

92 THE EFFECTS OF PILATES EXERCISE ON BLOOD PRESSURE AND SELECTIVE PHYSICAL FITNESS COMPONENTS IN SEDENTARY OVERWEIGHT FEMALES

Zeinab Omid Ali, Fahimeh Esfarjani, Effat Bambaiechi, Mohammad Marandi *Faculty of Physical Education and Sport Sciences, University of Isfahan, Isfahan, Iran*

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The purpose of this study was to examine the effects of 8 weeks Pilates exercise programme on blood pressure and selective physical fitness components in sedentary overweight females. Thirty sedentary overweight student females (mean \pm SD; age: 26 ± 3 years, body mass: 65.9 ± 5.8 kg, height: 1.58 ± 0.08 m, BMI: 26.2 ± 1.8 kg/m²) from Isfahan University participated in this study. Subjects were randomly assigned to either the experimental (n = 15) or control group (n = 15). The experimental group participated in 8 weeks Pilates class, which met for 1 h three times per week, while the control group was prevented from any sport activity and just participated in pre- and post-testing. Systolic and diastolic blood pressure, percentage of total body fat, handgrip, flexibility, aerobic power, abdominal endurance and waist circumference were assessed. There was a significant decrease in fat percentage, fat body mass and waist circumference in the experimental group after 8 weeks Pilates exercise by 7.3%, 8.5% and 4.6%, respectively ($p < 0.05$). Aerobic power, abdominal muscular endurance and hand grip in experimental group compared to control group significantly increased by 12.3%, 9.8% and 23%. In addition, flexibility consists of sit and reach and shoulder reach test in experimental group compared to control group significantly increased by 28% and 22%, respectively ($p < 0.05$). There was no significant difference between experimental and control groups in total body weight, body mass index, lean body mass and systolic and diastolic blood pressure ($p > 0.05$). It is concluded that sedentary females may experience improvement in some physical fitness components and significantly decrease in body fat and waist size following 8 weeks Pilates exercise programme.