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Home Literacy Environment of African American Head Start Children

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Abstract

Researchers have documented culturally specific family literacy practices in which low-income families engage, which are often a function of the context in which the family is currently embedded. These practices are well documented in ethnographic literature. Although this evidence exists, its utility is limited due to small sample sizes and lack of quantitative documentation on their contribution to children's language and literacy development. This study attempted to quantify those culturally specific family literacy practices. 51 low-income African-American mother-child dyads participated. The contribution of multiple literacy practices was examined in relation to child language and literacy outcomes. Most low-income African-American families engaged in multiple literacy practices. Recommended areas for future research directions are discussed.

Key Words: family literacy, head start

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Introduction

Low income minority children are at high risk for low academic achievement, particularly in the literacy domain. There is evidence that these children consistently score below their White, middle-class counterparts on measures of emerging literacy (e.g., knowledge about print, phonological awareness, language functioning) (Adams, 1990; Beach, 1996; Blachman, Ball, Black, & Tangel, 1994; Bus & van IJzendorn, 1999) and reading (Campbell, Hombo, & Mazzeo, 2000; Donahue, Finnegan, Lutkus, Allen, & Campbell, 2001).The potential lifelong consequences of the failure to become literate, such as unemployment or underemployment, and intergenerational illiteracy (Cooter, 2006), have prompted researchers, educators, policy makers and advocates to examine what factors may alleviate illiteracy.

Family literacy practices represent one factor which may influence a child's interest and engagement in literate behaviors. Such practices may vary, depending on the cultural and contextual variables of the family (Auerbach, 1989; Morrow & Paratore, 1993; Taylor, 1983; Taylor & Dorsey-Gaines, 1988). Family practices that have been documented to facilitate early literacy across a wide variety of studies include parent-child book reading and parents acting as literacy role models (Beals & Smith, 1992; Marvin & Mirenda, 1993; Snow & Dickinson, 1991; Weigel, Martin, & Bennett, 2006). These literacy practices have been documented to occur among families from low-income, minority backgrounds, although to a lesser extent than in families from middle class, majority backgrounds (Taylor, 1983; Taylor & Dorsey-Gaines, 1988).

Because of the evidence of compromised emergent literacy skills among African American, low-income children, researchers are attempting to identify the factors which contribute to the development of their literacy skills. Multiple studies have examined educational variables; family factors have been examined to a lesser extent. Further, only qualitative studies have investigated culture-specific family literacy process which may influence literacy outcomes in these children. To address this gap in the literature, the current study examined the literacy practices of a group of African-American Head Start children and their families. Employing a within-group approach (Garcia Coll et al., 1996), this study was designed to identify the types of literacy practices utilized by these families, as well as to explore the specific factors that contribute to emerging literacy among African American children from low-income backgrounds.

Family Literacy

"Family literacy" reflects the processes that occur between family members which both promote and facilitate literacy development and use (Morrow & Paratore, 1994). Grounded in a Vygotskian (1978) perspective, literacy is perceived to emerge through literacy related social interactions between individuals, and may extend beyond the parent-child relationship to other family members (Gregory, 2004). Scholars have discussed the disconnect between home and school literacy practices, and how that disconnect could impact the early literacy development of young at-risk children (Auerbach, 1989; Heath, 1983; Purcell-Gates, 1996; Taylor, 1983; Taylor & Dorsey-Gaines, 1988). Findings from more culturally sensitive investigations of literacy practices suggested the existence of home literacy practices that are not captured by traditional measures (e.g., number of books in the home, time spent per day reading).

According to Auerbach (1995), deficit perspectives on literacy development in families "blame marginalized people for their own marginalization" (p. 645). In response to such criticism, researchers using qualitative methodology have described family interactions that occur in low-income homes which are related to literacy (Elish-Piper, 1997; McTavish, 2007; Purcell-Gates, 1997; Taylor & Dorsey-Gaines, 1988). Despite the emphasis on deficits in families of low-income and minority children, there is evidence that these parents do facilitate and encourage their children's literacy development (Auerbach, 1989, 1995a, 1995b; Elish-Piper, 1997, 2000; Fitzgerald, Speigel, & Cunningham, 1991; Tett, 2000). Additionally, findings from multiple studies indicate that the home environments of families from minority, low-income backgrounds do promote children's positive development in cognitive, language, and academic areas (Bradley, Corwyn, McAdoo, & Garcia Coll, 2001). Indeed, there may be culture-specific characteristics of their home environments (e.g., extended family configurations; reliance on oral story-telling) that may further facilitate positive developmental outcomes (Hill, 1998; Heath, 1983).

