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Scaffolding the Home Reading Experiences of African-American First Graders

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This study explored the feedback provided by sixty African American mothers as they listened to their first grade children read aloud from a grade level text. Maternal feedback fell into two distinct groups. Children with higher oral reading accuracy levels on the text had mothers who more frequently waited and permitted opportunities for the children to work through one or more word identification attempts before they intervened with difficult words. Conversely, children with lower accuracy levels on the text had mothers who provided more immediate and explicit support for difficult words, particularly providing words with few to no opportunities for children to try out reading strategies on their own. These findings suggest that the mothers were able to effectively determine the amount of assistance their children needed based on how well they were reading the text. The findings are aligned with the type of support teachers typically provide for children during oral reading in schools. Implications are provided for developing a curriculum connecting school literacy learning with at-home reading practice to capitalize on the positive strategies parents and caregivers seem to intuitively offer. This connection may be a critical factor as educators continue their efforts to close the literacy achievement gap between African American children and their non-minority peers.

Nearly three decades of research have reached the same conclusion: Parents and other caregivers can be a strong influence on their children's reading development. The practice of hearing children read has been defined as the home environment factor most related to the reading success of seven- and eight-year olds (Hewison & Tizard, 1980). When parents are *trained* to provide specific kinds of literacy assistance, children experience significant gains in reading accuracy and comprehension (Leach & Siddall, 1990; Tizard, Schofield, & Hewison, 1982), and reach significantly higher achievement levels than merely receiving extra help from the classroom teacher (Tizard et al., 1982). However, under ordinary circumstances in many school settings, parents are not trained to read with their children, and are left to their own devices for determining how to provide the best support.

The purpose of this study was to examine the feedback African American mothers from varied educational and socioeconomic backgrounds provided for their children's word identification attempts during oral reading interactions. The authors hoped to reveal the type of support these diverse mothers provided intuitively for their children, when no particular literacy training was given. Additionally, the study attempted to determine whether or not a relationship existed between maternal feedback styles and child outcomes such as oral reading accuracy and child reading ability. Research on these interactions can help guide families from diverse backgrounds as they attempt to support their children's reading attempts at home.

Information about the reading practices of children with their caregivers is of current interest in the field of literacy, particularly when viewed in light of the widely reported "achievement gap" (U.S. Department of Education, 2009). For many years, a considerable disparity has existed between the literacy achievement scores of African American students and their Caucasian peers. In 1997, the National Center for Education Statistics (NCES) reported that in the previous year, the average reading proficiency scores of African American fourth- and eighth-grade students across the nation were well below those of their Caucasian and Hispanic American peers. Additionally, NCES reported that the percentage of high school dropouts was higher for African American students (6.2% of 16- and 17-year-olds; 14.4% of 18- and 19-year-olds) than their Caucasian peers (5.1% and 9.3%, respectively). While more recent reports have indicated a narrowing of this achievement gap (U.S. Department of Education, 2009), there is concern that the gap will be difficult if not impossible to close (Flowers, 2007).

Parent involvement has emerged as a recommended theme for reading researchers as they pursue the most effective methods for helping parents become more involved in activities that can lead to reading gains for their children in an attempt to continue the narrowing and eventual closing of the achievement gap (Flowers, 2007). These methods include determining strategies for reaching other adults who serve parenting functions in the African American community and customizing recommendations for African American families based on the individual student's reading level and family structure. The current study adds to this discourse by exploring the positive literacy practices already demonstrated by these families, then reinforcing and supporting those practices to bring about growth in reading for their children.

Theoretical Framework

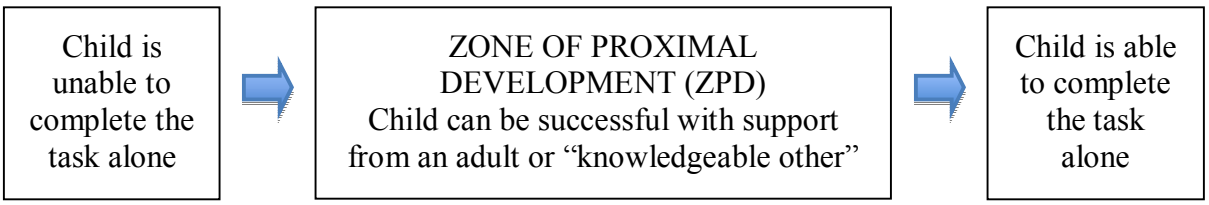
As children engage in oral reading with their parents and teachers, they frequently encounter unfamiliar words. When this happens, a general "error episode" sequence of child miscue, child reaction, and adult feedback typically occurs (Chinn, Waggoner, Anderson, Schommer, & Wilkinson, 1993). This feedback can provide a window into adults' perceptions about how children learn to read and the role they should play in that process (DeTemple & Tabors, 1994; Goldenberg, Reese, & Gallimore, 1992). The adult response following a child's oral reading attempt is a critical variable in reading instruction not only because it can assist the child with the reading of the current word, but it can also determine what the child will choose to do when faced with similar reading circumstances in the future (Singh, 1989).

