Comparison from Dynavision Training on Concussion Vital Signs Performance

Kristina M. Fahrner
*Wright State University, fahrner.2@wright.edu*

Brian M. Wheeler
*Wright State University, wheeler.109@wright.edu*

Scott L. Bruce
*Wright State University, scott.bruce@wright.edu*

Follow this and additional works at: [https://scholarworks.bgsu.edu/jsmahs](https://scholarworks.bgsu.edu/jsmahs)

Part of the Biomechanics Commons, Exercise Science Commons, Motor Control Commons, Other Kinesiology Commons, Rehabilitation and Therapy Commons, Sports Medicine Commons, and the Sports Sciences Commons

**Recommended Citation**
Fahrner, Kristina M.; Wheeler, Brian M.; and Bruce, Scott L. (2017) "Comparison from Dynavision Training on Concussion Vital Signs Performance," *Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association*: Vol. 3 : Iss. 1 , Article 20. DOI: [https://doi.org/10.25035/jsmahs.03.01.20](https://doi.org/10.25035/jsmahs.03.01.20) Available at: [https://scholarworks.bgsu.edu/jsmahs/vol3/iss1/20](https://scholarworks.bgsu.edu/jsmahs/vol3/iss1/20)
Comparison from Dynavision Training on Concussion Vital Signs Performance

Kristina M. Fahrner, ATC, Brian M. Wheeler, AT, ATC, Scott L. Bruce, EdD, AT, ATC

Department of Kinesiology & Health, Wright State University

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.

REFERENCES

KEY WORDS: reaction time, neurocognitive assessment