

High performance vision training improves batting statistics for University of Cincinnati baseball players.

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Abstract

PURPOSE:

Baseball requires an incredible amount of visual acuity and eye-hand coordination, especially for the batters. The learning objective of this work is to observe that traditional vision training as part of injury prevention or conditioning can be added to a team's training schedule to improve some performance parameters such as batting and hitting.

METHODS:

All players for the 2010 to 2011 season underwent normal preseason physicals and baseline testing that is standard for the University of Cincinnati Athletics Department. Standard vision training exercises were implemented 6 weeks before the start of the season. Results are reported as compared to the 2009 to 2010 season. Pre season conditioning was followed by a maintenance program during the season of vision training.

RESULTS:

The University of Cincinnati team batting average increased from 0.251 in 2010 to 0.285 in 2011 and the slugging percentage increased by 0.033. The rest of the Big East's slugging percentage fell over that same time frame 0.082. This produces a difference of 0.115 with 95% confidence interval (0.024, 0.206). As with the batting average, the change for University of Cincinnati is significantly different from the rest of the Big East ($p=0.02$). Essentially all batting parameters improved by 10% or more. Similar differences were seen when restricting the analysis to games within the Big East conference.

CONCLUSION:

Vision training can combine traditional and technological methodologies to train the athletes' eyes and improve batting. Vision training as part of conditioning or injury prevention can be applied and may improve batting performance in college baseball players. High performance vision training can be instituted in the pre-season and maintained throughout the season to improve batting parameters.

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