Other studies have suggested that even for low income minority families, literacy was part of daily life and was used in a variety of situations and for a variety of purposes. Specifically, literacy was used for survival sake (e.g. clipping coupons, reading a bus schedule), for organizational/record keeping purposes (e.g. shopping lists), to fulfill institutional requirements (e.g. completing school forms), for correspondence (e.g. writing letters to friends and family), for religious purposes (e.g. reading the

Bible), or for recreation (Chaney, 1994; Elish-Piper, 1997; Heath, 1983; McTavish, 2007; Purcell-Gates, 1997; Taylor, 1983). In these studies, there was evidence that parents supported their children in the acquisition of literacy knowledge, and that parents served in some way as role models for their children in engagement in literate behaviors.

When studying low-income and minority populations, researchers have called for a closer examination of within group processes (Garcia Coll et. al, 1996). Examining family literacy practices within a low-income, minority Head Start population would be an important step toward actualization of this goal within the early literacy arena. Whereas there are studies that examine the contribution of more mainstream literacy practices to children's literacy development, fewer studies have investigated culture-specific family processes that influence children's emerging literacy. One goal of the current study was to bridge the two. As such, this exploratory study aimed to fill a gap in the literature on the multiple literacy practices (i.e., traditional and non-traditional) that occur in African American low-income populations. For this study, the following research questions were proposed:

1. What are the multiple literacy practices (i.e., both traditional and non-traditional) that occur in low-income African American families?
2. What factors influence low-income African American children's emergent literacy?

Method

Participants

The participants for this study were drawn from Head Start programs in two large metropolitan cities. Two centers served as recruitment locations for this study; one in the Washington, DC area and one in the Baltimore metropolitan area. The centers were identified by the program directors as having the highest number of children in the 4 – 5 year old age range. The participants were African American children enrolled in Head Start and their biological mothers. The mothers were unusually highly educated because one of the programs served students on a local university campus. It should be noted that this is uncharacteristic of most Head Start families, but that the university students were often not employed full time, thus making their families eligible for Head Start enrollment. There were 20 male and 31 female participants. The average age in months of the children was 57.71 (SD 5.38). Table 1 highlights other participant demographic information, including education, income, employment status, and presence of a male figure (father or otherwise) living in the home.

Table 1. Participant Characteristics

Characteristic	n	%
Gender of participants		
Male	20	39.2
Female	31	60.8
Mother's educational level		
High school graduate or less	23	45.1
Partial college/AA degree/trade school or greater	28	54.9
Mother's employment status		
Full-time	26	51.0
Part-time	9	17.6
Unemployed	16	31.4
Total Household Income (Annual)		
< 29,000	30	58.8
$30,000 or greater	21	41.2
Receiving Public Assistance		
Yes	23	45.1
No	28	54.9
Father/father figure lives in home		
Yes	26	51.0
No	25	49.0

Recruitment

All eligible African American children in the classrooms of the two Head Start centers described above received a letter and flyer requesting their parents' participation in a study on activities in the home with their children. Caregivers who responded were contacted by an initial telephone call to schedule a home visit. During this initial call, the study was described in detail and oral consent was obtained from the parent. A home visit was scheduled at that time. For families who did not have access to a telephone, contact was made with them during drop-off and pick-up times.

Data Collection

During the home visit, prior to initiating data collection, an informed consent and permission form was signed by the parent. The research team completed the home visit in approximately 1-1 ½ hours. Child testing lasted approximately 45 minutes – 1 hour, with frequent breaks as necessary for the child. At the end of the testing and interview period, the parent was paid $20.00 for participation in the study and the child received a developmentally appropriate book. It should be noted that both data collectors were African American. Data collection proceeded as follows:

1. A trained undergraduate research assistant administered the Pre-CTOPPP, PPVT-3, and the EOWPVT-3 to the child participant while the first author administered the Home Literacy Environment Interview – Revised, the Literacy Prop Box, and the demographic questionnaire to the caregiver.
2. The first author completed the Home Observation for Measurement of the Environment, 3rd Edition (HOME) instrument after the formal interview had been completed.
3. After all measures were completed, the parent-child dyads were requested to play together during unstructured time with the materials from the Literacy Prop Box. A timer was set for five minutes. After five minutes, the caregiver was asked to read a book to the child, *Don't Wake Mama, Another 5 Little Monkeys Story*.

