ABSTRACT

Aim: The aim of this study is to investigate the relation between heart rate and shooting performance in elite archers. Method: 12 licenced archers joined to the study voluntarily. Heart rate volumes and shooting scores during shooting were taken by forming atmosphere of “Individual Elimination Shots” as Hall Archery Competitions. This atmosphere was applied on 5 series of shots with 3 arrows in 18 m distance. Heart rate volumes were taken by using “Garmin Premium Heart Rate Monitor”. In statistical analysis of datas, “Pearson Correlation Analysis” was used in order to define the relations between heart rates in each series and shooting scores. Findings: These were calculated from Archers that mean age 20.91±1.37 years, height 175.83±6.79 cm, weight 71.5±7.79 and archery experience 8±1.12 years. When examined the relation between archers’ heart rates and shot scores, No statistical association was found in all series (p>0.05). Discussion-Result: when examined the findings in the study and literature, it can be said as the reason for failure to observe changes in heart rates during shooting that athletes’ physical strength situations were at optimal level. Additionally, in some researches supported our study, it was claimed that if the physical strength required in the archery was sufficient, the heart rate slowed down; however if heart rate was affected when the physical strength was insufficient, and therefore the attention and time were affected. Forward studies may be suggested to take into account the strength factors affecting shooting performance in archery. Key Words: Archery, Heart Rate, Shooting Performance