconsistent for Puerto Rican mothers to believe that schools have the primary responsibility to educate children and at the same time believe that parents should support their children's learning at home. Nor is it inconsistent for mothers to believe that obedience in children is important while also believing that children should be allowed to express themselves. As demonstrated by Reese and Gallimore (2000), Latino parents who move to the U.S. mainland often maintain the beliefs of their culture and integrate values and practices that they are exposed to through their children's schools.

Our results also demonstrated that mothers in both groups valued social skills in children. This is consistent with other research that demonstrates that Latino cultures place great importance on human relationships and interacting with others in a respectful manner (Zuniga, 1998). Additionally, the results revealed that mothers in both groups valued conformity and self-direction. Mothers of children in the SEC group, however, placed more emphasis on self-direction in children and less emphasis on conformity than did mothers of children in the HEC group. Given that most mothers of the HEC children were from families who lived on the U.S. mainland longer than mothers of the SEC children, this is a surprising result. Because the mothers of the HEC children would have had more exposure to the

Table 4. Children's home literacy practices.

Activity	Group		F(1, 69)	p
	HEC (n = 51)	SEC (n = 30)		
Press for achievement				
<i>M</i>	45.90	40.03	7.38	0.008* ⁺
<i>SD</i>	8.61	9.18		
Value placed on reading				
<i>M</i>	44.62	40.80	1.78	0.18
<i>SD</i>	11.72	10.97		
Number of children's books				
<i>M</i>	3.55	3.13	Fisher's Exact Test	0.31
<i>SD</i>	1.99	1.83		
Book reading with child				
<i>M</i>	5.97	5.41	Fisher's Exact Test	0.03 * ⁺⁺
<i>SD</i>	1.51	1.52		

*Significant at $p < .05$.

⁺ $d = -0.31$. ⁺⁺ $d = 0.48$.

U.S. mainland cultural model, which values independence and individuality, one might expect that the mothers of the HEC group would value self-direction more and conformity less than would the mothers in the SEC group. Perhaps mothers of the SEC children, a large percentage of whom chose to move their families to the mainland, may have incorporated values that are more traditionally associated with the mainstream culture (Reese & Gallimore, 2000).

In regard to literacy practices in the home during the children's second year of Head Start, mothers of children in the HEC group reported teaching their children early literacy-related skills more frequently than did mothers of children in the SEC group, which is consistent with an earlier investigation involving a subset of these same mothers during their children's first year of Head Start (Hammer et al., 2003). Because mothers of the HEC children had lived on the U.S. mainland for longer periods of time and were more likely to be educated in mainland schools, it is possible that they were more familiar with the skills their children were expected to have when they entered school (Hammer et al., 2003).

Additionally, this investigation revealed that mothers of the children in the HEC group read to their children more frequently than did mothers of the children in the SEC group. This result did not occur when a subset of the children were in their first year of Head Start (Hammer et al., 2003). There are two possible reasons for these different results. First, the increased sample size may have provided sufficient power to detect a difference between the two groups. Second, the mothers of the HEC group may have been influenced by Head Start's encouragement to read books to their children, more so than the mothers of the SEC group.

The two groups did not differ with regard to the number of children's books that were in the home. Given that the mothers who participated in the investigation were living in poverty, they may not have had sufficient economic resources to buy books for their children. Additionally, the mothers reported that they infrequently engaged in literacy activities. Even though the mothers did not engage in literacy activities themselves on a frequent basis, the mothers supported their children's early reading development by teaching and reading to their children.

In addition, relationships between mothers' beliefs and literacy practices were not found. There are at least four possible explanations for this. First, because we could not reject the null hypothesis, it may be that the mothers' beliefs were not related to their practices or it may be that we did not have sufficient power to demonstrate this relationship. Second, it is conceivable that global beliefs about parenting and education do not relate to parental literacy practices. Instead, it may be that only specific beliefs about literacy correlate with mothers' literacy practices (DeBarshye, 1995). Third, maternal beliefs may impact *how* mothers teach and read books to their children rather than *how frequently* they engage in various activities. Finally, maternal beliefs may guide mothers' literacy practices, but their beliefs may not fully determine their practices (Reese & Gallimore, 2000).

