Benefit of telephone solutions for children and adults

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Abstract

"Children are not just small adults," is also true when using mobile hearing devices while listening to a phone as adults and children benefit from different approaches. Two recent approaches and trial benefits especially when using one of the latest hearing devices have been investigated in two studies: one with children and the other with adults. These different clinical studies highlight the potential of using mobile hearing devices for phone calls. The studies investigated different coupling methods between the mobile hearing device and the hearing aids, and the impact of an automatic directional system for telephony. Both studies used objective speech tests for the speech material presented via a phone receiver.

Participants & Methods

Age-group#1: 10 children: 2 – 5 years
- Phonak Naida Q90-SP
- Setup: 4 loudspeaker: 45° , 135° , 225° , 315°
- Mean age 72 years (range 57-83 years)
- How does speech recognition on the phone in quiet and in noise compare when using a monaural versus binaural listening condition? Participants are a group of adults using a wireless signal routing system?

Age-group#2: F [1, 40] = 11,4, p < 0,05) for both age groups.

Results

Speech recognition in quiet and in noise:

- Comparison of mean word recognition scores for age-group#1 between a monaural and binaural phone condition.

Discussion and Conclusion

In both studies participants showed substantial benefit using a mobile hearing device for telephony. The hearing aid signal to the world around was an important factor as greater benefit was provided on the better ear. Further, there are other devices on the market which could be considered for use as such devices provide higher benefit when the hearing aid signal is heard on the better ear.

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The study investigated automatic coupling methods between the mobile hearing device and the hearing aids, and the impact of an automatic directional system for telephony.

Speech: level 65 dB (KEMAR)