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ABSTRACT

A study examined factors that may foster advanced knowledge of literacy among impoverished preschoolers who are generally found to be academically at-risk in learning to read. Six preschoolers enrolled in a Head Start program were identified by teacher recommendation as showing profound interest in written language (looking at books, writing letters, etc.) and most likely, in the teacher's judgment, to be successful in becoming literate. The six children were individually administered a battery of formal and informal measures to assess their overall literacy knowledge. Three of the six demonstrated advanced understanding of written language that placed them in the top quartile among their age mates from low- and middle-class homes. An extensive investigation of the three preschoolers revealed that regardless of a disruptive family environment, activities that promoted literacy development continued. Reading to children was found to be a regular routine in these homes. All three children were frequent writers. Of equal importance, an influential individual (mother, older sibling, or grandmother) was also discovered to directly engage the young learner in activities involved with written language. Regardless of the strategies adopted, the print-related experiences provided by the literacy advocate appear to have contributed substantially to advancing the three impoverished children's literacy development. (Four tables and two figures of data are included; 36 references are attached.)  
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A Study of Three Impoverished Preschoolers with Advanced  
Understanding of Literacy

ED 363 862

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RUNNING HEAD: THREE PRESCHOOLERS

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### Abstract

The current study was conducted to examine factors that may foster advanced knowledge of literacy among impoverished preschoolers who are generally found to be academically at-risk in learning to read. Six preschoolers enrolled in a Head Start program were identified by teacher recommendation as showing profound interest in written language (e.g., looking at books, writing letters, etc.) and most likely, in the teacher's judgement, to be successful in becoming literate. The six children were individually administered a battery of formal and informal measures to assess their overall literacy knowledge. Three of the six demonstrated advanced understanding of written language that placed them in the top quartile among their age mates from low- and middle-class homes. An extensive investigation of the three preschoolers revealed that regardless of a disruptive family environment, activities that promote literacy development continued. Reading to children was found to be a regular routine in these homes. All three children were frequent writers. Of equal importance, an influential individual (i.e., mother, older sibling, or grandmother) was also discovered to directly engage the young learner in activities involved with written language. Regardless of the strategies adopted, the print related experiences provided by the literacy advocate appear to have contributed substantially to advancing the three impoverished children's literacy development.

## A Study of Three Impoverished Preschoolers With Advanced Understanding of Literacy

### Objective

The current study identifies factors that may foster literacy development among economically impoverished preschoolers who have demonstrated advanced understanding of important literacy concepts.

### Conceptual Rationale

Evidence accumulated over the past two decades suggests that becoming literate is linked to the early experiences that children have with print prior to entering formal education (e.g., Bissex, 1980; Clay, 1975; Ferreiro & Teberosky, 1982; Read, 1971). Through young children's informal interactions with written language (e.g., having stories read to them, engaging in pretend writing and reading, etc.) important literacy concepts are believed to be acquired. These concepts function as schemata with which children interpret instruction they receive once they begin school. In a recent report, Robinson-Smith and Dixon (1992) compared the literacy knowledge of 64 preschoolers from low- and middle-class homes. Dramatic differences were found between the two groups. By the end of preschool, only one subject from an impoverished home scored in the top quartile on total literacy knowledge; all other scores belonged to middle-class children. Clearly, becoming literate appears to be a feat impaired by poverty. This finding is particularly alarming with one quarter of all preschoolers in the U.S. now living in poverty (Hodgkinson, 1991).

A number of ethnographic studies have examined the early literacy development of children from impoverished homes to determine the factors that may contribute to their seemingly inevitable failure (Harste, Woodward, & Burke, 1984; Teale, 1986; Heath, 1983; Taylor & Dorsey-Gaines, 1988; Wells, 1985). These studies provide rich descriptions of the home environments and the role literacy plays among family members. Accordingly, many literacy experiences are believed to be embedded in the daily routines of a family and support the notion that literacy development is a social process that occurs within a social context in all homes (Taylor & Strickland, 1989). Teale (1986) and Heath (1983) have also noted the social context in which literacy

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activities occur, but find notable disparities between middle and low-SES homes. Adults in low-income environments do not engage in writing or reading related to the work domain, while children in middle-class homes often see adults engage in reading or writing activities associated with careers. Another factor identified by researchers is that low-income children are not frequently read to by parents. Although, Wells (1985) reports that this important literacy activity is not a common routine in many homes, it appears to be more frequently absent in homes of poverty (Teale, 1986; Heath, 1983). Investigations also suggest that during the story book readings, parent-child behaviors may be distinctly different according to socioeconomic backgrounds (Ninio, 1980).

