

## Phonological Characteristics of Severe to Profound Hearing Impaired Children

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**Abstract :** In regard of phonological skills development importance and its influence on other aspects of language, this study has been performed. Determination of some phonological indexes in children with hearing impairment and comparison with hearing children was the objective. A sample of convenience was selected from a rehabilitation center and a kindergarten in Karaj, Iran. Participants consisted of 12 hearing impaired and 12 hearing children (age range: 5 years and 6 months to 6 years and 6 months old). Hearing impaired children suffered from severe to profound hearing loss while three of them were cochlear implanted and the others were wearing hearing aids. Conversational speech of these children was recorded and 50 first utterances were selected to analyze. Percentage of consonant correct (PCC) and vowel correct (PVC), initial and final consonant omission error, cluster consonant omission error and syllabic structure variety were compared in two groups. Data were analyzed with t test (version 16th SPSS). Comparison between PCC and PVC averages in two groups showed a significant difference ( $P < 0/01$ ). There was a significant difference about final consonant emission error ( $P < 0/001$ ) and initial consonant emission error ( $P < 0/01$ ) too. Also, the differences between two groups on cluster consonant omission were significant ( $P < 0/001$ ). Therefore, some changes were seen in syllabic structures in children with hearing impairment compared to typical group. This study demonstrates some phonological differences in Farsi language between two groups of children. Therefore, it seems, in clinical practices we must notice this issue.

**Keywords :** hearing impairment, phonology, vowel, consonant

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