

UNIVERSITI TEKNOLOGI MARA

**THE EFFECT OF STRUCTURED
EXERCISE ON HEALTH RELATED
FITNESS COMPONENTS IN ACTIVE
HIGH SCHOOL STUDENTS**

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ABSTRACT

Introduction: Structured exercise is the exercise training or physical activity that using of any bodily movement which is produced by a skeletal muscle contraction. The production of the movement causes energy expenditure. **Purpose:** The purpose of this study was to compare the effect of structured exercise on health related fitness among daily active high school students. **Method:** A total of 70 daily active high school students age from 13 to 17 years old were recruited to complete this six weeks exercise training program. The subjects are randomly divided into two, control group and intervention group. Before randomly assigned in group, subjects were undergoing a pre test at the beginning and post test at the end. The fitness tests consist of body composition, muscular endurance, muscular strength, cardiovascular endurance and flexibility. The intervention group was going through a six weeks training program consists of aerobic, anaerobic and flexibility training. The subjects were trained for two days per week. Meanwhile the control group was provided with diary to record their daily activity and heart rate. The data was analyzes using SPSS statistical software. Independent t-test is used to asses any differences between structured and control group. The paired t test used to measure the differences of pre and post result. **Result:** The result from study showed there were significant different in cardiovascular endurance among male subjects ($p < 0.033$). However, female subject also showed significant different in muscular endurance ($p < 0.001$) and flexibility ($p < 0.020$). **Conclusion:** As a conclusion, structured exercise may improve the cardiovascular endurance, muscular endurance and flexibility. However, there were only giving an effect on muscular endurance and flexibility in female subject, and effect on cardiovascular endurance on male subjects.