

COMPARISON OF DYNAMIC VISUAL ACUITY BETWEEN ELITE MALE AND FEMALE ATHLETES

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Abstract

Visual ability plays an important role on performance in fast-ball sports such as baseball or fast-pitch softball. Dynamic Visual Acuity, DVA, is one of the most important visual ability in fast-ball sports, which requires the ability to capture a ball moving at a high velocity. DVA was defined as the ability to resolve detail when there is relative movement between the observer and the target object. Therefore, the purpose of this study was to compare DVA between elite male baseball players and elite female softball players. 17 baseball elite players and 15 softball elite players with international level tournament experience voluntarily participated in this study. ATHLEVISION software was used to measure DVA ability. The Kruskal-Wallis one-way analysis of variance by ranks and Dunn's multiple comparison procedure were used to analyze all data. The result indicated that elite male baseball players has significantly better DVA ability than elite female softball players ($p < .05$). The finding suggested that there was a gender difference in DVA, and male athletes were significantly superior to female athletes.

Keyword : DVA