



LLCd Symposium.
SPEAKERS AND PRESENTATIONS.

Name: Kavitha Bhooshan

Affiliation: All India Institute of Speech & Hearing, Mysore, India

Brief Bio: Ms. Kavitha has a master's degree in Audiology and Speech Language Pathology from the Dr. S. R. Chandashekhar Institute of Speech and Hearing, Bangalore. She is currently working as a Junior Research Fellow at All India Institute of Speech and Hearing (AIISH), Mysore. Her areas of interest include childhood communication disorders and hearing impairment.

and

Name: Lakshmi Venkatesh

Affiliation: Dr. S. R. Chandrasekhar Institute of Speech & Hearing, Bangalore, India

Theme: Language and literacy development in the alphasyllabaries

Title of Presentation: Phonological awareness and reading skills in Kannada: Observations from children with hearing impairment using different communication modes

Abstract: The aim of this study was to investigate how primary mode of communication of 6- to 7- year-old prelingual children with hearing impairment (CWHI) influenced their ability to reflect on the phonological structure of their language (phonological awareness skills) and decoding skills in alphasyllabic orthography such as Kannada. Approaches at developing communication skills and education among CWHI differ in the emphasis placed on auditory input, speech reading and cueing. Oral-Aural (OA) mode emphasizes oral speech production and comprehension, amplification and optimal use of residual hearing and speech reading. Total Communication (TC) emphasizes the use of gestures, signing and finger spelling in conjunction with speech and audition to communicate. There is considerable evidence to warrant attention to phonological awareness instruction to facilitate reading achievement among normal hearing (Snow, Burns, & Griffin, 1998; National Reading Panel, 2000) and CWHI exposed to alphabetic scripts (Nielsen & Luetke-Stahlman, 2002). Attempts to examine phonological awareness skills among young CWHI in general and those learning alphasyllabic orthographies are limited.

Participants: Groups of 6- to 7-year-old, CWHI using Oral-Aural mode of communication (CWHI – OA) or Total Communication (CWHI- TC) participated in the study. Their performance was compared with two groups of children with normal hearing (CWNH); one matched for age, i.e., 6-7 year olds' (CWNH – AM) and another matched for grade in school, i.e., grade - one (CWNH – GM; 5- to 6-year olds'). There were 10 participants in each of the four groups.

Tasks: Phonological awareness tasks included rhyme recognition, syllable segmentation, syllable deletion and phoneme deletion. Picture based stimuli along with verbal instructions (supported with gestures for children using total communication) were used for all tasks. Reading abilities were assessed using the Reading Readiness Test (RRT; Devaki Devi, 1978) and the reading subsections of the Reading Acquisition Profile-Kannada (RAP-K; Prema, 1998).

Results: CWHI – TC group performed significantly lower than CWHI-OA group and CWNH on phonological awareness and decoding tasks. CWHI–OA and CWNH-GM groups achieved similarly high scores on rhyme recognition and poor scores on phoneme deletion tasks. However, CWHI-OA performed higher than CWNH–GM on syllable awareness tasks of syllable segmentation and syllable deletion tasks. A significant positive correlation existed between phonological awareness skills (specifically syllable segmentation and syllable deletion) and reading of ‘akshara’ as well as word decoding skills. Similar to performance on syllable awareness tasks, the decoding skills of CWHI- OA were significantly higher than CWNH-GM and lower than CWNH-AM group studying in the higher grade. CWNH –AM group performed significantly higher than the younger CWNH –GM group and CWHI on phonological awareness and decoding skills.

Conclusion: Consistent with earlier research on older children (e.g., Sterne & Goswami, 2000), the findings reveal that CWHI are not precluded from developing phonological awareness skills. The primary mode of communication among CWHI impacts the development of phonological awareness skills and emergent decoding skills. Early experiences with spoken language both in terms of perception and production among CWHI using an oral-aural mode of communication facilitate their performance on phonological awareness and decoding skills. CWHI using total communication need additional support for developing phonological skills in general and syllabic awareness in specific and draw on these skills for learning literacy skills. The role of cueing and finger spelling on development of phonologic representations in CWHI needs to be investigated. The current findings lend support to suggestions that any phonological awareness instruction for facilitating decoding skills in alphasyllabic orthography may be implemented with an emphasis on awareness at syllable level. A study investigating the effect of intervention program including phonological and orthographic awareness activities on the decoding abilities of CWHI-TC group is currently underway.