To truly comprehend the relevance of this child-adult reading episode, it is important to be aware of the variety of underlying theories that drive these occurrences. First, according to *theories of word recognition development*, children pass through predictable stages with predictable reading behaviors as they become more mature, competent readers (Biemiller, 1970; Indrisano & Chall, 1995; Ehri & McCormick, 1998; Weber, 1970). Second, oral reading episodes are influenced by the *bi-directional relationship* between adults and children during literacy interactions, as the behavior of one influences and is influenced by the behavior of the other (Baker, Serpell, & Sonnenschein, 1995; Doyle, 1979). Third, oral reading episodes may be influenced by an *intergenerational transfer of literacy* in which certain attitudes, skills, and behaviors are directly transmitted from parents to children through literacy events (e.g., joint book reading), which can determine success in kindergarten and first grade (Snow & Tabors, 1996).

While the aforementioned theories do play a role in adult-child oral reading interactions, Vygotsky's (1978) socio-constructivist model of learning may be an underlying force that drives these episodes. According to Vygotsky, learning occurs in the context of social interactions between a more knowledgeable other (e.g., adult or peer) and a learner. Initially, the more knowledgeable other controls and supports learning through activities, questions, or prompts. Over time, and with consistent yet gradually decreasing support, the two individuals share the responsibilities, and ultimately the learner takes the lead.

Within this perspective, the area in which optimal learning can occur is called the zone of proximal development, or ZPD (Vygotsky, 1978). Full development of the ZPD depends upon full social interaction with a more knowledgeable other. In any learning activity, the ZPD is determined by the learner's level of development and the form of instruction provided. The zone thereby becomes a range of skill and/or knowledge that can be developed with adult guidance or peer collaboration and exceeds what the learner can attain alone.

Assistance in the ZPD is called *scaffolding,* and is a major component of any teaching activity (Bruner, 1984). Scaffolding is an instructional tool that reduces learning ambiguity, thereby increasing growth opportunities (Doyle, 1986). Wood, Bruner, and Ross (1976) describe scaffolding as "controlling those elements of the task that are initially beyond the learner's



capability thus permitting him to concentrate upon and complete only those elements that are within his range of competence" (p. 9). As the more knowledgeable other creates a supporting structure that can initiate and sustain interest, the learner becomes involved. As the learner gradually gains control of the task, more of the responsibility is assumed, and the scaffolding is gradually removed.

In the case of oral reading episodes, the more knowledgeable other is a teacher, parent or other caregiver who listens and provides feedback as the child, or learner, reads aloud. Scaffolding during oral reading, particularly from texts that children cannot read independently, may be evidenced by such feedback as assisting with phonics, attending to illustrations or other textual features, calling up prior knowledge and experiences, or even providing words. When children are able to do the work of reading with higher levels of success, less scaffolding is needed. Eventually, children are able to complete the majority of the reading task independently, and little to no support is needed. This movement through the ZPD starts anew each time children are faced with a text which they cannot read without assistance.

Review of Literature

Research from the past several decades reveals valuable information about what actually occurs during children's oral reading episodes. The current study draws predominantly from literature on parent and teacher feedback to children's reading errors (miscues) in three distinct areas: 1) timing of feedback, 2) types of feedback, and 3) factors affecting feedback.

Timing of adult feedback. Both parents and teachers tend to provide feedback immediately after an error has been made (Chinn et al., 1993; Singh, 1989). Although poor readers are especially likely to receive this behavior (Allington, 1980; Chinn et al., 1993; Englert & Semmel, 1983; Hoffman & Clements, 1984), teachers tend to provide instant feedback for difficult passages, regardless of child reading ability (Chinn et al., 1993). Teacher interruptions also tend to be meaning-based, with prompts occurring more commonly when miscues disrupt meaning (Englert & Semmel, 1983), and less often when miscues are semantically acceptable and syntactically appropriate (Lass, 1984; Singh, 1989). For example, teachers overlook insertions and omissions, which usually do not alter meaning, and provide less feedback when students continue reading beyond their miscues (Chinn et al., 1993). Both teachers and parents are more likely to ignore the miscues of high-ability readers (Haine & Tabors, 1997; Hoffman & Clements, 1984).

Types of adult feedback. Both parents and teachers individualize the amount and type of support provided for children's miscues during oral reading (Haine & Tabors, 1997; Hannon, Jackson, & Weinberger, 1986). Parents and teachers respond to miscues by providing feedback that is either *sustaining* or *terminal*. *Sustaining feedback*, or feedback that explicitly encourages continued attempts at figuring out the unknown word, is demonstrated in a variety of ways including attending to the letters and sounds in the word, recognizing familiar letter patterns, and focusing on illustrations. *Terminal feedback*, or supplying the difficult word, is the most commonly used type of feedback by both teachers and parents (Allington, 1980; Chinn et al., 1993; Haine & Tabors, 1997; Hannon et al., 1986; Hoffman & Clements, 1984; Singh, 1989; Spiegel & Rogers, 1980). This type of feedback "terminates" the decoding attempt on that word and allows the child to move on to the next word. Haine and Tabors (1997) suggest that mothers

provide low-ability readers with *terminal feedback* in an attempt to maintain reading pace and phrasing.