Measures

Preschool Comprehensive Test of Phonological and Print Processing (Pre-CTOPPP). (Lonigan, Burgess, & Anthony, 2000). The Pre-CTOPPP was designed to be a diagnostic tool regarding emergent literacy skill for children ages 3-0 to 5-11. This was a nonstandardized, prepublished assessment that had been used with at-risk children, specifically Head Start students. At the time of this investigation, only locally developed norms were available, which were posted on the Pre-CTOPPP website through Florida State University (Lonigan, personal communication, March, 2004). Since then, the use of the Pre-CTOPP has been discontinued, and there has been an alternate test of phonological skills published by the test developers (Test of Pre-School Early Literacy, Pro-Ed, 2007) This work reports on the Pre-CTOPP as that is the assessment that was used in the study. The following subscales of the Pre-CTOPPP were used for this study: print awareness; initial sound matching; and blending. The total possible score for the version of the Pre-CTOPPP used in this investigation is 71(36, 14, and 21, respectively for each subscale). The authors report internal consistency scores (Cronbach's alpha) of .59 – .89 for this measure. The alpha computed for this scale with the current sample was 0.77.

Peabody Picture Vocabulary Test-3 (PPVT-3). (Dunn & Dunn, 1997). This measure is an individually administered assessment that examines receptive vocabulary. The PPVT-3 was administered according to the standard administration manual. It was standardized based on a nationally representative sample; raw scores may be converted to standard scores, percentile ranks, and/or age equivalents. The authors report internal reliability scores (Cronbach's alpha) of .88 – 96. This measure has demonstrated validity via its correlation with other child language measures (e.g. EOWPVT-3).

Expressive One-Word Picture Vocabulary Test-3 (EOWPVT-3). (Academic Therapy Publications, 2000). This measure is an individually administered assessment that examines expressive vocabulary. The EOWPVT-3 was administered according to the standard administration manual. It was standardized based on a nationally representative sample; raw scores may be converted to standard scores, percentile ranks, and/or age equivalents. The authors report internal consistency scores of .93 – .98. This measure has demonstrated validity via its correlation with other child language measures (e.g. PPVT).

Home Observation for Measurement of the Environment, 3rd Edition (HOME). (Caldwell & Bradley, 2001). This measure assesses the quality of the environment in which children are living. An objective judge rates the home environment using a dichotomous scale. The early childhood version of this measure was utilized, which has a total possible score of 51 points. The measure's designers have presented evidence for the validity of this instrument with African American children (Bradley & Caldwell, 1981). An alpha of .91 was obtained with this sample.

Home Literacy Environment Interview. (HLEI). (Chaney, 1994). This measure is intended to garner information about the amount and types of multiple literacy interactions which occur in the home environment. Questions include those designed to identify the types of reading materials, the frequency of reading, the frequency of joint caregiver-child reading, the availability of reading and writing materials in the home, the use of the local library, and other traditional home literacy practices. The HLEI interview was modified to include questions regarding engagement in literacy practices that

have also been described in the literature with respect to minority families. Specifically, questions were developed regarding the following literacy practices: 1) daily living (e.g., reading a recipe); 2) pleasure and entertainment (e.g. playing a game); 3) work- related; 4) religious (e.g., Bible study); 5) interpersonal (e.g., writing/reading letters); or 6) informational (e.g. reading bus or subway schedule). In order to aid in recall during the Home Literacy Environment Interview, items that matched what was being asked about in each of the interview questions were used. For example, as the researcher asked a specific question, she held up that item from the literacy prop box and said, "Here's an example of what I am describing".

The original HLEI interview consisted of 27 questions, 23 of which could have received scores. Although no psychometric properties for this measure have been published, the author has indicated that it correlated with a number of indices of language skills (e.g. performance on the Preschool Language Scale, performance on the Peabody Picture Vocabulary Test) (Chaney, 1994; personal communication, March 2002). On the modified HLEI, the total number of points that could have been earned was 147. An alpha of .90 was obtained for the modified HLEI with this sample.

