

**Hearing Aid Refusers Educated In Mainstream Secondary Schools:  
An evaluation of unaided access to speech and the social,  
psychological and educational impact for pupils with a mild or moderate  
hearing impairment.**

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## **ABSTRACT**

Just over two thirds (67.7%) of pupils, who are supported by children's hearing impaired services in secondary mainstream schools in England, have a mild or moderate hearing loss (British Association of Teachers of the Deaf 2004). These pupils are often those who reject, or resist, hearing aid use. The aim of this small scale research project is to identify the levels of speech audiometry accessed by these pupils, without the use of audiological enhancement and to gain an understanding of why these pupils choose not to wear their hearing aids, in order to seek to identify possible support strategies that could be offered to them.

To obtain the research sample, the Local Authority education service data base of 220 hearing impaired pupils was searched for those who fitted the following inclusion criteria: currently in secondary mainstream education (Year 7 to Year 11); bilateral permanent sensori-neural hearing loss categorised as mild or moderate loss; fitted with post aural behind the ear digital signal processing hearing aids for over 2 years and encouraged by health and education to wear hearing aids. Eighteen pupils, (7.8% of the service case load) were invited to participate in the research.

Quantitative data was obtained from speech audiometry using the Bamford Knowle and Bench (BKB) sentence test. This data was then correlated with audiometry results, obtained from audiology records, to identify if there was a relationship between good speech audiometry scores and rejection of hearing aid use. The results suggest that there appears to be a direct correlation between the two and that, as average hearing loss increases, average speech audiometry scores decrease. However, with a small sample no statistical conclusions can be made and variations are apparent. For example, one subject with a mild hearing loss appeared to perform well without hearing aids, whereas two other subjects (with similar hearing loss) displayed some difficulties listening in noisy situations. Qualitative data was obtained from a semi-structured interview. Interviews were analysed, using Colaizzi's technique, in order to establish any emergent themes. Five main themes emerged that affected hearing aid use: visibility of deafness; lack of confidence; coping with hearing impairment; using support and making a choice.

The key findings of the research are that, firstly, quantitative data from speech audiometry, especially in noisy situations, can highlight a need for hearing aid use that may not be realised by the pupil. Alternatively, it may identify where further testing is required, or show that the pupil is possibly correct in their belief that a hearing aid would not be beneficial to them. Secondly, individual pupil involvement through interview is imperative in establishing and agreeing support levels. This includes investigating why individual pupils reject hearing aids, exploring their perceptions about hearing aids, listening to their concerns and possibly helping to identify ways forward in hearing aid use, or self-help strategies. Such discussion allows pupils to then make informed choice as to whether they continue along the path of hearing aid rejection, or re-establish hearing aid use: whether permanently, or only on certain occasions.