

Usability Testing of a Self-Learning Computer Program on Exercise for Older Adults Used by Health Volunteers

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ABSTRACT

The purpose of this study was to test the usability, namely, the effectiveness in terms of exercise knowledge compared with a conventional training program, the efficiency and the satisfaction of the developed self-learning computer program (or the Computer-Assisted Instruction [CAI]) on exercise for older adults used by Health Volunteers (HVs). The samples were 63 HVs from Muang District, Chiang Mai Province. They were randomly assigned to the experimental group (31 HVs) and the control group (32 HVs). Data were collected using the Demographic Questionnaire, the Exercise Knowledge Questionnaire (EKQ), the Efficiency Regarding the Use of the Computer Program Questionnaire (EUCPQ) and the Satisfaction Regarding the Use of the Computer Program Questionnaire (SUCPQ). Data were analyzed using descriptive, two-way mixed-method ANOVA and paired t-test. The results showed that the exercise knowledge of HVs in the experimental group immediately after the training and after 3 weeks of using the CAI was statistically higher than that of before at $p < .001$ and $p < .05$, respectively. However, the findings showed that there was no statistically significant difference between the exercise knowledge of the experimental and control groups. Further results showed that there were 22 HVs who used the CAI for repeated learning at the mean time of 33 minutes. In total, they felt at ease and highly satisfied after using the CAI. The results suggest that the CAI holds promise as an option for HVs to learn health promotion knowledge.

Key words: Older adults, Exercise, Health volunteers, Computer-Assisted Instruction, Usability