

Effects of Memory Skills Intervention on Student Performance

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Extensive research on memory interventions has confirmed their success with older people, but its effects on adolescents and their academic performance are relatively unexplored. The inability to memorize the learned materials was reported to be one of the key predisposing factors contributing to weak academic performance in student interviews.

In the current study, the effectiveness of a memory intervention is examined based on academic performance and perceived stress levels among students in a particular programme of the Hong Kong Institute of Vocational Education. Students were randomized into intervention and control groups with stratified sampling. Base line comparisons showed no significant difference in the academic performance and perceived stress level between groups. Psychological theories on why students forget what they have learned and memory strategies based on evidence-based empirical experiments (Vlach, Sandhofer & Kornell, 2008; Akerstedt, 1990; Smith & Rothkopf, 1984; Godden & Baddeley, 1975; Deese & Kaufman, 1957) were given to the intervention group at the beginning of the semester. Academic Performance was compared between intervention and control group after the end-of-semester examination. The intervention effect was significant in the examination scores between the two groups' comparison using General Linear Model. Compliance was proved to have a strong mediating effect on the improvement especially in students with weak academic performance in Multiple Regression Analysis. Focus groups were conducted again after the examination. All students in the intervention group found the intervention useful in helping them relieve stress, as reflected by the Perceived Stress Scale, and increasing their interest in studying, especially in science subjects that require a greater amount of memorization.

The current memory intervention not only can improve students' performance, but also reduce their stress level and may well enhance their motivation. This may assist future investigators to target interventions to students in specific disciplines and further enhance their learning experiences.

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