COHORT STUDY: A LONGITUDINAL PERFORMANCE EVALUATION OF PHYSICAL FITNESS PROMOTION PROGRAMS

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Abstract

Based on the researches, if teenagers acquire good sport cognition, it is likely they will develop better sport behaviors and excellent sport habits at the later time. As a result, cultivating accurate fitness cognition and attitudes so as to build regular exercise habits can not only change their sport participation behaviors but also enhance physical fitness. In addition, previous studies on physical fitness promotion had mostly focused on single physical fitness program or execution results of single fitness program implementation. Therefore, carrying out long-term performance evaluation of physical fitness promotion becomes an important research topic.

Ministry of Education (MOE) of Taiwan has promoted school fitness program for more than ten years. After shifting lots of resources in implementing these programs, how were the results? Were there any improvements in student fitness? Did students foster regular exercise habits? How about the fitness concepts of students? These were important issues concerned by the government, as well as those promoters. As a result, middle school students who were in growth phase were the subjects, using text analysis in order to construct key indicators in evaluating effectiveness of promotion fitness programs. Purpose: The purposes of this study were to get the status of MOE in promoting fitness program, analyzing student fitness test results, probing into the differential analysis from student fitness tests, as well as using Latent Growth Curve Modeling (LGC) analysis in order to evaluate beneficial results of the implementation of MOE fitness programs.

Method: Middle school students who were in first, second and third grades in year 2010 were the subjects. Based on the proportion of student in each county, stratified cluster sampling was used to collect data. 3,797 validation samples were collected, and validation rate was 95.88%. Result: The results were as below: 1. Promotion of school fitness programs was in good condition, but sports participation and physical activity of students still needed to be improved. 70 percent of students felt that school sports culture was good; 86 percent of students affirmed that fitness promotion was a good policy; 70 percent of students felt that the performance of fitness programs was

good, but there were only 50 percent of students started to foster regular exercise habits due to the promotion of fitness programs, 2. There had been a marked decline in the fitness test performances. Male?s performance in flexibility, explosive power, and cardio respiratory fitness was shown decline, so was female?s performance in muscular strength/muscular endurance, explosive power, and cardio respiratory. 3. Middle school students in different demographic were different in fitness attitude, cognition test and regular self-confidence. Fitness attitude and regular exercise self-confidence of male were better than female; Students in lower grades had better fitness attitude and regular exercise self-confidence than students in higher grades, whereas fitness cognition test of higher grades was better than lower grade students. Those who participated in sports club had higher fitness attitude and regular exercise self-confidence than those who did not. For those who regularly exercise had better fitness attitude and regular exercise self-confidence than those who had no regular exercise habit. 4. According to the analysis of fitness LGC Modeling, the model was fit, but there was only a positive slope of 3.00 in fitness cognition test, while slopes for the fitness attitude and regular exercise selfconfidence were negative, -.05 and -.08 respectively.

Conclusion: Consequently, government should reexamine the fitness promotion activities and strategies, strengthen the effectiveness in fitness assessment tracking, in order to improve the beneficial results of school fitness.