A primary focus of past studies has been to provide indepth descriptions and conclusions about factors that may have contributed to the literacy plight of disadvantaged children. The current study, however, takes a clearly different perspective of literacy development among the poor. This study investigates impoverished preschoolers who have demonstrated advanced understanding of literacy. Hence, the current study was conducted to better understand what factors might contribute to promoting more sophisticated literacy knowledge for preschoolers living in low- socioeconomic homes.

#### Methods

Procedures - Thirty-six Head Start preschoolers enrolled in a morning or afternoon program in a mid-size Midwest city were identified for the study. After teaching both sessions of preschoolers for five months an experienced Head Start teacher, was asked to recommend children who had shown a profound interest in literacy activities (e.g., looking at books, pointing out letters, and writing using alphabetic letters, etc.) and who, in her judgment, were most likely to be successful in learning to read. Using these criteria, the lead teacher identified six subjects.

A series of informal measures were individually administered to the six preschoolers to examine their knowledge of oral and written language. Total literacy strand scores were calculated for each of the six subjects following Mason's (1984) model of reading acquisition. Scores for the six subjects were compared with data collected in a larger study investigating the literacy

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knowledge found among low-and middle-class preschoolers. In this earlier study (Robinson-Smith & Dixon, 1992), the literacy scores of 64 preschoolers had been ranked in ascending order. Three out of the six subjects in the current study, who had originally been recommended by the preschool teacher, fell in the top scoring quartiles. The three advanced literacy learners served as the focal subjects for the extensive investigation described in this paper.

Function of print strand - As mentioned, the three subjects were assessed on a number of formal and informal literacy measures that correspond to the strands in Mason's (1984) models of reading acquisition. The initial strand, function of print, is said to reflect prereaders' attempts to read words using the context or purpose, rather than the graphic details. For example, a child might successfully read her own name or the McDonald's logo. Children in this initial strand are capable of correctly identifying a limited number of logos, labels, names, and familiar words. In this study, assessments of children's knowledge of the function of print included 1) identification of literacy objects, 2) explanation of the functions of literacy objects, 3) identification of environmental print, 4) recognition of readable print, and 5) identification of words in isolation.

In this initial strand, preschoolers' knowledge of literacy objects was assessed by asking children to identify selected materials that were individually presented to them. The objects included a newspaper, telephone book, menu, map, dictionary, check book, calendar, coupon, receipt and a postcard (total points=10). Using these same materials, the children were also assessed to determine their understanding of the function of these materials. Each child was asked, "What do people use this for?" Prompting was encouraged ("tell me more") and all responses were recorded verbatim (total points=10).

Knowledge of environmental print was assessed by showing children ten 4 x 5 color photographs of logos that appeared in context. The child was shown each photograph individually and asked, "Tell me what this says." The logos were selected from reports by other authors (e.g., Heibert, 1978; Masonheimer, et al., 1984) of environmental print frequently recognized by prereaders. In

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each photograph the print and context are clearly legible. The ten photographs consisted of pictures of a McDonald's sign, stop sign, K-Mart sign, Coke cup, Crayola box, Burger King sign, speed limit sign, school bus, Target sign, and a Pepsi can. One point was awarded for each correct response (total points=10).

In another task measuring the function construct, children were shown 5 x 8 cards with strings of letters or scribbles, sometimes including numbers, printed on each card (e.g., I, MMM, 57M8R). When the examiner showed a card, she would ask "Is this a word that big people read?" The task was developed to examine children's ability to differentiate among printed forms and determine what type of print constitutes a word people can read. The task was designed from work reported by Lavine, (1977) and Ferriero and Teberosky (1982) on what prereaders perceive as readable print. Specifically, the task examined whether variety (words must be composed of different letters), multiplicity (words must be composed of enough letters), and directionality (words must appear horizontally) of print influenced children's concept of what people can read (total points=15).

In the final task, assessing the function strand, fifteen words were culled from a pre-primer word list of a popular basal series (Houghton Mifflin, 1991). Each child was shown a word and asked to identify it. If a child could not correctly identify any of the first five words the assessment of word recognition was stopped.

Form and structure of print strand - The second strand in Mason's (1984) model of reading acquisition, form and structure, refers to children's explicit knowledge that words are comprised of letter forms which carry specific names or sounds. Therefore, unlike function of print, which dealt with meaning, strand two focuses on the visual or phonological aspects of print. Preschoolers' understanding of the form and structure of print was assessed in this study by measuring 1) knowledge of letter names, 2) knowledge of letter sounds, 3) ability to write dictated words, 4) ability to blend syllables into words, and 5) ability to blend phonemes into words.