Other factors affecting adult feedback. Adult feedback during oral reading is related to the child's reading behaviors (Chinn et al., 1993) and adult perceptions of the child's reading ability (Haine & Tabors, 1997; Pflaum, Pascarella, Boswick & Auer, 1980). In general, poor readers are provided with more feedback than good readers (Allington, 1980; Chinn et al., 1993; Englert & Semmel, 1983; Haine & Tabors, 1997; Hoffman & Clements, 1984). One study in particular revealed that teachers' prior knowledge and perceptions of an individual student's reading proficiency level essentially predetermined the type of strategy used with that child (Pflaum et al., 1980). Another study (Haine & Tabors, 1997) confirmed this relationship, suggesting that mothers' knowledge of their children's literacy abilities may have aided the selection of appropriate feedback strategies (e.g., *terminal, sustaining,* or *no feedback*) while listening to their children read aloud.

Additionally, studies have confirmed the effects of passage difficulty on children's reading strategies (Blaxall & Willows, 1984; Christie & Alonso, 1980; Tracey & Young, 1994). Findings from these studies indicate that children tend to make more meaning-changing errors and self-correct less when reading from difficult texts. Consequently, these child reading behaviors may impact the type of adult feedback provided.

Rationale for the Current Study

Prior research focusing on *teacher feedback* for student oral reading miscues has already shown a relationship between type of feedback provided by teachers and children's reading ability. By examining mothers' interactions with their children during oral reading episodes, we can explore whether or not a similar relationship exists between *maternal feedback* and child reading ability. More specifically, we can examine the ways in which African American mothers provide assistance for their children's oral reading attempts, and how this assistance compares to "best practices" by teachers. Because mothers in this study came from widely ranging socioeconomic and educational backgrounds, the study allows for comparison across these variables to determine any patterns that may emerge. Prior research has been limited to separate studies of low-income African American families (Haine & Tabors, 1997), working class families from relatively disadvantaged backgrounds (Hannon et al., 1986), and suburban middle and upper-class Canadian parents with high school and university degrees (Evans et al., 1998; Tracey & Young, 1994).

To date, researchers have not explored whether African American mothers from diverse circumstances provide similar or different kinds of feedback for their children's oral reading attempts. Moreover, knowledge of what already occurs in these diverse home environments, as children engage in oral reading episodes with their parents and caregivers, can facilitate the development of a curriculum that connects school literacy learning with at-home reading practice. Findings from this study will add to the current discourse addressing reading skills for all children by building on what is working well when mothers and/or caregivers engage in oral reading episodes with their children. Thus, the findings enrich the possibilities for positively impacting the achievement gap through curriculum and at-home reading practices.

Methodology

Sample and Data Collection

Sixty child-mother dyads were recruited from community-based child care centers in two small southeastern cities. The participants were part of a larger longitudinal study examining the relationship between children's health and their communication development from infancy through the elementary school years (Roberts et al., 1995). Child-mother dyads were chosen from the larger study for analysis based on the following criteria: (a) the mother or primary caregiver was African American, (b) the child attempted to read some portion of the book, (c) the entire text was completed, whether independently by the child or collaboratively by the child and mother or caregiver, and (d) the child's oral reading accuracy score on the text was at or below 95%. Students reading above 95% accuracy (N=5) were omitted from the analysis because they had few reading miscues and consequently few opportunities for maternal feedback.

All children (32 females, 28 males; mean age 7.1 years) and caregivers (mean age 33.3 years) were African American. Fifty-four of the caregivers were the children's biological mothers; the remaining caregivers were grandmothers and adoptive or foster mothers. Mean maternal education level was 13.2 years, with 18% of the caregivers having less than a high school education, 43% with a high school diploma or GED, 27% with technical or associates degrees, and 12% with undergraduate or graduate degrees. At the time of observation, 48% of the family income levels were at or below the federally defined poverty threshold.

During the spring of first grade, child-mother dyads were videotaped as each child attempted to read the book *Sharing Time Troubles* (Maccarone, 1997). This book was pre-selected by researchers in the larger study because it is written at grade level 1.5, meaning students midway through the first-grade year should be able to read it independently with few errors. For this study, mothers were given a copy of the book and the following instructions: "Now I would like _____ to read this book to you. You can help _____ in any way that you would like with his/her reading." Mothers were not provided with other instructions for assisting their children, nor were they given time constraints. A camera positioned outside the room made it possible for examiners to leave during videotaping of the reading and to return when the children had finished reading.

The child-mother reading interactions were independently transcribed and coded by two trained observers using a modified version of Clay's (1993) running record procedure. Next, the coders produced a verbatim transcription of the interaction on a copy of the text by marking successive child *triggers* (e.g., insertions, omissions, and substitutions) above the target word and maternal feedback (e.g., phonics clues, providing words) below the target word. Coders also noted adult and child non-verbal behaviors such as nodding or pointing to a word or illustration, but only when these behaviors were clearly visible on the videotape.

After the mother and child responses were transcribed and scored, they were then coded according to type of child trigger and type of maternal feedback using a coding scheme primarily based on Haine and Tabors' (1997) categorization system, but expanded to include more specific categories of child miscues (see Singh 1989; Spiegel & Rogers, 1980) and maternal feedback (see Hoffman & Baker, 1981; Hoffman & Clements, 1984). Additionally, the dialogue and gestures observed during the interactions guided the creation of more categories, resulting in ten

possible child triggers and ten possible types of maternal feedback. The following figures provide definitions for and examples of each of those categories.

