ABSTRACT

Working memory is a prerequisite for learning. It is fundamental to perform and learn new skills. Deficit in working memory can affect almost all the activities of an individual. It equally affects the children with or without special needs. It may have more implications specifically in children with Mild Intellectual Disability (MID). Hence, the Investigator decided to attempt to understand which aspect of working memory affects academic achievement and language skills among children with MID. This will help educationist to plan education of these children in inclusive setup and the wastage of human resources can be minimized. The study was conducted on children with MID in NCR, Delhi region. Total 36 participants were considered for the final study. The study aimed to study the relationship between working memory – academic achievement (Hindi and mathematics) and working memory – language skills of children with MID. It also put the efforts to see if socio-economic status of parents has any influence on working memory. The investigator used standardized test of working memory, academic achievement (in Hindi and mathematics), language skills and socio-economic status. Appropriate statistics was used to assess and test the hypothesis. The results revealed that (i) the phonological short-term memory is good predictor of achievement in Hindi. It plays an important role in the academic success and functional skills of children with MID. (ii) Visual short-term memory is a predictor of achievement in mathematics; this also plays a significant role in learning the mathematics. Children use visual and spatial memory as a mental board for simple mathematical sums. (iii) Central executive is predictor of language skills. With this result, we can predict that keeping information in mind and processing at the same time plays a major role in language comprehension in children with MID. (iv) Socio-economic status does not play any role in the working memory of children with MID. These results emphasise intervention of working memory skills in academic achievement. It also emphasises the importance and need of curriculum modification according to the working memory components.

Key Words: Working Memory, Academic Achievement, Language Skills, Children with MID, Hindi, Mathematics