Background Questionnaire. Parents were administered a questionnaire developed for the purposes of this study, in which they provided information on child gender, child age, maternal educational level, and other demographic variables.

Results

Family Literacy Practices

The first research question related to the types of literacy practices that were occurring in the homes of these low-income African American children. As expected, the majority of families reported engaging in some type of literacy activity (see Table 2), including having children's books or magazines in the home. Although nearly all of the respondents reported reading to their child at home and that the child looks at books alone, almost 2/3 of these respondents did not read to their child daily.

A goal of this study was to document the use of materials and practices described in the qualitative literature with respect to minority families. Most families reported that they did use some of these literacy practices in the home (see Table 2). However, fewer respondents reported engaging in these literacy practices with their children.

The second research question examined what factors influenced emerging literacy skills in African-American children from low-income backgrounds. Table 3 provides the results of bivariate correlation analysis of all the key variables. Child factors examined were receptive and expressive vocabulary. Children's receptive language and expressive language were highly intercorrelated, and were associated significantly with emerging literacy. Because of high intercorrelation, only one measure of language was included in the multivariate analyses (i.e., receptive language).

The overall quality of the home environment and engagement in multiple literacy practices were associated with emerging literacy skills in low-income African American children (see Table 3). Correlational analyses indicated that higher scores on the HOME scale were significantly positively associated with expressive language, marginally associated with receptive language, and marginally associated with preschool literacy scores. Higher scores on the HLEI-R were significantly associated with expressive language functioning and preschool literacy scores.

Notably, the HOME and HLEI scales were highly intercorrelated. Due to the high correlation between traditional (e.g., parent-child bookreading) and "non-traditional" (e.g., using literacy during religious experiences) home literacy practices, in most cases, traditional and non-traditional scores performed similarly. However, there was no relation found between children's receptive language and their non-traditional home literacy experiences. Because of the high intercorrelation between the two home environment measures, only the home literacy environment was used in the regression analyses described below.

Further analyses were conducted to identify specific factors in the home environment which were related to emerging literacy and language. For example, an increased number of books in the home was significantly associated with increased performance on the PPVT-3, EOWPVT-3, Pre-CTOPPP, HOME, and HLEI-R overall. This question was singled out from the HLEI-R because researchers have previously used number of books in the home as an indicator of the quality of the home literacy environment (e.g. Dickinson & Snow, 1987).

Table 2. Family Literacy Interactions From HLEI-R

Item	n	%
Number of readers in home		
0	1	2.0
1	2	3.9
2	9	17.6
3 or more	39	76.5
Read adult books	34	66.7
Use reference books	34	66.7
Use religious materials	39	76.5
Read magazines	48	94.1
Twice/week or more	28	58.3
Read newspaper	37	72.5
Twice/week or more	18	48.6
Number of books or magazines for kids		
1-14	8	15.7
15-25	3	5.9
25+	38	74.5
Genres		
Names 1-3 categories	6	11.8
Names more than 3 categories	43	84.3
Family members read books with child	45	88.2
Interact other than with books	40	78.4
Mom reads to child	49	96.1
How Often		
Daily	20	39.2
3 times/week	31	60.8
How Long		
Less than 15 minutes	9	17.6
About 15 minutes	26	51.0
Longer than 15 minutes	16	31.4
Child asks to be read to	46	90.2
Child looks at books alone	50	98.0
Child writes		
Daily	40	78.4
Twice per week	11	21.6
Family members go to library	26	51.0
Child goes along	18	35.3
Mom read books about teaching reading or writing	27	52.9
Child discusses school day	47	92.2
Mom understands	46	90.2
Child discusses favorite book	40	78.4
Mom understands	39	76.5
Child plays school	24	47.1
Child likes nursery rhymes	41	80.4
Has memorized one or more	39	76.5
Oral storytelling tradition in home	30	58.8