Child Trigger	Definition	Example
Graphophonics	Sounding out or focusing on the spelling of a word	"/b/ /a/ /t/" for "bat" "B-A-T" for "bat" "anther" for "another"
Structural analysis	Recognizing smaller words or spelling patterns within the word	"am" in the word "Sam" "go" in the word "gold"
Context	Searching the page for picture clues or using surrounding text to come up with a reasonable guess	"rabbit" for "bunny" "wants" for "likes"
Prior use	Remembering previous experiences with the word in this text or different one, or recalling the word but in a different context	Recalling words from spelling lists, word walls, other texts
Multiple strategies	Using any combination of phonics, meaning, or syntax	"Tuesday" for "Thursday" "brought" for "brings"
"Strategy-free" reading attempts	Attempts with no discernible strategy	"/p/" for "Thursday," "was" for "my"
Self-monitoring	Attempting to monitor one's own reading, independently repeating a word or phrase, or asking for help with meaning	"That's not right." "What does that mean?" "I don't understand."
Call for word	Directly calling for help with identifying a word	"What's that word?" "Does that say 'money'?"

Non-production	Failing to provide the next word(s) of text.	(silence)
No chance	Not being allowed an opportunity to provide an attempt because the mother provides immediate assistance.	N/A

Maternal Feedback	**Definition**	**Example**
Graphophonics	Telling the child to sound out a word, providing or asking for phonics rules, providing sounds or chunks of the word	"What sound does the letter P make?" "The sh says /sh/."
Structural analysis	Providing cues to help the child make analogies to known words	"It looks like 'can,' but it starts with a J."
Context	Helping the child use surrounding words or illustrations as contextual cues	"Look at the picture." "What's on her arm?"
Prior use	Providing cues about words repeated in text or words known to be familiar to the child	"You read that word." "That's a spelling word."
Monitoring	Helping the child monitor his reading after an attempt has been made; repeating the child's words or directing the child to reread	"Did that make sense?" "Let's try that again."
Encouraging/ positive	Providing feedback that confirms and sustains the child's attempts	"Yes." "Keep going."
Negative/ punitive	Providing unhelpful or unsupportive feedback, or rejecting the child's reading attempt.	"No, that's not right." "You're not trying."

Neutral	Providing feedback that is neither strategic, encouraging/positive, nor negative/punitive	"What does it say?" "Try it."
Telling words	Providing the target word	"That word is 'Max'."
No feedback	Saying nothing, waiting for the child to make a reading or correction attempt	(silence)

Next, pairing of child triggers (child's reading behaviors) with the subsequent maternal feedback (mother's responses) created a child-mother combination. After analyzing the 100 possible child-mother combinations (based on pairing 10 possible child triggers with 10 possible forms of maternal feedback), and using a review of research for support (Allington, 1980; Chinn et al., 1993; Ehri & McCormick, 1998; Haine & Tabors, 1997; Lass, 1984; Pflaum et al., 1980; Roller, 1994; Singh, 1989; Spiegel & Rogers, 1980; Spiegel & Rogers, 1980), seven maternal feedback styles were selected for use as summary variables. These styles, which represent broader categories of maternal responses to children's reading attempts, included the following:

1. *Literacy-Related Feedback* (use of phonics, context, and structural analysis),
2. *Extending Feedback* (use of the same literacy cueing system the child used),
3. *Complementary Feedback* (use of a literacy cueing system the child appears to have neglected),
4. *Premature Assistance* (providing help before the child has a chance to make a reading attempt),
5. *No Feedback* (waiting; allowing the child to work through one or more strategies without offering assistance),
6. *Negative Feedback* (e.g., saying, "No," "That's not right," or shaking head), and
7. *Terminal Feedback* (providing the target word).

Measures of Background Variables

To explore the relationship between maternal feedback styles and backgrounds factors of socioeconomic status and education, several family, mother, and child background measures were selected for analysis. Family variables included income and home environment. Mother variables included highest level of education and reading achievement. Child variables included gender, oral reading accuracy, and reading ability.

Income. Family income was classified based on the relationship between income at the time of the study and federally defined poverty levels. For example, according to the 1996 U.S. Census Bureau, the poverty threshold for a family of 3 ranged from $12,273 to $12,641, depending on the number of children under 18 years old in the household. For this study, family income was defined as either above the poverty level or at or below the poverty level. Families earning income at these levels are eligible for free or reduced school lunch.

Home environment. The Home Observation for Measurement of the Environment (HOME) (Caldwell & Bradley, 1984) is a semi-structured observation/interview which assesses the responsiveness and supportiveness of the children's home environment. Items of interest include parental emotional and verbal responsivity, acceptance of child behavior, encouragement of maturity, emotional climate, growth-fostering materials and experiences, provision for active stimulation, and family participation in developmentally stimulating experiences. The HOME was administered when the children were 9, 18, 30, and 42 months old, and during pre-Kindergarten and first grade. A mean of these scores was used as an indication for home environment in this study.

Mother's highest level of education and reading achievement. During the first-grade observations, mothers provided information about their highest level of education achieved (at, above, or below twelfth grade). The Wide Range Achievement Test – Revised (WRAT-R) (Wilkinson, 1993) was administered to the mothers prior to their children's entry to kindergarten. The reading section of the WRAT-R measures letter/word recognition and pronunciation skills.

