EQUIPPING MINDS: APPLYING A BIBLICALLY BASED CURRICULUM FOR IMPROVING WORKING MEMORY

Recent findings in neuroscience confirm the neuroplasticity of the brain. There has been strong interest in applying these discoveries to learners with learning disorders focusing on increasing working memory capacity. The aim of the present study was to explore the effectiveness of cognitive intervention with the Equipping Minds Cognitive Development Curriculum (EMCDC), based on Feuerstein’s theory of structural cognitive modifiability. Feuerstein’s theory states that a learner’s cognitive functioning can be modified through mediated learning. EMCDC is aimed at enhancing processing, working memory, comprehension, and reasoning abilities. Participants were learners with Specific Learning Disorders (SLD) Learners were randomly assigned into one of two groups. The active control group received small group intervention in academic subjects an hour a day five times a week for 7 weeks. The training group received small group intervention in the Equipping Minds Cognitive Development Curriculum an hour a day five times a week for 7 weeks. Both groups were tested on measures of working memory, verbal and nonverbal ability, and academic attainment before training and re-tested on the same measures after training. Analysis of the pre-to
post-test scores demonstrated significant (p<0.05) advantage of the training over the active control group on the KBIT-2 in verbal, nonverbal, and IQ composite, as well as far transfer effects in science. This study’s design could be replicated in multiple educational settings with other neurodevelopmental disorders. Key words: Neuroplasticity, cognitive development, Feuerstein, Equipping Minds, mediated learning, working memory, Specific Learning Disorders