

**COMPARISON OF PERFORMANCE-INTENSITY FUNCTION BETWEEN
DIFFERENT AGE GROUPS 7-12 YEAR OLD OF NORMAL HEARING CHILDREN
USING HEARING IN NOISE TEST**

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This study compared the reception threshold for sentences, RTS and performance-intensity function (PI function) in normal hearing children between 7 to 12 years old, using hearing in noise test (HINT). Forty five children consisting of 15 children in each group of 7-8, 9-10 and 11-12 years old participated in this study. RTS was measured in four conditions which were in quiet and noise (front, right, left) while PI function was measured in the three noise conditions. Results of this study showed that 7-8 years old group had significantly higher RTS than two older groups in quiet, noise front, noise right and noise left conditions while 9-10 and 11-12 year old had similar RTS (no significant different). Mean RTS and gradient of PI function according to words and sentences correct showed significant different in all HINT conditions. Mean scores and gradient of sentences and word recognition for the 7-8 years old were significantly different from the 9-10 and 11-12 years old. However, no significant differences were seen between the RTS and PI gradient of the two older groups. Negative correlation between RTS and suprathreshold recognition score indicated better word and sentences recognition correlated with better recognition score at suprathreshold. The findings of this study highlight the importance of developing different normative values for HINT in quiet, noise front, and noise left for the 7-8 years old. Meanwhile similar normative values can be used for the 9-10 and 11-12 years old.

Ibrahim, H. 2011. Comparison of Performance-Intensity Function Between Different Age Groups 7-12 Year Old of Normal Hearing Children Using Hearing in Noise Test. Bachelor of Audiology Thesis. Universiti Kebangsaan Malaysia.