Preschool maternal bookreading strategies. Maternal bookreading strategies were determined as part of the larger study, as mothers and children engaged in storybook reading when children were 2, 3, and 4 years of age. Videotapes of these interactions were coded for behaviors believed to be facilitative of literacy skills, such as simple or elaborate description, attention to letters/sounds, attention to book concepts, predictions, inferences, and links to the world. Strategy frequencies were summed for each age group and a mean score was calculated for use in the current study.

Child oral reading accuracy. Accuracy scores for the child's oral reading of *Sharing Time Troubles* (Maccarone, 1997) were calculated based on the percentage of words the child read correctly and independently (i.e., without maternal assistance), divided by the total number of words in the text. These scores indicated whether the child read this particular text at an independent level (95-100% accuracy), instructional level (90-94% accuracy), or frustrational level (below 90% accuracy) (see Clay, 1993). The instructional level is the desired text level for reading instruction in schools. Essentially, it is a particular child's zone of proximal development for reading due to its "just right" amount of challenge and its opportunities for adult scaffolding of reading strategies the child is not yet using appropriately, independently, or consistently. It is important to note that at the time of the study, it was less common to determine instructional level texts for children to read aloud; therefore, this was not a factor in text selection and a single grade-appropriate book was chosen for all children.

Child reading ability. The Woodcock-Johnson Psychoeducational Battery (WJPEB) (Woodcock & Mather, 1989, 1990) was administered to the children during the spring of first grade. This is a wide range diagnostic tool used to determine students' academic and cognitive strengths and weaknesses. The reading portion measures letter-word identification, word attack skills, and passage comprehension.

Analysis Procedures

Descriptive statistics, including means and standard deviations, were computed for the child, maternal, and maternal summary variables. Regression models were used in an effort to examine

a predictive relationship between types of feedback and ancillary demographic characteristics (i.e., poverty, child gender, maternal education). Additionally, one regression model included child reading accuracy on the observational text to ensure that observed feedback did not merely reflect responses to differences in child reading ability.

Results and Discussion

Mothers in this study used a variety of kinds of feedback, with *terminal feedback* (i.e., telling words) being the most common, followed by *no feedback* (i.e., waiting for the child to make a reading attempt or self-correction). Maternal feedback styles were aligned with those behaviors typically observed by classroom teachers when listening to children read orally. However, before discussing the feedback mothers provided, it is important to note that the text selected for this study, which was chosen based on its grade-level appropriateness, was difficult for the majority of the child participants. The children's oral reading accuracy scores on *Sharing Time Troubles* (Maccarone, 1997) ranged widely, from 3% to 94%, with a mean score of 68.5% (SD = 22.5). Of the 60 children participating in the study, 9 (15%) were able to read the passage at an instructional level, with accuracy scores between 90-94%. The remaining 85% of the children read at a frustrational level, with accuracy levels below 90%.

Maternal Feedback Styles Observed

Terminal feedback, or telling words, was used most frequently by mothers in this study. Although this is the most commonly used type of feedback for teachers (Allington, 1980; Chinn et al., 1993; Hannon et al., 1986; Hoffman & Clements, 1984; Singh, 1989; Spiegel & Rogers, 1980) and for parents (Haine & Tabors, 1997; Hannon et al., 1986), it is unclear exactly why adults frequently provide words for children. On one hand, researchers propose that terminal feedback may be a conscious effort to emphasize correct pronunciation of words (Spiegel & Rogers, 1980). Alternatively, it has been suggested that parents and teachers tell words in an attempt to maintain fluency and to emphasize story meaning over individual words (Chinn et al., 1993; Haine & Tabors, 1997; Roller, 1994; Spiegel & Rogers, 1980). Haine and Tabors (1997) concluded that the mothers in their study provided words, especially for low readers, in an attempt to maintain fluency.

No feedback, or waiting to allow children opportunities to select and employ reading strategies or to continue past the challenging word without attending to the error, was used by each mother at least once during the study. Because prior research indicates that both parents and teachers often ignore errors which do not disrupt meaning (Chinn et al., 1993; Englert & Semmel, 1983; Haine & Tabors, 1997; Lass, 1984; Singh, 1989), these instances of *no feedback* may have been purposeful attempts to maintain the flow of the reading by allowing the child to work through the miscue or to move on even though an error has occurred. This silence on the part of the mother makes sense when compared to research indicating that teachers often ignore errors when readers use insertions or omissions (Chinn et al., 1993), which typically do not disrupt meaning. However, the errors of poor readers are less likely to be ignored than those of good readers, regardless of semantic acceptability (Allington, 1980; Chinn et al., 1993; Englert & Semmel, 1983; Haine & Tabors, 1997; Hoffman & Clements, 1984), making *no feedback* a response more commonly afforded to better readers.

Literacy-related feedback occurred very infrequently during the study. This is consistent with research findings indicating that these types of feedback are provided far less frequently than other types of feedback, especially *terminal* and *delayed feedback* (Chinn et al, 1993; Hannon et al., 1986; Singh, 1989; Spiegel & Rogers, 1980). Findings from prior research indicate that poor readers are more likely to receive phonics instruction following a reading miscue than good readers (Englert & Semmel, 1983; Pflaum et al., 1980). *Premature assistance, extending feedback,* and *complementary feedback* also occurred very infrequently during the study. Incidentally, there is no documentation of their use in previous research.

