PR3: Motor Performance and Functional Mobility in Children with Specific Learning Disabilities

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ABSTRACT

Introduction: Children with specific learning disabilities (SLD) may have problem in motor performance that can further lead to impaired functional skills. Nevertheless, the literature regarding motor performances showed an inconclusive finding. Thus, the aims of this study were to investigate the level of motor performance and functional mobility in children with SLD and to determine the influence of motor performance on the functional mobility. **Method:** A cross-sectional study was conducted on 148 children with SLD. The evaluation consisted of the Movement Assessment Battery for Children – 2 (MABC-2) and the Functional Mobility subtest from Pediatric Evaluation of Disability Inventory – Computer Adaptive Test (PEDI-CAT). The level of motor abilities and functional mobility were compared against an established normative percentile rank and standard T-score respectively. A linear regression was then conducted to assess the extent to which variance in motor performance (i.e. manual dexterity, aiming and catching and balance) could be accounted for functional mobility scores. **Results:** The results of motor performance tests by MABC-2 revealed that the children with SLD had no movement difficulties in manual dexterity (mean percentile rank=21.58), aiming and catching (mean percentile rank=30.05) and balance (mean percentile rank=33.25). The mean standard T-score for functional mobility was 49.49 and this indicated an average capability. The motor performance was accounted for 20% of variability in functional mobility scores. The performance in manual dexterity and balance can positively predict the ability in functional mobility among children with SLD. **Conclusion:** This study found that there were no significant movement difficulties in children with SLD as measured by MABC-2. However, there was a significant influence of manual dexterity and balance on functional mobility scores. Therefore, this study suggested that a comprehensive assessment of motor skills is important in order to detect any associated functional deficits in children with SLD.

KEY WORDS:
Assessment; balance; children; motor performance; specific learning disabilities

PR4: Single-Word Comprehension Amongst Malay-Speaking Patients with Aphasia Following Stroke: An Exploratory Study

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ABSTRACT

Introduction: This study aims to investigate processing of nouns and verbs comprehension in Malay-speaking adults with aphasia. **Method:** The performance of two groups of participants; control subjects and subject with aphasia were assessed via picture verification task. 14 Malay-speaking adults with aphasia, aged 28-64 years old (mean=50.70) and 20 control subjects with age-, gender- and education-matched, 28-71 years old (mean= 52.29) native speakers of Malay were recruited. 52 nouns and 32 verbs black and white picture cards, controlled for word length, imageability and familiarity were elicited. The subjects were asked to judge by saying 'yes' or 'no' whether the spoken words were the correct name for the picture shown. **Results:** ANOVA comparing the group of control subjects and people with aphasia (fluent and non-fluent) showed a significant difference between the groups (F(1,32)=14.50, p<0.05), a difference between nouns and verbs (F(1,32)=24.28, p<0.05), but no significant interaction (F(1,32)=2.82, p=0.10), showing that, as a group, people with aphasia showed poorer performance with verbs than nouns relative to control subjects. When comparing the groups of fluent and non-fluent aphasia, there was a significant main effect of group (F(1,18) =11.32, p<0.05), reflecting the much better comprehension of both classes of words by people with fluent aphasia. There was a significant main effect of word classes (F(1,18) = 13.54, p<0.05), because the subjects in both groups were less accurate with nouns than verbs. The interaction of group and word class was not significant (F(1,18)=0.27, p=0.61), indicating that the two groups showed a broadly equivalent degree of difficulty with verbs relative to nouns. **Conclusion:** This study highlights comprehension of verbs was found to be more difficult than nouns in Malay-speaking adults with aphasia.

KEY WORDS:
Nouns, verbs, aphasia, word comprehension, Malay language