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Title Effect of Working Memory Training on Learning Ability of High School Students
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Abstract

In this study, we investigated whether working memory training has an effect on the improvement of basic skills in Mathematics and English among high school students. Forty-two high school students were divided into two groups, one with and one without working memory training. The training group received about 10 minutes of dual N-back task training per day for 10 days, excluding Saturdays and Sundays. To evaluate the effects of working memory training, three assessment tasks were used: mental arithmetic, writing English sentences, and backward digit reciting. The results showed that there was no significant difference in the effectiveness of training between the training and control groups. However, there was a little tendency of the effects of the training when it came to memorizing multiplication and reciting many numbers in reverse, which consume a large amount of working memory capacity. This seemed to be thought to be due to the short training program period and short time of training.