Measures Predictive of Maternal Feedback Styles

Income. Of the maternal background characteristics considered for this study, family income was most predictive of maternal feedback styles. First, low-income mothers (48% of those in the study) were more likely to provide *literacy-related* and *extending feedback* than middle-income mothers. In other words, low-income mothers provided more phonics, context, and structural analysis assistance for their children's reading miscues overall, and they tended to match their children's literacy-related cues more often than middle-income mothers. This finding is supported by Haine and Tabors (1997) who also reported that low-income mothers were adept at providing sustaining feedback (e.g., help with phonics, context) for their children's oral reading miscues.

Low-income mothers in the current study were also less likely to provide *no feedback* than middle-income mothers. Prior research examining the feedback of African American mothers during children's oral reading (Haine & Tabors, 1997) has not compared proportions of feedback when family income varied. Therefore, comparisons for this aspect of the current study are limited to low-income mothers. In the current study, on average, no feedback accounted for approximately 22% (range = 5.23-51%) of the responses provided by low-income mothers (N = 31). These findings are consistent with those from Haine and Tabors (1997), which reveal that low-income mothers often ignore miscues, though not as frequently as they provide target words or sustaining feedback (e.g., phonics or context). It can be argued that in the current study, because low income mothers' children found this grade-level text more challenging, the mothers may have perceived fewer opportunities for ignoring miscues, and instead chose strategies that helped their children complete the reading episode with minimal frustration. Likewise, mothers from higher income families, whose children typically did not find the text overly challenging, had more opportunities for ignoring errors that did not disrupt overall comprehension of the story.

Child's oral reading accuracy level. As in prior studies of both child-mother and student-teacher oral reading interactions, interruption behaviors in this study appeared to differ as a function of child reading ability level. In an exploration of the reading errors of second- and third-grade students during reading group lessons, Allington (1980) found that teachers interrupted struggling readers for 74% of their reading errors, while only interrupting for 31% of the errors of good readers. Similarly, Haine and Tabors' (1997) study of mothers' responses to their children's oral reading miscues revealed that low readers received significantly more feedback than readers of average or high ability.

In this study, both *terminal feedback* and *premature assistance* were related to oral reading accuracy scores. When children were reading at lower accuracy levels, their mothers tended to

provide more target words or give more premature assistance. Conversely, when children were reading at higher accuracy levels, their mothers typically provided higher proportions of *no feedback* as opposed to other kinds of feedback. Prior studies of maternal feedback to children's oral reading miscues have not explored the relationship between maternal responses and children's accuracy level on the observed text. However, findings from the current study do provide support for previous studies indicating that text difficulty influences teacher feedback when listening to students read orally (Chinn et al., 1993; Christie & Alonso, 1980; Roller, 1994).

It is possible that because the text was so difficult for so many of the children and because their mothers sensed this level of challenge, the mothers felt compelled to provide certain kinds of feedback more often than others. Similarly, from an educator's perspective, certain strategies chosen by the mother may have been considered more reasonable based on how well the text matched the child's instructional reading level. For example, with a text far above the child's instructional level, high amounts of telling words (i.e., *terminal feedback*) would be expected more often. Conversely, with instructional level text, attention to phonics or context, or perhaps even ignoring some errors, can be a more appropriate response. The match between the strategies the mothers chose and those that many educators would agree to be appropriate provides strength for the argument that African American mothers are able to choose feedback that is appropriate given their children's success with the reading task.

Maternal Feedback Styles Predictive of First-Grade Reading Skills

For this study, maternal use of *literacy cueing systems* (e.g., phonics, context, structural analysis) did not predict first-grade reading scores. Instead, the maternal behaviors most predictive of these children's first-grade standardized reading scores were whether mothers provided help before a child's reading attempt (i.e., *premature assistance*), and whether mothers provided help at all (*no feedback*). Specifically, reading scores were lower when mothers provided premature assistance, and higher when children were allowed to work through one or more word identification strategies before their mothers intervened. These findings continued to be significant after controlling for child and maternal background factors. Table 1 provides correlations between maternal feedback styles and child reading outcomes. Table 2 shows regression analyses used to predict first-grade reading achievement scores based on maternal feedback styles.

Premature assistance. *Premature assistance* occurred relatively infrequently in the current study (M = 10.75, range = 0-148), despite the fact that more than 60% of the mothers in the study used it at least once. Prior studies coded instances of *immediate feedback*, which referred to immediate maternal responses following a child miscue (Chinn et al., 1993; Singh, 1989). However, the current study looked at *premature assistance*, which refers to maternal assistance provided before the child has an opportunity to make a reading attempt. There is no prior research reporting the frequency of this type of feedback.

