

The Effects of Aerobic Dance with 9 Square on the Cardiovascular Endurance System and the Percentage of Body Fat

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Abstract

This experimental research was one group pretest-posttest design. The purpose of the study was to compare the effects of Aerobic Dance with 9 Square on the cardiovascular endurance system and percentage of body fat before and after the implementation. Simple random sampling was employed to select a sample group of fifty students who studied in Silpakorn University and enrolled in the Principle of Exercise for Health course in the first semester of 2012. The main instrument was aerobic dance with 9square program. The samples were trained by aerobic dance with 9square program for eight weeks, three days a week (Tuesday, Wednesday, Thursday), one hour a day (17.00-18.00 hours) Pre- and Post-tests were implemented before and after the experiment to test the subjects' cardiovascular endurance and percentage of body fat. Statistics used in analyzing data were frequency, percentage, mean, standard deviation, and t-test dependent. The results showed that aerobic dance with 9square program had a positive impact on cardiovascular endurance and percentage of body fat. Subjects' heart rate while exercising was 137.74 BPM (beat per minute), and after training, it was 113.04 BPM. It showed that students' cardiovascular endurance, and percentage of body fat after training was proved significantly better than the result before training statistically ($p < .05$).

Keywords: aerobic dance, nine-square, cardiovascular endurance system, percentage of body fat

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Introduction

Being healthy is everyone's wish such the saying that "Without disease is a precious fortune." Being healthy combined with good mind contributes to effective people. In this current innovative society, "Sedentary behavior" is technology that allows people more conveniences and little movement, which is known as. Each day, less people move their body, which cause more risk to be suffered from NCDs, non-communicable diseases. They are grouped in relation to human's routine, and behavior that many cause, such as, heart attack, circular problems, diabetes, breast cancer and intestinal cancer. This brings more burdens on high expense but less physical efficiency to deal with work. In order to reduce risk of the aforementioned diseases, aerobic dancing boosts vascular circulation and lungs to absorb more oxygen. Aerobic dance with 9 square gives patterns of movement to brain which help it to be more systematic. This project is an experimental research about results from Aerobic dance with 9 square on physical efficiency, vascular circulation endurance, and fat percentage of body of Silpakorn's students. The experiment lasts 8 weeks and both before and after the experiment. This study also compares the endurance of vascular circulation and fat percentage in body before and after Aerobic dance with 9 square.

Literature Review

Physical Efficiency means an ability to control and command body to do activities and work effectively, can be recovered and enthusiastically without being exhausted or fatigue. Instead, body's power in a short minute. To set proper exercise for each person, it is necessary to consider many elements to be proper for their physical and goal (Krabuanrat, 2006). General knowledge of exercise consists of exercise intensity, period of time, frequency which can be applicable to people's real lives. Likewise, People of all ages enjoy dancing without repetition and the dance gives them patterns in their brain to be more creative and imaginative. They also scaffold what they have learned and be examined their endurance from the exercise in a short period of time.



Picture 1 and 2 aerobic dance with 9 square

Conclusion

According to the result of the experiment, it explains that aerobic dance is making movements with different rhythm that dancers can be creative in their moves. Thus it is suggested that people should exercise regularly in order to not only activate brain to be imaginative enhance change in vascular circulation and fat percentage in body.



Picture3 Fat percentage measured by TANITA



Picture 4 YMC -3 Minute Step test

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