Effects of brain breaks video intervention of decisional balance among Malaysians with type 2 diabetes mellitus: A randomised controlled trial

ABSTRACT

Brain Breaks® are structured physical activity (PA) web-based videos designed to promote an interest in learning and health promotion. The objective of this study was to examine its effects on decision balance (DB) which consists of the perceived benefits (Pros) and perceived barriers (Cons) of exercise in people with type 2 diabetes mellitus (T2DM). A randomised controlled trial was conducted among people with T2DM at Hospital Universiti Sains Malaysia. The intervention group received Brain Breaks videos for a period of four months. The intervention and control groups completed the validated Malay version of DB questionnaire for five times, at pre-intervention, the first month, the second month, the third month, and post-intervention. Multivariate Repeated Measures Analysis of Variance was performed for data analysis. A total of 70 participants were included (male = 39; female = 31) with a mean age of 57.6 years (SD = 8.5). The intervention group showed a significant change in the Pros and Cons factors of DB scores over time. The intervention group showed significantly higher scores for the Pros (p-value < 0.001) and lower scores for the Cons (p-value = 0.008) factors than the control group. In conclusion, the Brain Breaks video is an effective intervention to improve decisional balance in patients with T2DM to help them in deciding on behaviour change to be more physically active.