Furthermore, because *premature assistance* has not been included in prior studies, there is no documentation of its rationale. However, some preliminary conclusions can be drawn. First, mothers in this study may have anticipated certain words which would be difficult due to lack of contextual clues, phonetic regularity, or concept familiarity. Also, because premature assistance

was primarily used by mothers of children with low standardized reading scores, those mothers may have been fully aware that the text was too difficult for their children to read. To view this from a socio-cultural framework, it can be argued that these mothers appropriately scaffolded the reading experience by taking on most (or in some cases, all) of the responsibility of the reading when the text was too difficult. In other words, they may have opted to read large portions of the text *for* their children, and encouraged their children to *chime in* with familiar words and words easily identified through context or from the pictures whenever possible.

The relationship between *premature assistance* and lower standardized reading scores is not only logical, but it also provides important information about mothers of children attempting to read text beyond their instructional levels. The text used in this study was far too difficult for the majority of the children to read independently, and almost two-thirds of their mothers had the insight to read portions of the text *for* their children. This is precisely what would be expected in a school setting, if the only text provided or available was at such a level of difficulty. This finding supports those of prior studies which suggest that mothers are able to fine-tune their feedback to their children's oral reading miscues based on the children's reading ability, and it underscores the importance of instructional level materials for children's independent reading. If the objective of the session is for the child to be able to read to the parent, then the text must be at a level that is not too challenging.

No feedback. While *premature assistance* was associated with lower scores on measures of first-grade reading skills, *no feedback,* or allowing children to make one or more reading attempts without adult assistance, was associated with higher reading scores. This type of feedback occurred with relatively high frequency in the current study (M = 22.25, range = 6-73). Most of the mothers ignored children's reading miscues at least once during the oral reading episode. This is consistent with prior research, which shows that parents and teachers often ignore reader errors (Chinn et al., 1993; Englert & Semmel, 1983; Haine & Tabors, 1997; Lass, 1984; Singh, 1989).

Haine and Tabors (1997) and Evans and colleagues (1998) found that parents delayed feedback especially when their children were reading with high levels of accuracy, perhaps in a conscious attempt to maintain fluency (Haine & Tabors, 1997). However, the results are different when children are poor readers, whose errors are less likely to be ignored than those of good readers (Allington, 1980; Chinn et al., 1993; Englert & Semmel, 1983; Haine & Tabors, 1997; Hoffman & Clements, 1984).

Some researchers propose that when *no feedback* is provided, children are allowed the opportunity to use syntax and/or semantics to cross-check their word identification attempts (McNaughton & Glynn, 1981; Shake, 1986). In these instances, children can see if the reading makes sense before adult intervention. Additional research indicates that less feedback leads to continued reading and increased self-correction behaviors (Hughes, 1985).

Providing *no feedback* for reading miscues may not be appropriate for all readers. Singh (1989) suggests that less-skilled readers are less likely to detect errors, even those that disrupt meaning. In such cases, failure to correct or to provide prompts for self-correction can contribute to poor reading ability. In the current study, *no feedback* occurred most often when children were

reading with higher accuracy levels. Again, from the socio-cultural perspective, mothers who ignored their children's reading errors may have been gradually releasing the responsibility of the task of reading (i.e., removing the scaffold or support) for their children when the reading was not particularly difficult.

Researchers have not speculated why the errors of poor readers are sometimes ignored. In the current study, poor readers' errors were ignored, though not with the same frequency as those of good readers. A possible explanation is that mothers of less-skilled readers believed that their children were capable of reaching the target word on their own if they continued trying different word identification strategies. However, because this study did not investigate mothers' rationale for choosing particular strategies, this is only speculation.

The amount of time adults wait before providing feedback may impact the type of word identification strategy chosen by the reader. In studies of teacher questioning behaviors, Rowe (1986) found that, on average, teachers a) typically waited less than one second for a student response, and b) waited less than one second after a student response before reacting or responding with subsequent questions. Results from Rowe's studies revealed that increasing wait time to approximately three seconds led to decreases in students' failure to respond and increases in speculative thinking and self-confidence.

In the context of the current study, mothers who provided *premature assistance* did not use wait time at all. For children reading at an instructional level, increased maternal wait time may likely have resulted in more child-initiated reading attempts, more thoughtful attempts at decoding, and increased confidence in word identification abilities, with the result of higher reading scores. However, for children struggling with the text, most of their word identification attempts were likely to be ineffective regardless of what kind or how many strategies they tried. Wait time may not have made a difference because the text was too difficult.

Unlike mothers who provided *premature assistance,* mothers who paused before responding gave their children a chance to think of an appropriate strategy. In some cases, mothers did not respond to individual reading attempts at all, though their reasons cannot be discerned within the confines of the study. Nonetheless, it can be argued that because these mothers allowed a period of wait time, for whatever reason, their children may have initiated more reading attempts, may have been more thoughtful in their attempts at decoding, and may have experienced increased confidence in their word identification abilities.

Also unlike mothers who provided *premature assistance*, mothers who provided *no feedback* held their children accountable for doing the work of decoding themselves. Clay (1991) contends that reader initiation of strategies (e.g., searching text, choosing responses, monitoring meaning, self-correcting) signals the development of inner control, which leads to reading independence. Mothers who withhold feedback for their children's oral reading miscues facilitate the development of inner control; mothers who provide too much *premature assistance* or use it impulsively or needlessly may impede this development.