Knowledge of letter names was assessed by asking children to identify the names of lower case letters when presented individually on 3 x 5 cards (total

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points= 26). In a similar task, knowledge of letter sounds was measured by asking children to identify the sounds of the lower case letters presented on 3 x 5 cards (total points=24). Letter mastery has been noted by many researchers as important in beginning reading achievement (Chall, 1967; Ehri, 1983; Masonheimer et al., 1984).

The individual letter cards were all placed in front of the child. The examiner began the tasks by selecting the initial letter in the child's name and asking, "Can you tell me the name of this letter?" Each child was then asked to select any letter card, on her/his own, and say the name. All subjects selected five or more cards without hesitation. The examiner provided positive reinforcement ("good answer", "good for you", etc.) to all responses; however, once a child incorrectly identified the names of five consecutive letter cards, the task was stopped. These same procedures were used to assess children's explicit knowledge of letter sounds presented later in the session.

The ability to write dictated words and phrases was measured using a modified version of a task adopted by Kontos (1988). This task was selected because it taps the broad range of abilities found among preschoolers' early writing productions. Unlike similar measures which ask children to manipulate plastic letters, this task evaluates children's attempts to produce specific print. All early writing efforts can be quantified. That is, scores are awarded for the less sophisticated symbolic pictures or scribbles, as well as, the more advanced letter-like and alphabetic symbols (Huba, Robinson, & Eltinge, 1989).

Seven utterances (each a word, phrase or short sentence) were individually read, and the child was asked to "write down on paper in any way that will help you to remember them". Barnhardt and Sulzby (1986) reported maximum performance among children when they were asked to write individual words or short phrases. The utterances selected in this task were the child's name and the words and phrases, cat, red car, my mom, big frog, and spooky ghost. Each of the seven items were scored from zero to eight (total points=56) for sophistication of spelling productions using criteria suggested by Clay (1975). The writing samples were judged independently by the two

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authors. Inter-rater reliability was .94.

In the task measuring children's ability to combine syllable segments into words, the child was asked to identify the word after being presented with verbal utterances consisting of two isolated syllables (e.g., /ze/ /bra/, /ei/ /bow/, etc.). Before beginning, the child participated in a demonstration in which the examiner allowed the child two opportunities to practice the task. The words used in this measure were zebra, elbow, table, pencil, and funny (total points=5).

A similar task was used to measure children's ability to combine phoneme segments into words. Research has shown (e.g., Bradley & Bryant, 1985; Fox & Routh, 1975) that although four-year-olds are fairly successful in blending syllables into words, blending phonemes is difficult, but may demonstrate an implicit awareness that words consist of a sequence of sounds. In this task, the child was asked to identify the word after being presented with verbal utterances consisting of two isolated phonemes (e.g., /t/ /ea/). Again, prior to administering the task, children participated in a demonstration which provided two opportunities to practice the task. The words used in this measure were tea, may, sew, knee, and sea (total points=5).

Conventions of reading - The third strand, describes the social and task constraints of reading. This strand describes children's knowledge of terms used to talk about reading (e.g., word, sentence, etc.) and the rules that govern the act of reading (e.g., knowing one moves from left to right to read text, etc.). The conventions of reading were measured by assessing 1) concepts about reading, and 2) concepts of words.

The concepts children hold about reading were assessed by adapting Marie Clay's Concepts of Print test (1979). Using her book entitled, Stones, children were asked to demonstrate their knowledge about how people read books (e.g., pointing the proper direction, knowing that print rather than pictures are read, etc.). A maximum total of 11 points was awarded.

Understanding the concept of word has been linked to beginning reading ability (Roberts, 1992; Morris, 1980). Although word is a particularly difficult construct to define, it represents an important aspect of oral and written language. The phrase "concept of word" assessed the child's

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understanding that a word represents a unit of spoken utterances and written symbols (Roberts, 1992). Knowledge of word was measured by asking the child to 1) say one word, 2) identify the number of words in orally presented phrases consisting of one to three words, 3) circle words in a sentence that was presented in text form only, 4) circle words in a sentence that was presented in text form and also read out loud, and 5) provide an example of a long, short, difficult and make-believe words (total points possible = 20).

Two formal measures were also used to evaluate the subjects' intellectual (Slosson, 1991) and receptive language (Peabody Picture Vocabulary Test, 1981) ability. All measures were presented to the children in three separate sessions, each lasting approximately 20 minutes. Children were told at the beginning of each session, that they could stop at anytime and go back to their classroom; none did. All testing was administered by one of the authors at the preschool site.

