

EFFECTIVENESS OF AEROBIC TRAINING ALONG WITH RESISTANCE EXERCISE ON BMI AND DEPRESSION IN SUBJECTS WITH OBESITY-SIMPLE EXPERIMENTAL STUDY

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ABSTRACT

Background: Obesity is defined as “abnormal excessive fat (adipose tissue) accumulation that may impair health. Obesity is usually defined by using weight and height to calculate “body mass index” (BMI). It is often a major risk factor for the development of several non-communicable diseases, significantly disability and premature death. It is due to sedentary lifestyle changes, modern technologies and junk foods. It is major health hazard in later years.

Objective: The Study’s primary objectives was to determine the combined effectiveness of Aerobic training along with Resistance exercise to reduce BMI and Depression on subjects with obesity.

Subjects and Methods: The study design is a Simple experimental study. The 15 subjects were selected based on inclusion and exclusion criteria. Obese female were selected between the age group of 20-35 years. Following the baseline testing of Body mass index (BMI) ranging between 20-34.9kg/m² and Beck’s Depression Inventory (BDI) Scale for Depression. The Intervention consist of Aerobic training along with Resistance exercise. Aerobic training was given for 25 minutes for 6 days per week for 12 weeks, Along with Aerobic training the Resistance exercise were given for 20 minutes. Total treatment duration was 12 weeks. Pre-test and Post-test measured by using Body mass index (BMI) and Beck’s Depression Inventory (BDI) for depression.

Result: The results shown that, the statistical values were calculated using the paired ‘t’. The pre- test mean and standard deviation of BMI were 32.6 and 0.45 and post- test mean and standard deviation of BMI were 26.9 and 0.59. Thus the calculated ‘t’ value 11.95 which was greater than table ‘t’ value – 2.145. The pre- test mean and standard deviation of BDI were 24.2 and 0.96 and post-test mean and deviation 17.2 and 0.72. Thus, the calculated ‘t’ value 11.10 which was greater than the table ‘t’ value 2.145. Thus the statistical analysis of the study showed significant reduction in BMI and depression after Aerobic exercise along with resistance exercise.

Conclusion: There is significant reduction in BMI and Depression following the application of Aerobic training along with Resistance exercise for 12 weeks among obese subjects. This study was concluded that the Aerobic along with Resistance exercise is effective to reduce the Body mass index (BMI) and Depression among obese subjects.

Clinical Implication: Aerobic training is found to produce a significant effect when combined with Resistance exercise on Body mass index (BMI) and Depression in subjects with obesity.

KEYWORDS: Aerobic exercise, Resistance exercise, Body mass index (BMI), Beck's Depression Inventory (BDI) Scale.

Article History

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