THE STRUCTURE OF LIP-READING DIFFERENT LINGUISTIC STIMULI IN PRELINGUALLY DEAF CHILDREN

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recived: march'98.
accepted: september'98.

Original scientific paper
UDK: 376.33

The results of two (older and younger) groups of deaf children, attending different educational programs, in lip-reading four types of linguistic stimuli (nonsense syllables, isolated words, meaningful sentences and sentences expressing unexpected events) were factor analyzed. The results of the investigation showed that there was a difference in the structure of lip-reading ability between the two groups of deaf children. The structure of lip-reading ability was more differentiated in the group of older deaf children than in the group of younger deaf children. Possible explanations of the results are elaborated.

INTRODUCTION

The structure of linguistic stimulus itself may be considered as a factor influencing lip-reading achievement. On every level of complexity, from vowels and consonants in nonsense syllables, to meaningful words and sentences, there are certain properties of linguistic stimuli which are related in a particular way to lip-reading achievement.

It is known, for example, that lip-reading nonsense syllables in postlingually deaf adults (Hanin, cited in Boothroyd, 1988), as well as in prelingually deaf children (Bradarić-Jončić, 1997) is less accurate than lip-reading words and sentences. Deaf children achieve better in lip-reading isolated words than in lip-reading the same words in the sentence (Clouser, 1976; Erber & McMahon, 1976; Green, Green & Holmes, 1981; Beasly & Flaherty-Rintelmann, cited in French - St-George & Stoker, 1988; Bradarić-Jončić, 1997). Although sentences theoretically offer the lip-reader more contextual information, coarticulation effects make the borders between words and phrases less visible, and thus the lip-reading of words in sentential context becomes less successful (Erber, 1979). Regarding the number of syllables in a word, the children most successfully lip-read two-syllable words, then three-syllable words, while they most inefficiently lip-read monosyllable words (Erber, 1974), which do not contain enough visual cues for correct identification. The word functioning as a subject in a sentence is lip-read more easily than the word functioning as an object (Erber & McMahon, 1976; Bradarić-Jončić, 1997), and sentences of SVO structure are more successfully identified than sentences of OVS structure (Bradarić-Jončić, 1997). The length and syntactic complexity of a sentence significantly influence the lip-reading achievement of deaf children (Clouser, 1976; Schwartz & Black, cited in Erber, 1979). Sentences of OVS structure are linguistically more complex, especially in the Croatian language. Thus the child must know morphological rules well in order to understand the relationship expressed in the sentence, and this puts greater demands on his/her short-term memory. In addition, sentences of SVO structure are used more commonly in everyday communication and in the rehabilitation process than OVS sentences.

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