THE EFFECT OF AN AEROBIC TRAINING ON PERCEIVED STRESS, ANXIETY AND DEPRESSION OF NON-ATHLETE FEMALE STUDENTS

Abstract
The aim of this study was to study the effect of an aerobic training on perceived stress, anxiety, and depression of non-athlete female students. Statistical population of this research included all non-athlete female students of Guilan University who participated in general physical education training credits for the second semester. 40 non-athlete female students of the same age, educational level and marital status were selected by simple random sampling and divided into two groups: experiment and control (each group included 20 students). After this division, independent variable of physical activity was used for experiment group. Control group received no training. Subjects performed aerobic training 2 sessions per week, for 10 weeks. Pre- and post test measurements were used for both groups. Three questionnaires were used in this study. Spielberger state-trait Anxiety Inventory (STAI-Y) (1970) to measure anxiety including 40 questions, Beck Depression Inventory (BDI), to evaluate depression including 21 questions, and finally Perceived Stress Scale (PSS-14) (Cohen et al. 1983) including 14 questions were used. In this study, validity of the questionnaires, by using Chronbach Alpha, were determined as 0.72, 0.81 and 0.63, respectively. Independent T-tests and Multivariate analysis of Variance were used for data analysis. Results of the study showed that those students who have participated in aerobic training which was designed by researchers, had less stress, state-trait anxiety, and depression than before. This indicates the positive effect of an aerobic training period on students’ anxiety, depression, and stress. This issue becomes more important when no change has been observed in control group students, who have not participated in aerobic training, regarding stress, depression, and anxiety. Considering the results of the study, it seems that one of the most useful ways to cope with stress, depression, and anxiety is participating in exercise training especially aerobic ones.

Key words: aerobic training, anxiety, depression, stress