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# The application of audiological measures for fitting hearing aids to South African children.

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Abstract

***Objective:*** The appropriate application of audiological measures during paediatric hearing aid (HA) fitting ensures the fitting is effective and provides speech audibility across the frequency range. Audiological assessment may include both behavioural and objective measures, such as auditory brainstem response (ABR) and auditory steady-state response (ASSR). ABR and ASSR measures however do not have a 1:1 correlation with behavioural measures, and correction values need to be applied to estimate behavioural thresholds prior to HA fitting. No study has previously described how South African audiologists are utilising ABR and ASSR results during paediatric HA fitting. This study aimed to describe the current South African audiological clinical practice for paediatric HA fitting, with specific reference to the application of ABR and ASSR measures. ***Design:*** The study employed a quantitative, non-experimental, descriptive, cross-sectional survey research design. ***Study sample:*** Thirty-four personal interviews with audiologists were completed, seven within the private health sector and 27 within the public health sector. ***Results:*** Results indicated that limited departmental protocols exist and adherence to available protocols was questioned. There was a lack of consensus regarding the application of correction values to ABR and ASSR measures for HA fitting and the values utilised often differed significantly from recommended guidelines. There appeared to be an over-reliance on electrophysiological measures for paediatric audiological assessment, as well as a lack of adherence to recommended age-appropriate assessment guidelines. ***Conclusion****:* Findings suggest the need for promoting improved clinical practice and knowledge within the area of paediatric audiology in South Africa. The need for the development of nationally-agreed guidelines was highlighted.

*Key Words:* Effective amplification; ASSR; ABR; paediatric HA fitting; South Africa.