Naming speed, phonological awareness and orthographic knowledge in children with and without dyslexia

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"Reading" can be identified as a complex cognitive process which leads people to become complete persons. Generally, children can acquire the ability to read when they are formally taught to read and write. But there is a special condition which prevents children from acquiring reading ability in spite of their average or above average intelligence, adequate reading environment and intact sensory organs. This condition can be identified as developmental dyslexia. The present study focuses on the reading ability of children with and without dyslexia. According to previous research findings, the reading ability can be measured through rapid naming skills, phonological awareness and orthographic knowledge of children. In this study major reading measures; Rapid Automatizing Naming (RAN), Phonological Awareness (PA) test and Orthographic Awareness (OA) test have been administered to 25 dyslexic children (age 8-14 years) and 24 aged-matched control group. I hypothesized there is a significant difference in children with and without dyslexia on reading measures, there is a significant relationship between the scores of RAN, PA and OA and RAN,PA and OA are important as predictors of reading achievement. Both accurate answers and time taken for completing tasks were analyzed by using the t-test, Pearson correlation and stepwise regression. The results revealed that there is a significant difference in children with and without dyslexia on reading measures other than colour naming, number naming and syllable reversal tasks. There is a significant negative correlation between RAN, phonological awareness and orthographic awareness scores. The results also showed there was a significant positive correlation between phonological awareness scores and orthographical awareness scores. The stepwise regression analysis showed that orthographic awareness and RAN-numbers were best predictors for word reading and OA for non-word reading in dyslexic children. Further, Phoneme deletion time taken was the best predictor for word reading and RAN-letters were the best predictor for non-word reading in non-dyslexic children.

According to the results of the present study, the hypotheses stated were accepted and results are matched with the findings of previous studies other than RAN –colours, number and syllable reversal.