THE EFFECTS OF SLOW AND FAST CLASSICAL MUSIC ON THE AMOUNT OF PHYSICAL AND MENTAL FATIGUE IN NONATHLETE GIRL STUDENTS

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Recent researches showed there are many factors that can affect motor performance and one of the most important of them can be music. The aim of this research is to consider the effects of slow, fast classical music on physical, mental fatigue degree in girl students of general physical education Course in 2nd term of 84-85. In order to do this study, 36 non athlete students aged 23±2 years were chosen randomly. A pretest was performed on subjects in a way that pedaling on ergometer cycle was executed in a 20 watt power, then after each minute, 10 watts was added to workload so that they became exhausted. According to the pretest data, subjects were assigned in 3 groups (slow music, fast music and control) included 12 subjects in each one. Two experimental groups were doing the exercise as they listened to music by headphone. Exercise period included 5 weeks and 2 sessions in a week. Finally post test was completed. In this research in addition to evaluate physical and mental fatigue by the time to reach exhaustion, we used laboratory apparatus such as Finger Tapping Test and Chart for Continual Naming of Colors Test (made by Yagami International Company) in order to measure physical and mental fatigue. In according to the instructions of tests, music groups showed less physical and mental fatigue than control group. In order to analyze the data, one way variance analyzes was used. The results suggested that the classical music with slow and fast rhythm delayed the time to reach exhaustion subjects significantly (p= 0.028). Also, slow and fast classical music has a significant additive effect on final workload of subjects (p= 0.022). And also, slow and fast classical music has a significant additive effect on H.R of exhaustion of subjects (p= 0.013). There was no significant difference between fast and slow music for reaching to exhaustion time, final workload and H.R of exhaustion (p= 0.916, p= 0.755, p=0.360). The results of the data analyzes confirmed the results of laboratory tests. It concluded that listening to music and doing exercise simultaneously, leads to increased performance and enhanced the time to reach exhaustion. These results support the perceptual narrowing theory such as parallel informative processing (Rejesky 1985) and Sterbruk Cues utilization theory.

Keywords: Music, Fatigue