

原著論文

大学バスケットボール選手における
輻輳開散運動の潜時と速度に関する実験的研究

An experimental study on the latency and velocity of vergence eye movements
in university basketball players

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Abstract

The purpose of the present study was to examine the latency and velocity of vergence eye movements in university basketball players when shifting their gaze in the depth direction. Data from 77 college basketball players (35 female and 42 male) were analyzed in this study. They were classified as 31 regular players (17 female and 14 male) and 46 non-regular players (18 female and 28 male). In the experiment for measuring vergence, the participants were asked to shift their gaze as quickly as possible to the onset of light emitting diodes located at distances of 20 and 150 cm. Horizontal movements of the left and right eyes were recorded respectively with the electro-oculogram and then vergence parameters such as latency and peak velocity were calculated. The differences in these parameters due to group, gaze direction, and gender were examined. The results of analysis of variance indicated that vergence latencies were shorter in regular players than in non-regular players. Peak velocities were higher in convergence than in divergence. There was no gender difference in the vergence parameters. The present study suggests that basketball players with more match experience could shift their gaze quickly in the depth direction.

キーワード バスケットボール, 両眼眼球運動, 潜時, 輻輳開散運動
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