Note. N = 51**Influences on Emergent Literacy**

Table 3. Intercorrelations Among Key Variables

	MomEd	PPVT	EOWPVT	Pre-CTOPPP	HOME	Interest in Literacy	Total HLEI	HLEI Traditional	HLEI Non-traditional
MomEd	--								
PPVT	.28*	--							
EOWPVT	.20	.69**	--						
Pre-CTOPPP	-.03	.58**	.56**	--					
HOME	.49**	.26^{+}	.38**	.26^{+}	--				
Interest in Literacy	-.28*	.06	-.07	.11	.08	--			
Total HLEI	.29*	.17	.30*	.32*	.60**	.01	--		
HLEI – Traditional	.32*	.31*	.32*	.35*	.61**	.03	.93**	--	
HLEI - Non-traditional	.24^{+}	.08	.28*	.26^{+}	.51***	-.02	.95**	.76**	--

* = p < .05; ** = p < .01; *** = p < .001; + = p <.10

An independent samples t-test revealed group differences in receptive language between children who experienced high levels of non-traditional literacy practices compared to those who experienced low levels of non-traditional literacy practices (t=.88; p<.05). Additionally, children in families engaging in oral story-telling had significantly higher expressive language skills (t=2.11; p<.05). Additionally, parents who reported engaging in oral storytelling scored significantly higher on the HOME scale (t=3.52, p<.001).

Given the results of these analyses, a series of hierarchical regressions were conducted to determine the relative contribution of key child and family factors to the variance in children's emerging literacy skills. Because of the intercorrelation between expressive and receptive vocabulary, only the receptive scores were used in the regression analyses. Similarly, the significant correlation between the HOME and HLEI led to a decision to only use the home literacy environment variable in the regression equations. Due to the literature documenting a strong relation between maternal education and children's academic outcomes (Burchinal, Campbell, Bryant, Wasik, & Ramey, 1997), maternal education was entered as the first step in each hierarchical regression.

Table 4 summarizes the findings based on the hierarchical regression examining child emergent literacy regressed on child, parent, and family factors. Results indicated that the variables entered at both Step 2 and Step 3 were significant, $\underline{F}$ (2, 48) = 14.01, $\underline{p} < .01$, and $\underline{F}$ (3, 47) = 12.33, $\underline{p} < .001$, respectively. Specifically, mother's educational level did not have a significantly positive influence on children's emerging literacy skills (see Table 4). However, children's receptive language made a strong contribution to their emerging literacy. Further, the home literacy environment accounted for 7 % of the variance in children's emerging literacy scores, beyond maternal education and receptive language.

Table 4. Hierarchical Regression Analysis Summary for Child, Parent, and Home Influences on Emerging Literacy (N = 51)

Variable	B	SEB	β
Step 1			
Mother's education	-.28	1.49	-.03
Step 2			
Mother's education	-2.11	1.24	-.20^{+}
PPVT	.72	.14	.63***
Step 3			
Mother's education	-2.87	1.22	-.28*
PPVT	.68	.13	.59***
HLEI	.21	.09	.28**

Note. $\underline{R}^2 = .00$ for Step 1; $\Delta R^2 = .37$ for Step 2 ($\underline{p} < .001$); $\Delta R^2 = .07$ for Step 3 ($\underline{p} < .001$).
+ $\underline{p} < .10$; * $\underline{p} < .05$; ** $\underline{p} < .01$; *** $\underline{p} < .001$

In order to examine the relative contribution of traditional and non-traditional practices to children's emerging literacy, hierarchical regressions were conducted which separated out HLEI scores reflecting traditional and non-traditional items (see Table 5). The non-traditional items did not contribute to the variance in children's emerging literacy beyond what was accounted for by maternal education, receptive language, and traditional home literacy practices.

Table 5. Hierarchical Regression Analysis Summary for Home Influences (non-traditional and traditional literacy practices) on Emerging Literacy (N = 51)

Variable	B	SEB	β
Step 1			
Mother's education	-.28	1.49	-.03
Step 2			
Mother's education	-2.11	1.24	-.20^{+}
PPVT	.72	.14	.63***
Step 3			
Mother's education	-2.87	1.22	-.28*
PPVT	.68	.13	.59***
HLEI	.21	.09	.28**

Note. $\underline{R}^2 = .00$ for Step 1; $\Delta R^2 = .37$ for Step 2 ($\underline{p} < .001$); $\Delta R^2 = .07$ for Step 3 ($\underline{p} < .001$).
+ $\underline{p} < .10$; * $\underline{p} < .05$; ** $\underline{p} < .01$; *** $\underline{p} < .001$

Discussion

The purpose of this exploratory study was to examine the contribution of multiple family literacy practices to the literacy development of children from low-income environments. Although these findings may not be generalizable to the greater population of African American families, they do offer some insight into the literacy practices of low-income African American mothers and their children in Head Start. Generally, evidence from this study is consistent with the literature on literacy development. The findings revealed that most families engaged in traditional literacy practices. Additionally, many reported possessing non-traditional literacy materials, though not all families used those materials. The quality of the home environment influenced children's language and literacy skills. However, language skills emerged to make the greatest contribution to children's early literacy development.