In addition to these measures, observational checklists and questionnaires were used to determine each child's pastime activities (favored T.V. programs, movies, books, toys, etc.), home responsibilities, and games played with friends or siblings. Moreover, repeated observations were conducted to determine children's preferred choice of activities in preschool and at home. Taped interviews were conducted to learn children's perceptions of learning to read and write. Specifically, inquiries were made of their own ability to learn to read and write, how other people learn these skills, and who will help them learn to read and write. Parent interviews and on-site home visitations were conducted to learn about the expectations they hold for their preschoolers, activities used to help children learn, the role of a parent and teacher in helping children learn to read and write, leisure family activities, and family expenditures for children.

An analytical induction was conducted of field notes and transcriptions in an effort to identify important components that may have contributed to the three subjects' early literacy development.

Currently, the children are enrolled in three separate kindergarten programs. According to their kindergarten teachers, all three are described as very good students and continue to show high interest in literacy, even

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though two are enrolled in programs that do not encourage children's writing and reading experiences. As part of a longitudinal design, the children will be followed through the primary years to assess their overall literacy development.

#### Results

The current study focused on a broad descriptive question: What fosters advanced literacy knowledge in preschoolers living in impoverished environments? The foci of the current study were the preschool child and activities associated with literacy development.

Figure 1 illustrates how the three focal subjects compared with their peers in a rank ordering of scores taken from an earlier study (Robinson-Smith & Dixon, 1992). A function of print total was calculated for a group of 64 four-year-olds; 33 from low-income and 31 from middle-class homes. The

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Figure 1 about here  
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function of print total represents the combined scores of 1) reading environmental print, 2) identifying literacy objects, 3) explaining the function of literacy objects, and 4) recognizing readable print. Total scores for the 64 low- and middle-class preschoolers ranged from 12 to 31, with a median of 22. The three preschoolers in the current study scored 29, 27, and 27, placing them clearly in the top quartile.

Figure 2 shows how the three focal subjects compared with their age mates on total scores measuring Mason's (1984) second strand, form and structure of print. Total strand scores were calculated for all preschoolers by combining

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Figure 2 about here  
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the scores on the following measures: 1) letter names, 2) letter sounds, 3) blending word parts into syllables, 4) blending word parts into phonemes, and 5) writing dictated words. The scores of the 64 low- and middle-class preschoolers ranged from 7 to 77 with a median of 23. In the top quartile, scores ranged 34 to 77, with the three children in the current study holding

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totals of 75, 74, and 50, respectively. Again, these scores placed the three advanced literacy learners clearly in the top quarter among low- and middle-class age mates.

Comparative scores for the third strand in Mason's model were not available. However, data patterns for Figures 2 and 3 are remarkably similar. Together, they illustrate that even by age four, children from economically impoverished homes are disproportionately represented in the lowest quartile of literacy development. The three children identified for the current study present a sharp contrast with the vast majority of their peers from low-SES backgrounds.

Demographic Information - Table 1 shows the demographic information pertaining to the three focal subjects. The subjects consisted of two females

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Table 1 about here  
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and one male; two were Caucasian and one female was Afro-American. The average age of the three subjects was 66 months at midyear of preschool (February). The three preschoolers were in homes where reported incomes were at 100 percent of the poverty level, less than \$10,000 in family income, annually. None of the parents hold degrees beyond the high school diploma, one mother quit school in eighth grade. Two of the children live with a single parent who is unemployed or occasionally part-time employed in unskilled work. The third child lives with both parents, with mother unemployed and father employed as a construction worker. None of the families own their own home. One family reports occasionally living in their car. Nonetheless, each of the three preschoolers demonstrated an advanced understanding of oral and written language that placed her/him in the top quartile among literacy scores reported for a comparable group of middle-and low-income preschoolers.

Assessment of Language Knowledge - Table 2 shows the scores of all six preschoolers originally selected for the study on the eleven informal language and two formal measures. Scores appearing for subjects 01, 02, and 03 are highlighted to illustrate the performance of the three focal subjects in this

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study. The advanced knowledge of letter names is particularly noteworthy and

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Table 2 about here  
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forms a consistent pattern among the three preschoolers. Knowing the names of alphabetic letters remains one of the best predictors of beginning reading achievement (Chall, 1967; Ehri, 1983; Robinson, 1991). However, no other trends emerged with considerable variability found among the subjects in understanding most of the literacy concepts (e.g., letter sounds, phonemic awareness, and explaining the function of literacy objects).

