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# Cohort Study: A Follow-Up Performance Evaluation of the Ministry of Education's Physical Fitness Promotion Programs

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## Abstract

The Ministry of Education (MOE) has promoted school fitness programs for over 10 years. After shifting resources to implement these programs, the results were examined. These are important issues concerning both the government and promoters. The purpose of this study was to establish the status of the MOE in promoting fitness programs, analyzing student fitness results, probing differential analysis among student fitness tests, and using Latent Growth Curve (LGC) analysis to evaluate the benefits of the implementation of the fitness programs. Middle school students who were in the seventh, eighth, and ninth grade in 2010 were the subjects of our study. Stratified cluster sampling was used to collect data and was based on the proportion of students per county. The study collected 3,797 validation samples with a validation rate of 95.88%. The following results were obtained: (1) The promotion of school fitness programs was successful, but physical activity and sport participation needed improvement. (2) Both young men and women showed a marked decline in their fitness test performances. (3) Middle school students in various demographics showed varying results in their fitness cognition tests, attitudes, and self-confidence. (4) The fitness LGC model showed a positive slope of 3.00 in fitness cognition tests, but slopes for fitness attitude and exercise self-confidence were negative (-0.05 and -0.08, respectively).

Consequently, to reap the benefits of school fitness, the government must reexamine the fitness promotion activities and strategies used and strengthen the effectiveness of the fitness assessments.

**Keywords:** cohort study, latent growth curve modeling, performance evaluation, physical fitness