Conclusion

This study revealed valuable information about maternal feedback for children's oral reading miscues. First, it showed that without specific training, African American mothers from diverse educational and socioeconomic backgrounds demonstrate behaviors similar to those shown by classroom teachers when listening to children read orally. Second, it revealed that family income, maternal education, child gender and child oral reading accuracy on the observational text are predictive of maternal feedback styles. Finally, the results indicated that mothers' use of certain feedback styles predicts children's reading scores at the end of first grade. Specifically, children whose mothers provide *premature assistance* (i.e. responding before the child has a chance to make a word identification attempt) have lower reading scores at the end of the year, whereas children whose mothers provide *no feedback* (i.e., waiting or pausing to allow the child to work through reading attempts) show significantly higher first-grade reading scores. These findings suggest that mothers are aware of their children's reading ability in a broad sense, they can determine if a text is too difficult, and they can select feedback that is generally appropriate based on their children's experience with the text.

More importantly, the results of this study suggest that the type of feedback mothers provide in response to their children's oral reading miscues may not be as important as the timing of that feedback. Although responses to child errors may occur either early, as in the case of *premature assistance,* or in the form of a delay or pause, as observed by *no feedback;* in truth, either of these instances may be considered "right on time" based on the level of difficulty the child is experiencing with the text. On one hand, while *premature assistance* eliminates the opportunity for children to make attempts at word identification, it may be a very appropriate feedback strategy for mothers to employ when their children are presented with text beyond their instructional levels and when children are in need of maximum scaffolding or support. Conversely, providing *no feedback*, or waiting to allow children to independently think of and work through their own reading strategies, may be appropriate when children are reading at their instructional levels (i.e., requiring less adult support) because it gives children an opportunity to monitor their reading, which may lead to more cross-checking of reading strategies and self-correcting of reading errors. By examining the ways in which these mothers appeared to intuitively and efficiently time their responses based on text difficulty, we can begin thinking about what mothers already do that is helpful and able to be built upon when engaging in oral reading interactions with their children.

Limitations

While findings from the current study provide valuable descriptive information about child-mother oral reading episodes, the results should be interpreted carefully. First, the relatively small number of participants in the study and the inclusion of only one ethnic group lead to issues of generalizability to other populations. Second, because all students read from the same text regardless of individual reading instructional levels, particular child error patterns and maternal feedback strategies may have occurred which may not have been characteristic of those readers and their mothers when reading from text at their instructional level. Finally, because the study is based on correlational data, the findings must be interpreted with caution, especially with respect to any inference of causality in regard to whether the mothers' feedback is causing higher or lower scores on measures of first grade reading.

Implications

The results of this study indicate that during oral reading episodes in the home environment, African American mothers use the same types of feedback as teachers in the classroom setting, especially when the reading selection is particularly challenging. The results of this study provide implications for schools as they seek to include parents in supporting and extending best literacy practices at home, and increasing overall reading achievement. Schools and teachers can support improved oral reading accuracy by developing a home visit curriculum which focuses on the following:

- increasing the availability of texts at children's appropriate instructional level for use with at-home reading;
- training parents and children in how to determine a "just right" book, particularly for library visits and book store purchases;
- recognizing and supporting the effective reading strategies that parents already use with their children;
- providing opportunities for parents to learn how and when to use more precise types of feedback when errors do occur;
- emphasizing the importance of *wait time* to help children gain control of the reading episode; and
- giving attention to the needs of diverse families and home environments, in which factors such as time, self-confidence, and adult reading ability may impact the extent to which those adults will make at-home reading a priority.

Future investigations of this issue may include examinations of correlational differences between maternal feedback styles and socio-economic status, differences between maternal and paternal feedback styles, and cross-generational or cultural differences in feedback styles. Studies which focus on how mothers respond when children are presented with text at their instructional reading levels will provide a clearer picture of how children and their caregivers deal with oral reading miscues when decoding is not an overwhelming task.

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Table 1

Correlations Between Maternal Feedback Styles and Child Outcomes Using Rank Transformed Proportions

	Oral Reading Accuracy	Reading Achievement
Extending Feedback	.13	.01
Complementary Feedback	.03	-.04
Literacy-related Feedback	.04	-.08
Terminal Feedback	-.56****	-.45***
No Feedback	.76****	.67****
Premature Assistance	-.67****	-.55****
Negative Feedback	.12	.04

Note. Oral Reading Accuracy = percent of words read correctly and independently on observational text. Reading Achievement = Score on Broad Reading section of the Woodcock-Johnson (Woodcock & Mather, 1989, 1990) during the spring of first grade.
***$p < .001$. ****$p \leq .0001$.

Table 2

Regression Analyses – Predicting First Grade Reading Achievement from Maternal Feedback Styles

	First Grade Reading	
	m1	m2
R^2	.53***	.63***
	Standard Regression Coefficients	
Literacy-related	.09	-.02
Negative	-.17	-.12
Terminal	-.27	-.22
No Feedback	.40*	.33*
Premature	-.28*	-.23
Extending	-.20	.11
Complementary	.03	.04
Poverty		-.12
Gender		-.05
HOME		.24
M Reading		.08
M Strategies		-.09

Note. m1 = Model 1 (maternal feedback styles). m2 = Model 2 (m1 + demographics [poverty, child gender, maternal reading level] + quality of the home environment + maternal bookreading strategies). M = Mother variable.

*$p < .05$. ***$p < .001$.