Unique Protocol ID: SE 312/2021

Brief Title: Adaptation of Pediatric Speech Audiometry Tests Into Other Languages

Official Title: Methodological Guide for the Adaptation of Pediatric Speech Audiometry Tests Into Other Languages

25 August 2025

Statistical analysis plan

Outcomes:

The primary outcome measure is the correlation between SRTs obtained with the adapted test and the PTA thresholds (500 Hz, 1, 2, and 4 kHz). Secondary outcome measures include test–retest reliability (intraclass correlation coefficients, ICC), internal consistency, sensitivity and specificity in identifying hearing loss.

Statistical Methods:

Statistical analyses are performed using SPSS V.25.0 (IBM Corporation, Chicago, Illinois). ROC analysis will be used to establish sensitivity and specificity of the test and optimal cut-off points for clinical decision-making and to quantify the diagnostic performance of the test (Zhou et al., 2011; Hajian-Tilaki, 2013).

Sample size calculation: To determine the required sample size, calculations will be performed using GPower (version 3.9.1.7), based on the significance test for the correlation coefficient.