Child Influences on Literacy Development

As expected, there were no gender differences on the child outcome measures. Gender differences on standardized measures of language development are not typically found, and have been examined specifically regarding African American low-income children (Washington & Craig, 1999). As would be expected, child language was strongly associated with emerging literacy skills. In fact, some research suggests that early language skill is the most powerful predictor of children literacy skills. Consistent with the literature, findings from this study underscore the importance of early language exposure to children's literacy outcomes (Davidson & Snow, 1995; Dickinson & Snow, 1987).

Home and Family Influences on Literacy Development

An additional goal of this investigation was to explore factors that contribute to children's literacy development. The results reported here generally support the hypotheses specific to this study, and the findings in the literature, that the home environment and family factors robustly influence the development of literacy skills in young at-risk children (Aulls & Sollars, 2003; Serpell, Sonnenschein, and Baker, 2003). When examining the frequency of literacy behaviors that were reported by the mothers, it was noted that the majority of parents reported engaging in traditional literacy practices of some sort. Children's enrollment in the Head Start program may be positively influencing the parents' literacy practices in the home. Other studies of parents of Head Start children have yielded similar findings (Zill, et al., 2003).

There was variation in the extent to which various family and home characteristics contributed to children's language and literacy outcomes in the current study. In particular, a very surprising finding was the minimal influence that maternal education had on children's literacy development. This finding is counterintuitive and contrary to much of what is stated in the literature regarding children's language and literacy development. In a relevant study on the home literacy practices of low-income African American students, Britto and Brooks-Gunn (2001) found that mothers with a high school diploma had children with *poorer* expressive language skills than children of mothers with less than a high school diploma. However, in the same study, children's receptive language was positively associated with maternal education, which is consistent with the findings in the current study. Additionally, they documented that a more supportive social emotional climate was related to child expressive language, which is suggestive of the greater influence of the social emotional climate in the home when compared to maternal education.

Several other possibilities exist to explain the lack of an association between maternal education and literacy development in the current study. This sample tended to be educated; almost all had at least a high school diploma. Although data on the mother's educational level were collected, no information was collected regarding the educational level of other members in the home. There is a literature which suggests examining total household income rather than individual income as an indication of poverty (e.g. Moffitt & Roff, 2000); similarly educational data from all family members may be necessary to understand the impact of education on children's literacy outcomes. Further, given that maternal education was positively related to language, it may be that mothers have more language interactions with their children than reading interactions, thus the influence of their education is more salient for language than for literacy. Finally, there is evidence that maternal reading level may be more predictive of children's literacy outcomes than their education per se (Green, Berkule, Dreyer, Fierman, Huberman, Klass, Tomopoulos, Shonna, Yin, Morrow, & Mendelsohn, 2009).

This study revealed that increased numbers of books in the home was positively associated with receptive and expressive language, a finding which is consonant with the literature in this area (DeBaryshe, 1993, 1995; Dickinson & Snow, 1987; Dickinson & Tabors, 1991). As has already been documented in the literature on literacy practices (Christian, Morrison, & Bryant, 1998; Payne,

Whitehurst, & Angell, 1994), children in this sample whose parents reported visiting the public library with their children had significantly higher scores on each of the child outcome measures (i.e. PPVT-3, EOWPVT-3, and Pre-CTOPPP). Children in this group would be expected to have increased language skills and increased preschool literacy skills based on their exposure to more formal uses of literacy.

When examining the more non-traditional literacy practices (e.g., clipping coupons), the picture that emerged was mixed. Many parents reported having and using non-traditional materials in the home, which is similar to earlier evidence literacy practices in the homes of minority parents (Elish-Piper, 1997, 2000; Rivalland, 2000; Taylor, 1983; Taylor & Dorsey-Gaines, 1988). However, fewer respondents reported engaging with these materials in interaction with their children. The categories of practices were examined in relation to the reported engagement by mothers (i.e. not at all, alone, child observes but does not participate, or child participates). Additionally, half or more of the parents reported either not engaging in a particular category of practices at all, or engaging in a particularly literacy practice without their children.

