ELS Poster Day Application 2019

Reference: Dendy DW, James CR, Brooks T, Lierly M, et al. Case Study: Effect of stroboscopic vision training during a softball season

Context: In today's sports world, every advantage is needed to enhance sports performance. Current literature is emerging using stroboscopic visual training to improve visual perceptual abilities. No current research is available to show how this visual training affects softball.

Objective: The research question was how to implement a stroboscopic training in a softball season. More specifically, could such programming be implemented in a practical way while positively influencing performance with batting average statistics and have changes occur during visual testing.

Design: A case study was conducted with pre- and post-visual perceptual exams. Batting and fielding percentages were compared to a season of no training versus stroboscopic training year.

Setting: The study took place during a high school softball season. The training sessions took place in the evening or weekends.

Specimens, Patients or Other Participants: Single case study of a 16 y.o. female softball athlete in her sophomore year of high school.

Intervention(s): The participant went through 2-3 times a week of using the stroboscopic vision glasses during hitting and fielding drills. This took 10-15 minutes per session.

Main Outcome Measure(s): On-field performance was assessed using her batting percentages comparing her freshman year (no visual training), to her sophomore year (visual training). In addition, pre- and post- vision perceptual tests were done at a vision center.

Results: Freshman year batting average to her sophomore year increased from .184 to .436. The on-base percentage increased from .326 to .500 in her 2nd year of hitting. Data are still being analyzed from vision testing.

Conclusions: Batting average did increase after her sophomore year using the stroboscopic glasses. Vision testing still being analyzed.