

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

Halil Ibrahim Ceylan, Ozcan Saygin and Kemal Goral

Mugla Sitki Kocman University, Faculty of Sport Sciences, Mugla, Turkey

KEYWORDS Athletes. Exercise Intensity. Hand-Eye Coordination. Lactate Levels. Male. Treadmill

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.