Further findings suggest that the advanced language knowledge of the three preschoolers is not a result of being intellectually gifted. Total standardized test scores on the Slosson (1991) yielded scores that ranged from 93 to 117. Likewise, the three preschoolers did not indicate a particularly sophisticated level of receptive language, Peabody Picture Vocabulary Test scores ranged from the 27th - 70th percentile (Dunn & Dunn, 1981).

Observations and Interviews of Children - The three children were observed in the preschool classroom on three separate days and again at home on three occasions, totaling 12 hours of observation per child. Records were compiled on the children's choices of activities, preferred peers, and the amount of time each child spent engaged in an activity. In addition, each child was interviewed individually about their own perceptions of school and home. Table 3 illustrates some of the factors investigated.

Writing was observed to be a particularly popular activity among the

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Table 3 about here  
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three children, particularly at home. Although there was tremendous variation in the amount of time spent with writing; all students expressed genuine pleasure about their ability to write. When asked if they could write, their responses were affirmative (e.g., "yes:", "Do you want to see me?"). However, when the three subjects were asked about their ability to read, they all expressed some reservations (e.g., "just a little bit", "only the words in

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"The Little Mermaid", etc.).

Writing materials (paper, pencils, pens, and markers) were abundant and easily accessible to the children in their homes. However, the purpose for the prolific supply of writing materials differed dramatically. One mother for example reported that the ample supply of paper and markers were provided primarily to keep her child busy..."He'd write all day, if I'd let him. I buy paper and spiral tablets almost every week for him. He doesn't really write anything, but, I don't care, as long as it keeps him busy and out of my way so I can get something done...No, I don't help him with his writing, except sometimes I'll spell some words when he asks. I just don't have time".

The subsequent comments of the next parent present a very different view. "I buy her workbooks and paper all the time so we can work on her letters. She likes to work with me. I want my girls to be able to get good jobs so they can earn descent money. So, I tell them they got to learn their letters and how to write their names and stuff. They write for me all the time and show me what they can do".

The child in the third home experiences still a different attitude toward writing. Notes from field notations indicate that mother buys paper, pencils, and markers for her girls because they use them to play school. "I'm glad to buy these things for them, they play school by the hours...Her older sister is the teacher and she (the focal child) is the student. Her older sister loves school. So when she comes home, she gets her younger sister to play with her. They work on writing, and I hear Shawna read to her.

Regarding reading materials, all three homes contained story books for children. However, unlike writing materials, there was considerable variability in the quantity of books in the homes. The parent who had expressed concerns about her daughter, someday getting a good job, had the largest collection with well over a 100 story books that she proudly explained had been acquired at garage sales. In another home, a collection of 40 to 50 children's books were found. These well worn books were used when her daughters played school and at bedtime, when she regularly read them a story. In the third home, the number of story books were noticeably fewer than the other two homes. Here, no more than a dozen books designated for children

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occupied the premises. In a few cases, these were books given to the child by the Head Start teacher. In other cases, they represented presents from grandma. Nonetheless, all three focal children had access to varying quantities of children's books in their own homes.

The play activities and games selected by the target children did not distinguish them from other preschoolers (e.g., playing school, playing with Barbie dolls, etc.). However, the three preschoolers were observed to be frequently engaged in writing and reading experiences at home and at school. Reading to the preschooler was also a regular part of the daily family routine, even on very hectic days. Indeed, although the home environment was often disruptive and families dysfunctional, activities that promote literacy development continued. All three children reported that someone read to them and they had no difficulty providing the titles of some of their favorite books. They also indicated that they liked to watch T.V. and could easily name their favorite shows. Each child was also asked what they wanted to do when they grew up. All three children had a different but definite idea (e.g., fireman, scientist, or work at HyVee).

Parent Interviews and observations - The interviews of parents revealed three very different styles of parenting for the three focal subjects. Table 4 illustrates some of the issues examined with parents. One parent believed

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Table 4 about here  
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that children will learn quite automatically if they are simply encouraged or praised rather than corrected or reprimanded. She provides her children paper and pencils and a special place to do their work. "I've kept everything my child has ever made. When she has her own children, I will give it to her to help her understand how children learn." She also describes her daughter as an avid writer. "She can't spell words real good yet, but she understands how spelling sort of works. She has always loved to write. My daughter also learned a lot about writing from her sister who is one year older. They play school together all the time. She learns real fast. It sometimes makes it tough on my older daughter."

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This parent also regularly reads to her children. She reports that this is a regular bedtime practice, before the girls go to sleep. She has shown them how to write their names and some of the letters. However, she doesn't think she needs to try to teach them how to read by practicing letter sounds. She believes her child's teacher will be best at teaching reading. "We tell our children school is important. It's important to listen to your teacher. She will help you learn and be smart." Regarding discipline, this mother does not believe in spanking children... "I just try to explain what they did wrong and that I know I can count on them next time."

