

For pre-school children with post aural hearing aids: Do parents perceive a difference  
in listening and communication behaviour at home once fitted with a Radio Aid system  
for nine weeks

Ann Rayter  
June 2013

The Westminster Institute of Education at Oxford Brookes University

This dissertation is submitted in partial fulfilment of the requirements governing the  
award of Master of Science in Educational Audiology

## ABSTRACT

### **Background**

Radio Aid (FM) systems have historically been provided for deaf children in schools to access the curriculum. FM systems increase the signal to noise ratio (SNR) and give the speaker's voice better clarity and audibility. FM systems are not routinely provided for pre-school children and limited research and evidence is available to show benefit with FM in variable listening conditions in the home. The current study examines if a FM system makes a difference to listening and communication behaviour at home as perceived by parents.

### **Sample**

Three pre-school children aged three to four years with moderate to severe bilateral sensorineural hearing loss and parents were recruited into the study. Quantitative data was collected through the Parents Evaluation of Aural/oral Performance of Children (PEACH), which rates a child's listening and communication behaviour in quiet and noise, and qualitative data collected through a semi-structured questionnaire.

### **Results**

Key results were obtained for two children but the third child was reluctant to wear the FM system and excluded from the study, although parent's views were included. Compared with a baseline measurement with hearing aids a positive difference in listening and communication behaviour at home was observed when a FM system was used.

### **Conclusions and Recommendations**

Parents did perceive a difference in their child's listening and communication behaviour at home when FM was fitted. The cohort was too small to make generalisations, but comparison with outcomes of other studies showed a similarity in results. FM should be discussed as an option with parents when child was 12 months – from the age of mobility. Evaluation of a young child's amplification system should be holistic. Recommendations – wider research on FM with young children with ANSD and a modernisation of approach to give priority of access to FM for both pre-school and school age children.