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Comparison from Dynavision Training on Concussion Vital Signs Performance

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Fahrner, Wheeler, Bruce. Comparison from Dynavision Training on Concussion Vital Signs Performance [SMAHS. 2017;3(1), UG Abstract

Comparison from Dynavision Training on Concussion Vital Signs Performance

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CONTEXT

This study was done because there is an absence of data and research related to the Dynavision. The Dynavision is a light board that trains and records reaction time and trains central and peripheral vision. Concussion Vital Signs is an online neurocognitive test that measures Visual Memory, Visual Memory, Psychomotor Speed, and Reaction time.

OBJECTIVE

The purpose of this study was to determine if training on the Dynavision three days a week for six weeks has an effect on Concussion Vital Signs performance.

DESIGN

Randomized Control Trial (RTC)

SETTING

Athletic Training Laboratory

PARTICIPANTS

College-aged students picked from a convenience sample of athletic training students n = 22 (males: 10 females: 12) (Age: mean = 22.45 sd: ± 3.33).

INTERVENTION

Six weeks of training sessions on the Dynavision.

MAIN OUTCOME MEASURES

Change in Concussion Vital Signs scores

RESULTS

Dynavision training had a positive correlation on CVS reaction time scores. Paired t-test results CVS Reaction time (.001), CVS Shifting attention Correct reaction time (.090). Pearson r for all four reaction time tests were positive and showed an increase.

CONCLUSIONS

Dynavision training did improve reaction time scores on Concussion Vital Signs. The training did not affect any other test batteries on CVS. Some more research needs to be put into CVS.

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KEY WORDS: reaction time, neurocognitive assessment