

# Comparison of effects of self weight-control in mid-aged women with Problem-based learning and Subject-based learning

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## Abstract

Title : Comparison of effects of self weight-control in mid-aged women with Problem-based learning and Subject-based learning.

In Taiwan, the obesity prevalence in 45~64 years old women is 41.6 %, the purpose of this study was to compare the effects of problem-based learning (PBL) and subject-based learning (SBL) in community weight control programs.

This study used quasi-experimental design and convenient sampling. The subjects were overweight women ranging from 40~64 years old. Education intervention was 1 hour per week for 8 weeks in Taipei County. Thirty women in the experimental group used PBL and thirty women in the comparison group used SBL. The instruments used in this study were body measurements and a self weight control questionnaire.

Data analysis by SPSS Window 13.0 included chi-square and *ANCOVA*. The results showed that women in PBL groups decrease more waist width ( $F = 6.88, p = 0.011$ ) and obtained significantly better problem solving ability ( $F = 10.01, p = 0.003$ ) than SBL

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groups, especially in cause identification ( $F = 10.59, p = 0.02$ ) and prevention ( $F = 8.32, p = 0.006$ ).

Therefore, apart from the traditional SBL method, we suggest utilizing PBL in weight control programs, and institution-based or multimedia-based methods could be used in the future. Furthermore, we suggest that longitudinal studies should be conducted to evaluate long-term effects.

**Key words: mid-life women, problem-based learning, subject-based learning, weight control.**

