## THE CLASSROOM IN THE CLINIC:

An investigation into the feasibility of recreating a classroom listening environment in a clinical setting.

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## **ABSTRACT**

The main aim of this study is to establish if it is possible to create a listening environment similar to that of a classroom, when testing speech perception in children with a hearing impairment in a controlled or clinical environment. The assessment method used in this study is speech audiometry: firstly in the classroom and then in a quiet room with artificially generated background noise, to ascertain if the situations are comparable.

The research was undertaken with a small sample of four hearing impaired children, who use a range of different amplification methods, including behind the ear hearing aids, a bone anchored hearing aid and a cochlear implant. Data were collected by carrying out speech perception tests in different settings. The results were then analysed quantitatively, in order to compare and contrast the outcomes of each listening situation.

Key results were that background noise has varying effects on hearing impaired listeners and that all four participants missed speech sounds when speech perception was tested in the classroom. The artificially generated noise did not have as significant an impact on speech perception, as the background noise in the classroom, but the range of speech sounds affected were similar across all noise settings.

Main conclusions drawn were that it is possible to create a listening experience which is similar, but not exactly the same, as that of the classroom in a clinical setting. Nonetheless, results obtained in a clinical setting with artificially generated noise will give valuable information to the audiologist concerning how a hearing impaired listener may cope when listening in a classroom environment.