Overall, the findings of this investigation suggest that variations exist in the Puerto Rican mothers' cultural models of literacy. This is similar to the findings of Reese and Gallimore (2000), who found variability and nuance in the beliefs and practices of parents from Mexico and Central America who were living in the United States. As stated by Reese and Gallimore, families did not view their cultural model as a "straight jacket that constrains parents to a limited set of beliefs and practices" (p. 128). Instead, families held to some beliefs and practices that were consistent with their cultural background,

and at the same time, integrated beliefs and practices into their cultural model that were common to schools in the United States. These conclusions apply to the current study as well. Puerto Rican mothers' models of literacy included traditional aspects of their culture and also reflected values that are held by educators in the U.S. mainland educational system.

IMPLICATIONS

When SLPs and educators develop plans for enhancing children's early literacy abilities and parents' support of literacy in the home, they often develop programs that are based on the beliefs and practices of the mainstream culture (Carrington & Luke, 2003; van Kleeck & Stahl, 2003). This approach is problematic because it ignores the family's culture. Failure to recognize that families come to the intervention process with their own cultural model may limit the effectiveness of intervention programs. Culture is not simply an add-on; it is an overarching framework that guides families' beliefs and actions (Gadsen, 1999).

Therefore, when SLPs develop plans to enhance the home literacy environment, the family's cultural model becomes the central factor of the program (cf. Gadsen, 1999; Hammer et al., 2005). This means that an understanding of the parents' cultural model needs to be developed, which can be accomplished through semistructured interviews of the family. During semistructured interviews, open-ended questions are used to guide the process, and as a result, conversations occur between the SLP and the family. This process allows the SLP to demonstrate that he or she is genuinely interested in the family and is respectful of the family's culture (Delgado-Gaitan, 2004). Also, the SLP gains information from the family about their beliefs and practices. (See Crago & Cole, 1991; Hammer, 1998; Hammer & Weiss, 2000; and Westby, 1990, for information on conducting interviews with families.)

Once an understanding of the family's cultural model is developed, the SLP can construct a plan that builds on the parents' beliefs, behaviors, and strengths (Delgado-Gaitan, 2004; Gadsen, 1999; Hammer et al., 2005). In other words, the goal is for the SLP to develop a plan that supplements, rather than supplants, what the family is doing at home. In order to accomplish this goal, the SLP must refrain from comparing the families' beliefs and practices to those of the mainstream culture. When such a comparison occurs, the SLP often creates a program that is designed to "fix the deficiencies" that may be perceived about the family. By valuing the family's cultural model, the SLP instead builds a program that adds to the family's current practices. For example, rather than the SLP selecting books for the parents to read to their children, parents may be given the opportunity to make their own books. This allows the family to decide on the content of the books and to develop a story that is meaningful to them (Jones & Kermani, 2001).

When working with parents, it is also essential that the SLP provide families with information about the schools' beliefs and practices (Carrington & Luke, 2003; Delgado-Gaitan, 2004). That way, parents achieve an understanding of what the schools expect of their children and of them. Puerto Rican parents, for example, may not understand the schools' definition of parental involvement and the schools' expectations for how parents should be involved. Also, Puerto Rican parents may not realize that schools value individualism and independence in children—values that may be counter to the beliefs of Puerto Rican parents (Delgado-Gaitan, 2004). Once parents

are informed about the cultural models of the schools, they can make informed decisions about new beliefs and practices that may be incorporated into their cultural models. Additionally, by providing this information to parents, the SLP demonstrates that he or she respects the parents and wants to help their child succeed (Delgado-Gaitan, 2004). When this occurs, parents will respond positively to the SLP. As a result, the efforts made by parents and the SLP will be maximized as they work together to improve the child's literacy outcomes.

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