Parent number two also indicates that writing is an important activity in their child's life. "My daughter loves to play school with her sister. Her sister shows her how to write. She loves to play school after being in school all day. It's kind of funny. But, I really want my two daughters to be able to get good jobs, so I try to teach them to read and write. When I knew my first daughter was going to go to Head Start, we started working on knowing all the letters. By the time she started Head Start, she could write her name and knew all the alphabetic letters. She could also write her numbers from 1 to 10. I buy them workbooks and we have a program we play on the VCR about letters and sounds. I told myself when I had kids, I wasn't going to have no dummies! So we work on school stuff about everyday. My girls really like to work with me and show me what they know. My daughter, in your study, has always liked to work with me; she learns real easy."

The third parent, however, provides little literacy enrichment. She reports that she does not read to her son. "I hate reading; I was never very good at it. I wouldn't know the first thing about trying to teach someone else to read; I'm too busy anyway and way too tired". Her son however, gets plenty of story book reading when Grandma comes to babysit each day. "My son always has books picked out for Grandma to read. Most of the time they are the same books. He also writes all the time. He constantly asks me how to spell words. Sometimes he just copies off things he sees, like cereal boxes. He writes all the time! I buy him paper all the time. It keeps him busy. He has always been interested in writing, probably since two years of age. I usually don't buy him books and we've only been to the library once. I don't

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like to go there because you get fined if you don't get the books back. So, Grandma brings books to read a lot or school sends them home." Regarding discipline... "I spank them when they need it".

#### Discussion

With the exception of letter names, the three preschoolers did not uniformly demonstrate advanced knowledge of particular literacy concepts, as measured by the assessments. That is, their scores did not help to identify them as a unique group of preschoolers. However, a pattern that did reoccurred in each home was the presence of a literacy advocate; an influential individual who directly engaged the child in activities with written language. Sometimes, this person was a mother or grandmother, committed to having a good student. In another case, the influential person was an older sibling, who liked school. In this latter situation, the target preschooler was recruited to "play school" and serve the role of the student who must learn the names of alphabetic letters and how to write them. Often the literacy advocate employed practices that conflict with the more contemporary paradigm of emergent literacy (e.g., flash cards of letter names, video-games of identifying letters and words, drill on writing child's name correctly, etc.).

A second trend also identified among the three focal subjects was the children's frequent experiences with reading and writing in their homes. Reports indicated that the focal subjects were regularly read to by the literacy advocate in the home. The focal subjects were also described by parents and the Head Start teacher as particularly interested in writing and copying letters. Indeed, much like the studies of early readers, these three advanced literacy learners appear to have a propensity for writing, and interestingly enough could be included in Durkin's referent, "pencil and paper" kids (1966).

Therefore, the reading and writing experiences, combined with an at-home literacy advocate are believed to have substantially advanced understanding of literacy. As others have noted, virtually every child in a literate society such as the United States, has many experiences with written language before they ever enter school (Heath, 1983; Teale, 1986; Harste, Woodward, and Burke,

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1984). Much has been written about how literacy experiences are embedded in the social context of a family's daily routines. Accordingly, reading and writing play a very utilitarian role with universal literacy experiences for all children.

But, the interpretations of the current study may suggest something different. The "socially embedded literacy experiences" in and of themselves, are remarkably inadequate in fostering young children's literacy acquisition. The many print-rich experiences identified in homes (e.g., using telephone books and t.v. guides, paying bills, checking price tags, etc.) are simply not potent enough to advance children's literacy knowledge. Although interactions with environmental print have been reported to serve as the "root to literacy" (Goodman, 1986), a direct involvement with reading and writing, specifically, are suggested by this study. For children to advance into concepts found in Mason's (1984) second strand, requires explicit knowledge about print (i.e., knowing that alphabetic letters have names and sounds and that words are made up of a sequence of sounds, etc.). This knowledge is not likely learned from these socially -embedded literacy experiences, but rather requires direct involvement with reading and writing. Furthermore, advancing into strand two may be Vygotsky's (1978) zone of proximal development. That is, acquiring explicit knowledge of print requires assistance from someone with more advance knowledge (i.e., older sibling, mother, or grandmother).

A number of studies have noted that low-income children are not regularly read stories (Heath, 1983; Robinson-Smith & Dixon, 1992; Teale, 1986). Reminiscent of Heath's study (1983), in which three communities were studied, low-income children experienced many interactions involving print, but, unlike the experiences of middle-class children, they didn't prepare them for the reading instruction encountered in school. Perhaps, the combination of a literacy advocate who reads stories and opportunities to write and look at books are the critical experiences in literacy development.

