Effects of technology-supported brain breaks videos on exercise self-efficacy among type 2 diabetes mellitus Malaysians

ABSTRACT

The technology supported Brain Breaks (BB) videos are a series of structured, web-based physical activity (PA) videos designed to promote learning and health. The purpose of this study was to investigate the efect of BB videos on exercise self-efcacy (ESE) among type 2 diabetes mellitus (T2DM) patients using the Malay-versioned exercise self-efcacy scale (ESE-M). The study used a double-blind research design and was randomised into two groups: (1) The Technology Supported BB intervention group, and (2) the control group. 70 T2DM patients with a mean age of 57.6 years (SD= 8.5) were recruited from Hospital Universiti Sains Malaysia. For 4 months, participants in the intervention group were required to undertake PA every day using the BB videos (approximately 10 min). Both groups completed the ESE-M at pre-intervention, the end of the frst month, the second month, the third month, and post-intervention. For the data analysis, a mixed factorial analysis of variance was used. The results showed that at the end of the intervention, the two groups' ESE was signifcantly diferent ($p < 0.001$). From pre- to post-intervention, the intervention group's ESE-M mean scores improved signifcantly. Technology-supported BB videos may be an efective strategy for improving ESE in T2DM patients.