

VALIDITY OF THE AUTOMATED AND INTERACTIVE HEARING SCREENING KIT IN ADULTS

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The study assessed the validity of the automated and interactive hearing screening kit (AutoKit) in adults as compared to the conventional hearing screening method using portable Pure Tone Audiometer (PTA). Subject inclusive criteria were, subject must be 18-year-old and above, and subject must not have visual, cognitive or physical problems that may affect ability in using AutoKit. A total of 96 adults, aged between 19- 79 years old were recruited among patients, their family members and staff of Jinjang Health Clinic, Kuala Lumpur. All subjects underwent otoscopic examination, hearing screening tests using the AutoKit and portable PTA and diagnostic audiometry at octave frequencies from 500Hz to 4000Hz. The results had shown the almost same sensitivity for AutoKit and portable PTA, which were 92.5% and 92.1% respectively. However, the specificity for AutoKit and portable PTA had a difference of 17.2%, which were 75.0% and 92.2% respectively. The inclusion and exclusion of 500Hz test results improved the specificity from 92.5 % to 89.2 %. Results suggest that the newly developed automated hearing screening kit is a valid screening tool. The 500Hz frequency is not suitable to be included in the screening kit as it increases the false positive rate.

Tan, K. H. 2010. Validity of the Automated and Interactive Hearing Screening Kit in Adults. Bachelor of Audiology Thesis. Universiti Kebangsaan Malaysia.