### Conclusion

In order to alter the plight of the economically poor, a better knowledge of how literacy concepts are acquired is needed. This study addressed a void in the literature by examining at-risk learners who have demonstrated

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advanced knowledge about written and oral language.

The findings reflect as many differences as similarities among the home environments of the three advanced literacy users. Variability exists between the families in parenting practices, philosophical views about helping their own children learn, and attitudes about their own reading. Nonetheless, within these homes two distinct patterns appeared. To become literate children may likely need 1) an advocate who provides exposure and interaction with print-related materials, and 2) many experiences in which they write and have stories read to them.

In a final note, the descriptions of the three focal preschoolers also suggest that access to materials, such as children's books and paper and pencils are important factors to consider. Tremendous resources are spent each year in compensatory reading programs and parent involvement projects. It seems that a good investment might be for schools to begin sending books home with children to read and keep. Dramatic effects were reported by McCormick and Mason (1986) when Head Start children received copies of Little Books. To become literate, children need to have copies of their own books to read and reread again. Ironically, the U.S. is one of only two industrialized countries that does not give children their first books to take home and keep. (Blom, Jansen, & Allerup, 1976). Subject number three in this study would have been greatly limited in his access to story books without the books furnished by Head Start.

A fundamental underpinning of literacy development is providing children opportunities to experiment with print and be exposed to how people use it. In each home, but in very different ways, this took place. Sometimes the instruction was directive and traditional, other times it occurred while playing school with a sibling. Often, the information may not have been correct or properly delivered, nonetheless, learning occurred. The advanced literacy users operated as constructivists, culling from the experience what was needed. As stories were read to them and as they engaged in writing, the rich interactions with printed language helped to foster their advanced understanding of literacy.

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top quartile

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median = 22

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asterisk = advanced preschooler

circled = middle-class

uncircled = low-class

bottom quartile

Figure 1. Distribution of low- and middle- class four-year-olds on function of print strand (N= 64)

