

An Experiment Research on the Effect of Brain-Break in the Classroom on Elementary School Students' Selective Attention

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Abstract : Introduction: Related research shows that students don't concentrate on teacher's speaking in the classroom. The d2 attention test is a time-limited test about selective attention. The d2 attention test can be used to evaluate individual selective attention. Purpose: To use the d2 attention test tool to measure the difference between the attention level of the experimental class and the control class before and after Brain-Break and to explore the effect of Brain-Break in the classroom on students' selective attention. Methods: According to the principle of no difference in pre-test data, two classes in the fourth-grade of Shenzhen Longhua Central Primary School were selected. After 20 minutes of class in the third class in the morning and the third class in the afternoon, about 3-minute Brain-Break intervention was performed in the experimental class for 10 weeks. The normal class in the control class did not intervene. Before and after the experiment, the d2 attention test tool was used to test the attention level of the two-class students. The paired sample t-test and independent sample t-test in SPSS 23.0 was used to test the change in the attention level of the two-class classes around 10 weeks. This article only presents results with significant differences. Results: The independent sample t-test results showed that after ten-week of Brain-Break, the missed errors (E1 $t = -2.165$ $p = 0.042$), concentration performance (CP $t = 1.866$ $p = 0.05$), and the degree of omissions (Epercent $t = -2.375$ $p = 0.029$) in experimental class showed significant differences compared with control class. The students' error level decreased and the concentration increased. Conclusions: Adding Brain-Break interventions in the classroom can effectively improve the attention level of fourth-grade primary school students to a certain extent, especially can improve the concentration of attention and decrease the error rate in the tasks. The new sport's learning model is worth promoting

Keywords : cultural class, micromotor, attention, D2 test

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