

THE BENEFIT OF THE EDULINK ON SPEECH PERCEPTION IN NOISE AMONG SCHOOL-AGED CHILDREN

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This experimental research was conducted to measure the benefit of the EduLink FM system on speech perception in noise. Twenty-two normal hearing school children ages between 8;0 to 9;11 years participated in this study. The benefit of EduLink was investigated using P-MyHINT (Pediatric Malay Hearing In Noise Test) in two noise conditions i.e. first, using multitalker babble noise from side and back, and second using spectrally matched P-MHINT noise from the front. In each noise condition, speech perception test was conducted without the EduLink, with unilateral EduLink and bilateral EduLink fitting. Reception Threshold for Sentences (RTS), which was defined as signal-to-noise ratio (SNR) in which 50% of the speech sentences were correctly repeated, were measured in each test condition. The results showed EduLink usage produced significant reductions in RTS, compared to without EduLink, in noise condition from sides and back [$F(2,42) = 121.66; p < 0.001$]. Unilateral and bilateral EduLink usage reduced RTS by 7.80 dB and 9.11 dB respectively. Bilateral EduLink fitting produced significantly better RTS compared to that of unilateral EduLink. EduLink fitting did not reveal any significant difference in benefit, [$t(20) = 0.64; p > 0.025$]. No significant benefit in speech perception was obtained with EduLink usage in noise for front listening condition.

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