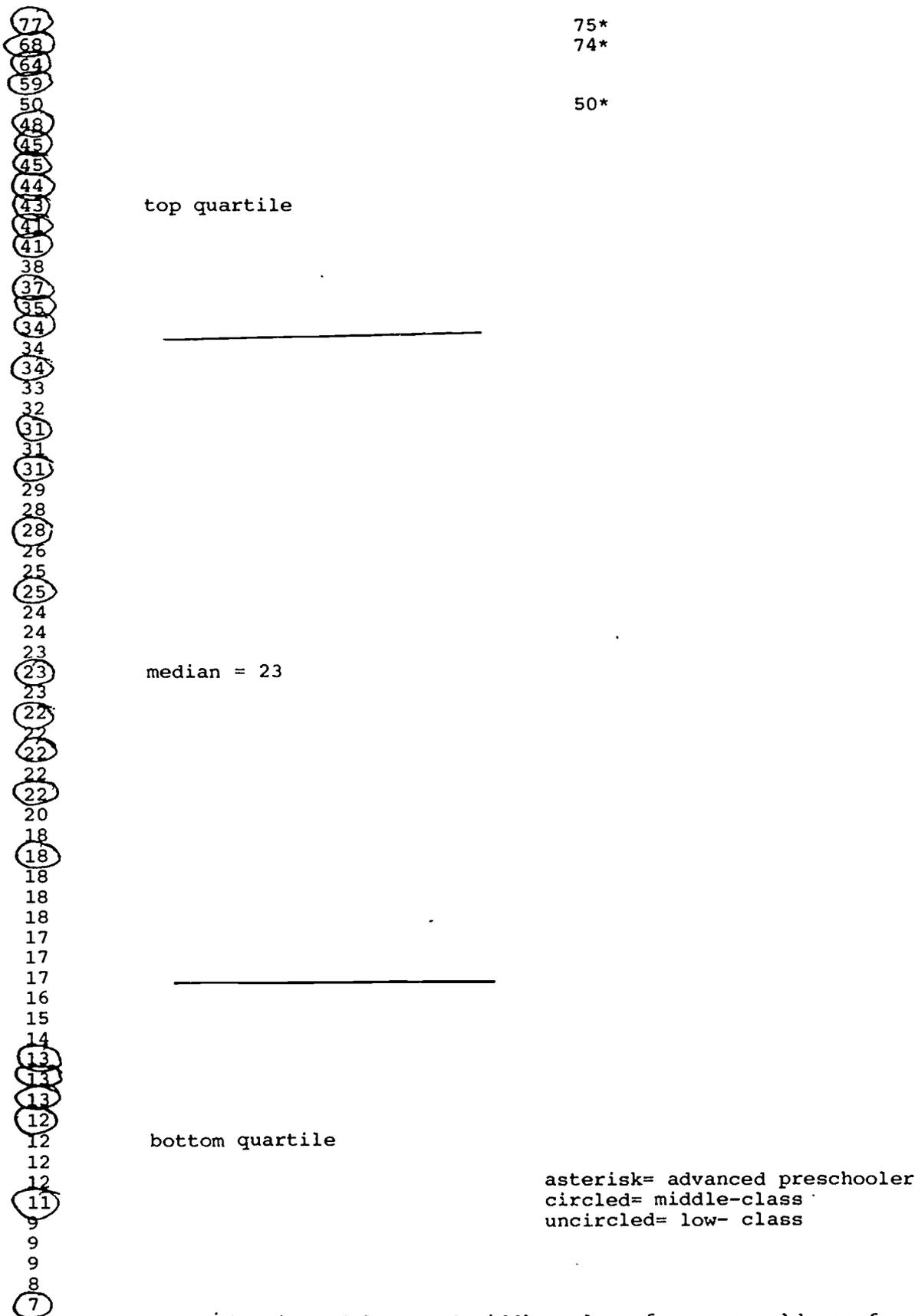


Figure 2. Distribution of low- and middle- class four-year-olds on form and structure strand (N= 64)

Table 1. Demographic Information about three impoverished preschoolers with advanced knowledge of literacy

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<u>Subject 1</u>	<u>Subject 2</u>	<u>Subject 3</u>
female	female	male
white	Afro-American	white
67 months	65 months	67 months
resides with parents 2 siblings one year older and an infant	resides with mom 1 sibling older sister	resides with mom 2 siblings one year older two years younger 1 stepsister same age 1 boyfriend grandma provides daily childcare
mom- H.S. Diploma dad- H.S. Diploma	mom- H.S. Diploma	mom- 8th grade
mom- daycare in home dad- construction	mom-unemployed	mom-bartender

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TABLE 2. Scores for six preschoolers on language and intelligence measures

	<u>Subjects</u>					
	<u>00</u>	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>
Letter Names (total=26)	06	26	26	22	6	7
Letter Sounds (total=25)	06	11	7	0	0	1
Invented Spelling (total=48)	23	25	31	18	21	23
Syllables - Words (total=10)	10	8	10	10	10	10
Phonemes - Words (total=10)	0	5	0	0	1	0
Environmental Print (total=10)	6	6	6	7	6	5
Identify Objects (total=10)	4	7	6	3	4	6
Explain Function (total=10)	8	6	5	7	7	8
Recognize Print (total=15)	5	10	10	10	8	10
Concept of Word (total=18)	7	11	14	8	7	10
Read isolated words (total=15)	0	0	1	0	0	1
Slosson Intelligence (Total Stand. Score)	100	100	117	93	110	110
Peabody Pct/Voc. Test (Percentile Rank)	14	70	58	27	77	34

Subjects 01, 02, and 03 were selected for this study

Table 3. Highlights of observations and interviews of three impoverished preschoolers.

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	<u>Subject 1</u>	<u>Subject 2</u>	<u>Subject 3</u>
<b>Writing</b>	Yes Do you want to see?	Yes I can write alot	Yes My name, Shawn,
<b>Reading</b>	Only the "Little Mermaid book"	Just a little bit	Grandma reads to n.e. I can read Bugs Bunny!
<b>Play</b>	T.V., my doll "Sandy"	Barbie, School T.V.	Operation & Bugs Bunny & T.V. & School
<b>Jobs</b>	cleans room	cleans room	makes bed
<b>Goals</b>	Scientist	Fireman	work at HyVee

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Table 4. Highlights from parent interviews and observations regarding three impoverished preschoolers

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	<u>Subject 1</u>	<u>Subject 2</u>	<u>Subject 3</u>
<b>perceptions of child</b>	learns easily	learns fast	learning is easy child bored w/ ktg.
<b>writing</b>	loves to write writes all the time	loves writing	constantly writing likes to copy words
<b>influential people</b>	dad and mom explain things & give materials and buy books	mom directs teaching workbooks & drill	grandma brings books & reads to child
	older sister plays school		mom buys paper to keep him busy
<b>reading to child</b>	mom reads regularly sister frequently	mom regularly	grandma everyday
<b>teaching reading</b>	taught letter names and how to write name	taught letters how to write	mom doesn't help grandma does
	best for teacher to do She will learn	I will teach them too	letter names write names

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