

The Relationship among Socioeconomic Status, Education, and Maternal Book-Sharing Practices

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Introduction

Studies have shown that maternal book reading strategies in the toddler years impacts language and emergent literacy in the preschool years (Roberts, Jurgens, Burchinal, 2005).

Certain forms of linguistic input, including the use of complex syntax and vocabulary, have been shown to be associated with better language and literacy outcomes for children.

There is some research that suggests that parents from low income (SES), low education homes use fewer words and less complex vocabulary and syntax during book reading than parents from high SES, mid-high education homes (Horton-Ikard & Ellis Weismer, 2007) although results are mixed.

More research is necessary to disentangle the effects of SES and education from the kinds of linguistic input parents use with their children.

Purpose

The purpose of the current study investigated the relationship among household income, maternal education, and vocabulary and the complexity of language used by mothers during two different types of book-sharing.

Research Hypothesis

Mothers will use more words per utterance (MLU), more total words (TNW), more diverse vocabulary (TDW), fewer directives, and more elaborations in wordless books than in books containing print.

Our hypothesis is based on the notion that parents may feel constrained by “print,” whereas in wordless books, parents are free to elaborate and interact with their children.

Methodology

Participants

A total of 65 mother-child dyads participated in the study. Dyads were recruited from early intervention programs in the Ogden and Jordan school districts. To qualify for early intervention in the State of Utah, a child must exhibit delays in one or more of the following areas: physical development, vision or hearing, feeding or dressing, social and emotional development, communication and language learning, problem solving and play skills (Utah Department of Health).

Children who participated in this study were between the ages of 22-30 months, the mean age being 24.7 months. All children scored a standard score of 70 or above on the auditory comprehension subtest of the Preschool Language Scale-4 (PLS-4; Zimmerman, Steiner, & Pond, 2002).

Mother-child dyads came from a wide range of socioeconomic backgrounds. Of the 65 mother-child dyads, 11 fell below the 2009 Federal Poverty Income Guidelines. Income levels ranged from 5,000- 170,000 dollars with the mean income of \$63,548.

General Procedures

The PLS-4 (Zimmerman et al., 2002) was administered to all children to measure language comprehension skills.

Mother-child dyads participated in a 15-minute recorded video sample consisting interactions with books and toys.

Assessments and video-interactions were collected in the participant’s home. Dyads were given two books to use during the interaction.

One book contained printed words (*The Very Hungry Caterpillar*; Carle, 1969) and the other was wordless (*Carl’s Afternoon in the Park*; Day, 1991).

Each interaction was orthographically transcribed using procedures and software from the Systematic Analysis of Language Transcripts (SALT; Miller, 2006).

After an interaction was transcribed by a “primary transcriber,” a “secondary transcriber” checked the transcript for errors. After the transcriptions were corrected, codes for elaborations, imitations, and directives were added and were checked for reliability.

Results

There is a significant moderate relationship between **household income and maternal education** ($r = .42, p = .001^{**}$). **Maternal income was also significantly related to maternal vocabulary** ($r = .31, p = .02^{*}$). There was a large relationship between **maternal education and maternal vocabulary** ($r = .54, p = .0001^{***}$). **Maternal education was also related to MLU** ($r = .34, p = .03^{*}$). **Maternal vocabulary was significantly related to maternal MLU** ($r = .34, p = .03^{*}$) and **TDW** ($r = .36, p = .009^{**}$) during the shared-book reading.

Higher income was associated with **higher education, greater vocabulary knowledge, and longer MLUs** during shared-book reading with their children with developmental delays.

An independent t test was conducted to determine whether differences existed between the two book contexts for TDW and MLU. Results indicated that for the two outcome measures, MLU [$t(40) = 7.33, p = .0001^{***}$], and TDW [$t(50) = 5.17, p = .0001^{***}$]. The mean **MLU and TDW scores** for the **wordless book** were **significantly higher** than the mean MLU and TDW scores for the book containing print.

Discussion

The first purpose of this study was to explore relationships among maternal education, household income, maternal vocabulary knowledge and maternal language productivity measures (MLU, TDW, complex elaborations) during shared-book reading with children who demonstrate developmental delays.

Findings revealed that **maternal education and family income** were significantly related to **maternal vocabulary knowledge**. A significant positive relationship existed among **higher income, higher education, greater vocabulary knowledge** and **longer MLUs** during shared-book reading with their children with developmental delays.

The second purpose of this study was to determine whether differences existed in the type of language input that parents provided to children in wordless books versus books that contain print.

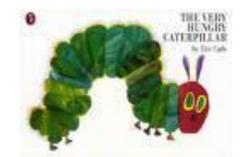
Mothers used significantly **longer utterances** and **more complex elaborations** in **wordless books** than in books containing print.

This is a very important finding because **children with language delays require elaborate and focused language stimulation to profit from interactions**.

Complex elaborations and exposure to a variety of vocabulary words in directed contexts has been shown to benefit children with language delays.

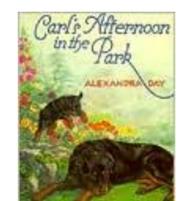


Inter-correlations among variables impacting child outcomes



Book Containing Print

Less diverse vocabulary, fewer words, and less complex elaborations used in each utterance to children with developmental delays



Wordless Book

More diverse vocabulary, more words used, more complex elaborations in each utterance to children with developmental delays

It may be even more important to address the ways in which these variables impact child outcomes for children with developmental delays.