The HLEI-R also asked parents if they told oral stories to their children. This question was examined independently because there is a literature that describes the emphasis in the African American community on oral storytelling (e.g. Heath, 1983). Those parents who responded that they did engage in oral storytelling also reported spending a lot of time engaged in other literacy practices. The children in these families had significantly higher expressive language skills and scored significantly higher on both indicators of the home environment. There was also a trend toward these children having higher scores on receptive language and pre-literacy skills than children whose mothers did not report engaging in oral storytelling. It may be that maternal story-telling reflects mothers' investment in literacy. Additionally, children's participation in oral storytelling with their mothers may help facilitate expressive language development.

Although the data revealed significant group differences between the high non-traditional and low non-traditional groups on receptive vocabulary (i.e., PPVT), there were not significant differences between the high non-traditional and low non-traditional groups on the other child outcome measures (i.e. EOWPVT-3, and Pre-CTOPPP). However, because the differences were in the projected direction, with the high non-traditional group scoring higher on all three measures, these results could be a function of the reduced power in the study. Similarly, the addition of non-traditional practices to the regression models did not yield significant findings. Overall, these findings suggest that parental engagement in non-traditional literacy practices may not have as powerful an influence on children's literacy development as do the more traditional literacy practices.

This study revealed several interesting findings regarding which combination of factors best explained the variability in children's literacy development. Although the quality of the home literacy environment made a significant contribution, it appears that receptive language accounted for most of the variance in children's pre-literacy skills. These findings are meaningful for several reasons. Perhaps children's early exposure to language may be one of the more important aspects of the early childhood home environment, due to its linkage to later literacy development (Baker, Scher, & Mackler, 1997).

Finally, the quality of the home literacy environment had a relatively small influence on children's preschool literacy skills, and did not have the anticipated influence on children's receptive and expressive language. Three possibilities exist for these findings. The first is that the sample size did not provide adequate power to detect significant findings. A second and perhaps less desirable possibility is that the HLEI-R instrument did not effectively capture the combined traditional and non-traditional literacy practices that were occurring in these homes. The HLEI-R instrument needs to be examined further, as is discussed below in the section on research directions. Third, it is possible that the child-directed educational intervention efforts offered by programs such as Head Start may simply be more effective regarding improved language and literacy than their efforts to improve the quality of the home environment (Dickinson & Smith, 1994; Lonigan & Whitehurst, 1998; Neuman & Gallagher, 1994; Wasik, 2001).

Limitations and Future Research Directions

Although this study contributes to the literature on literacy practices among low-income, minority families, there are several limitations which must be recognized. Because this sample was limited to those families who, based on their eligibility for Head Start, were living at or below the poverty line, generalizability to the larger population of African American learners is limited. Studies that include more economically diverse samples of African American children should be implemented. Additionally, these families were not followed over time. Ideally, a longitudinal study should be conducted which examines the literacy practices of these families while the child was enrolled in Head Start, and as the child transitioned into formal schooling.

A methodological limitation that must be acknowledged is the use of non-standardized measures with the participants in this study (i.e. Pre-CTOPPP and HLEI-R). Although the Pre-CTOPPP has been widely used with Head Start children, its standardization was completed after the implementation of this study. Finally, the Home Literacy Environment Interview-Revised was modified in an effort to capture the non-traditional literacy practices that had been described in the qualitative literature. Although the Cronbach's alpha scores were within the acceptable range for social science research, this measure may not be the best indicator of engagement in non-traditional literacy practices. Future research should include the standardization of a measure which adequately captures engagement in *both* traditional and non-traditional literacy practices.

The goal of this exploratory study was to examine literacy practices among African American Head Start families. Participant families engaged in multiple literacy practices, including those that are traditional (e.g., parent-child book reading) and non-traditional (e.g., reading religious materials). It was also found that children's language was more predictive of emerging literacy than family literacy practices or maternal education. This evidence suggests that early intervention programs such as Head Start should focus on the language development of participant children, and enhancing their early home language environment. Ultimately, such an approach may address the substantial gap in literacy skill and academic achievement between poor, minority and middle-class majority populations.

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