

# ABSTRACT BOOK

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# LECTURES & COMMUNICATIONS

### **HEAL 2018**

### Hearing Across the Lifespan

meaning of a word, to be able create conclusions and think abstractly, at the highest level, is required.

Aim: The aim of this stady was to examine the ability to define meanings of words of cochleary implanted (CIs) children and to determine whether there are differences in relation to their hearing peers.

Method: Sample group was consisted of 25 children with CI and 25 hearing children, ages 4 to 7. To test the ability to define a meaning of a word, the "Test for assessing the level of speech development" was used. Children had the task of defining the five most frequent nouns (mother, house, man, sun, life) appearing in the children's dictionary. The results of CI children were compared with the results of hearing children.

Results: The results show that both the CI children and hearing children have most correctly defined the word sun, then house, mother, man, with the word life being most incorrectly defined. Statistically significant differences in the group of CI children occurred in relation to hearing age, implantation occured and the duration of rehabilitation, but not to chronological age. Also, statistically significant differences appeared between CI and hearing children.

Conclusion: CI children show poorer results in defining meanings of the words, especially abstract ones, in relation to their hearing peers. It can also be concluded that the age of implantation, hearing age and duration of rehabilitation affect the understanding of meanings of words.

**Key words**: cochlear implant, meaning of words, children.

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### P.12.3

## **GESTURE FREQUENCY IN COMMUNICATION OF COCHLEAR IMPLANTED CHILDREN\***

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This study is observing both natural and learned gestures as a part of communication in hearing impaired children with cochlear implant and/or hearing aids, accompaning certain action or verbal statement.

The objective of the study was to observe the frequency of gesture use in deaf and hard of hearing children with different types of amplification Various impact factors affecting frequency of gesture use, such as gender, chronological age, onset of rehabiliation and educational settings were taken into consideartion as well.

The sample consisted of 40 children with severe to profound sensorineural hearing loss divided in two groups according to amplification type. Younger group consisted of children aged 5 to 10 years and older group 11 to 15 years. The cochlear implant group consisted of 18 children and hearing aid group of 22. The pairs of children with adjusted age and type of amplification have been filmed during play in the " shop "with ten objects or age appropriate toys. The videos were analyzed afterwards and communication has been classified as verbal, total or gestual. Word list has been based on video records.

The results have shown statistically significant advantage of boys regarding oral use of verbs (t(14) =2,569, p<0,0) and early rehabilitated children (oral use of verbs t(14) = 2,575, p<0,05 and pronouns t(14) = 2,763, p<0,05). Gesture use is more frequent in older children with conventional hearing aids. Younger children tend to use more words than gestures. Cochlear implanted children use considerably less gestures. Overall number of words and gestures used in communication increases over time..

Key words: cochlear implant, gesture, hearing aid, children

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