Improvement of Word Problem Solving and Basic Mathematics Competencies in Students with Attention Deficit/Hyperactivity Disorder and Mathematical Learning Difficulties.

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Problem solving represents a salient deficit in students with mathematical learning difficulties (MLD) primarily caused by difficulties with informal and formal mathematical competencies. This study proposes a computerized intervention tool, the integrated dynamic representation (IDR), for enhancing the early learning of basic mathematical competencies and word problem solving skills. The goal was to compare and contrast the effects of IDR on the acquisition of informal and formal mathematical competencies in students with attention deficit/hyperactivity disorder (ADHD) and MLD. Participants were 216 students (6–9 years), who were classified into three groups: ADHD (n = 72), MLD (n = 82), ADHD and MLD (n = 62). They completed the Test of Early Mathematics Ability (Third Edition). The results showed that all three diagnosed groups improved significantly postintervention in all mathematical competencies, with the MLD-only group benefiting the most at posttest.