

Comparison of Isokinetic Powers (Flexion and Knee Extension) of Basketball and Football Players (Age 17-20)

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Abstract : The objective of this study is to compare flexion and extension movements in knee-joint group by measuring isokinetic knee power of amateur basketball and football players. For this purpose, total 21 players were included, which consist of football players (n=12) and basketball players (n=9), within the age range of 17-20. After receiving the age, length, body weight, vertical jump, and BMI measurements of all subjects, the measurement of lower extremity knee-joint movement (Flexion-Extension) was made with isokinetic dynamometer (isomed 2000) at 60 o/sec. and 240 o/sec. angular velocity. After arrangement and grouping of collected information forms and knee flexion and extension parameters, all data were analyzed with SPSS for Windows. Descriptive analyses of the parameters were made. Non-parametric t test and Mann-Whitney U test were used to compare the parameters of football players and basketball players and to find the inter-group differences. The comparisons and relations in the range $p<0.05$ and $p<0.01$ between the groups were surveyed. As a conclusion, no statistical differences were found between isokinetic knee flexion and extension parameters of football and basketball players. However, it was found that the football players were older than the basketball players. In addition to this, the average values of the basketball players in the highest torque and the highest torque average curve were found higher than football players in comparisons of left knee extension. However, it was found that fat levels of the basketball players were found to be higher than the football players.

Keywords : isokinetic contraction, isokinetic dynamometer, peak torque, flexion, extension, football, basketball

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