

## **BENEFITS OF UNILATERAL AND BILATERAL EDULINK FITTINGS ON SPEECH PERCEPTION IN NOISE IN 50 TO 60 YEAR-OLD ADULTS**

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The purpose of this study is to measure the benefits perceived from unilateral and bilateral EduLink frequency-modulation system on speech perception in multitalker babble noise among older adults aged between 50 to 60 years old. The study also measured the relationships between ear advantage score with benefits from unilateral and bilateral EduLink fittings. Twenty-four Malay subjects who fulfilled the inclusive criteria participated in the study. The Malay Dichotic Double Digit Test (MyDDDT- free recall) was used to measure the ear advantage score. Reception threshold for sentences (RTS) were measured in non-EduLink, right unilateral, left unilateral and bilateral fittings using the Malay Hearing in Noise Test (MyHINT). EduLink benefit was defined as the improvement in RTS with the EduLink usage as compared to without the EduLink. Results showed that the use of EduLink provided significantly lower mean RTS than in non-EduLink ( $p < 0.001$ ). The difference in benefits between unilateral and bilateral fitting, as well as the difference in benefits between right and left unilateral fittings were not significant ( $p > 0.05$ ). Additionally, there was no significant correlation between the ear advantage score and benefits of unilateral and bilateral EduLink fittings ( $p > 0.05$ ). In conclusion, results suggest that the use of EduLink FM system improves speech perception in noise for older adults. However, there was no difference between the benefits received from the three EduLink fittings. Moreover, the ear advantage scores could not be associated with the benefits perceived from the EduLink fittings.

Mannan, N. H. 2009. Benefits of Unilateral and Bilateral EduLink Fittings on Speech Perception in Noise in 50 to 60 Year-Old Adults. Bachelor in Audiology Thesis. Universiti Kebangsaan Malaysia.