

THE EFFECTS OF EDULINK USAGE ON THE DEVELOPMENT OF CENTRAL AUDITORY SYSTEM AND CLASSROOM BEHAVIOR OF CHILDREN WITH AUDITORY PROCESSING DISORDER (APD)

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Auditory Processing Disorder (APD) has been identified as one of the underlying basis of many learning problems, including specific reading and language disabilities among school children. FM EduLink system is a practical alternative in managing school children with APD as it enhances signal to noise ratio (SNR). Although the effects of EduLink usage on the maturation of auditory system have been studied, none has compared the effect of unilateral and bilateral EduLink usage on the maturity of auditory system. Therefore, this study measured and compared changes in the development of central auditory system and classroom behavior after the usage of EduLink in the control group (non-EduLink users), unilateral EduLink users and bilateral EduLink users. This study also aimed to measure the teachers and students perception towards the benefits of EduLink usage in classroom. A total of 53 school children aged 7;0 to 9;11 years old with APD were chosen and divided into three groups which were the control group, unilateral EduLink group and bilateral EduLink group. The development of central auditory system was assessed using Malay Double Dichotic Digit Test (DDDT) and Pitch Pattern Sequence Test (PPST). The Screening Instrument for Targeting Educational Risk (SIFTER) questionnaire was used in measuring changes in classroom behavior. Teachers and students acceptance towards the benefits of EduLink usage in classroom were assessed using Listening Inventory for Education (LIFE) questionnaire. Results showed there were significant differences between the experimental group (EduLink users groups) and control group at post EduLink usage in PPST test [$F(2,49)=6.405$, $p=0.003$] and in communication component of SIFTER questionnaire ($F(2,50)=5.804$, $p=0.005$). Results also showed that both teachers and students expressed a generally positive view and high acceptance towards the benefits of EduLink usage in classroom. In conclusion, EduLink might help to improve the development of central auditory system and classroom behavior of school children with APD. Thus, EduLink could be recommended as one of the options in the management of school-aged children diagnosed with APD.

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