



**COMPARING LISTENING DIFFICULTIES OF SCHOOL-AGED COCHLEAR
IMPLANT USERS AND NORMAL-HEARING LISTENERS**

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Children diagnosed with severe to profound hearing losses can now receive a cochlear implant (CI) around their first birthday. The literature shows that long-term CI users can listen and learn to speak using electrical stimulation. This prepares them to achieve good academic proficiency as well. However, due to the limitations of CIs, children with CIs still struggle in difficult listening situations, for example, in noisy environments or when listening to music. These more challenging listening conditions are unfortunately typical for school, where CI users need to learn new information using degraded sounds via CIs. The objective of the study is to determine the listening difficulties in school-aged children using CIs and to compare them to those of their normal-hearing (NH) peers in school. The study has been recruiting ten mainstreamed school-aged children with CIs who received their implant early in life, before three years old, and use it every day for communication. For NH peers, ten age- and sex-matched school-aged children are also being recruited. All participants are native English speakers. Listening difficulties have been measured using a self-report with a 0 to 100 scale (no effort to extreme effort) along with structured questions with open answers to report their levels of fatigue in regards to different listening situations. The parents of both the children with NH and CIs are also being given a questionnaire composed of structured questions with open answers to determine specific listening environments that the children may struggle with. Preliminary results showed that NH children also struggle in challenging listening conditions such as classes where there are multiple talkers including the teacher and students. However, CI users have rated a higher effort compared to NH peers for listening situations such as understanding multiple talkers in noise, when given a new listening condition, and when listening in large groups. In this presentation, we will discuss the results of these questionnaires and how these results can help guide counseling and aural rehabilitation for students with CIs.