Growth in Emergent Literacy Skills of Preschool Children with and without Hearing Loss

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ABSTRACT

The purpose of this poster is to present interim findings from an ongoing study of developmental trends in emergent literacy acquisition of preschool children with and without hearing loss who use spoken language. Specifically, we examined growth of oral language, phonological awareness, and print knowledge. We measured growth at six-month intervals from study entry. This poster presents findings from the first three assessment points. Results indicated that children with hearing loss perform more poorly than children with normal hearing on most measures of emergent literacy and generally exhibit growth over time; however, the growth rates for most skills does not appear to be sufficient to “catch up” to their peers with normal hearing. Exceptions to this trend included letter knowledge and rapid naming, on which the groups did not differ, as well as phonological awareness and print knowledge, on which children with hearing loss exhibited less growth than children with normal hearing. This study is funded by NIH/NCDC (R03DC145353, PI: Werfel).

BACKGROUND

Despite recent technological innovations such as cochlear implants and digital hearing aids that allow children with hearing loss more access to sound than ever before, 18-year-olds with hearing loss had a median third-grade level, a number unchanged since the 1970s (Qi & Mitchell, 2012). Importantly, reading deficits of children with hearing loss are evident in the preschool years, measured by tasks of emergent literacy (Moeller et al., 2007).

Figure 1. Emergent Literacy Variables

Emergent literacy skills underlie reading and writing and consist of oral language, phonological processing, and print knowledge (Whitehurst & Lonigan, 1998). Figure 1 displays the component skills within each of these areas that was measured in this study. Little research to date has examined growth in emergent literacy skills across the preschool years.

PURPOSE

The purpose of this poster is to present interim findings from an ongoing study of emergent literacy acquisition of preschool children with and without hearing loss. Growth of oral language, phonological processing, and print knowledge across the first three assessment points are presented. The purpose of the larger study is to identify early predictors of reading difficulty for children with hearing loss.

METHOD

In this study, children with and without hearing loss complete a battery of early language and literacy assessments every six months from age 4 to age 6. To date, 16 children with hearing loss and 11 children with normal hearing have completed Time 1 (study entry), Time 2 (6 months), and Time 3 (1+ year) assessments.

Procedures

Of interest in the present study is children’s performance on a variety of emergent literacy measures at Times 1, 2, and 3. Table 2 lists the measures for each variable. Children participated in individual assessment sessions at their school, a public library, or a research lab. Published administration and scoring protocols were followed. For each time, children participated in one or two assessment sessions, depending on behavior and attention. Order of administration was randomized for each participant. Assessments were administered by the author, who is a certified speech-language pathologist, or a trained lab member (lab manager or speech-language pathology master’s students).

RESULTS

Table 1. Participant Demographic Information

Table 2. Outcome Variables

IMPLICATIONS

This poster reports findings from Year 2 of the ELLA study, a longitudinal investigation of emergent literacy acquisition in children with hearing loss. These findings are of interest to the field of educational psychology as they add to our understanding of the development of emergent literacy skills in children with hearing loss.

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