An Analysis on the Acute Effects of Blood Lactate Level and the Exercises Performed with Different Loading-Intensity on the Performance of Hand-Eye Coordination

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ABSTRACT The purpose of this research is to investigate the acute effects of the exercises performed at the intensity of seventy percent and ninety percent on the performance of hand-eye coordination, and to examine the relationship between blood lactate level and the performance of hand-eye coordination. Twenty-one male athletes participated in this paper voluntarily. In the analysis of the data, Paired T-test and Pearson's Correlation Test were used. As the result of the statistical analyses, a significant difference was found between the exercises performed at the intensity of seventy percent and ninety percent during the turning and placement tests (p<0.05). A significant positive relationship was found between the blood lactate level measured after the exercise performed at the intensity of ninety percent and the hand-eye coordination (turning test) measured 20 seconds after the measurement of lactate level (p<0.05). Consequently, it can be stated that the performance of hand-eye coordination during the exercises with high intensity was affected in a negative way with the increase in lactate; thus, such points should be taken into consideration while planning the training programs.