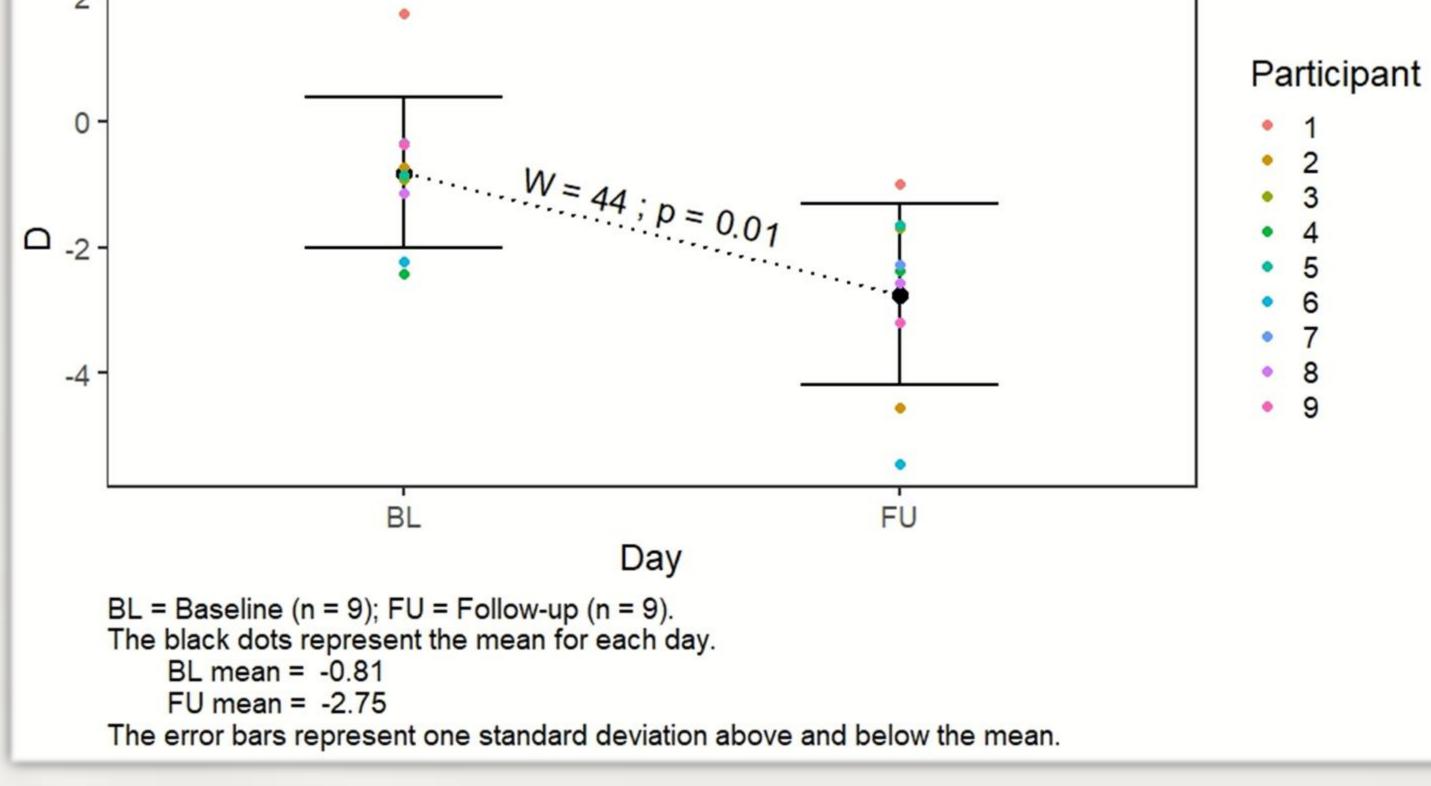
HOW CONCUSSION AFFECTS

VISUAL AND COGNITIVE FUNCTIONS

Josephine Eo Nilsson

Monocular Near Point Accommodation using Hofstetter's formula



Conclusion

- 1. Near point accommodation got worse after the concussion.
- 2. The symptoms relating to somatic sensation got worse after the concussion.



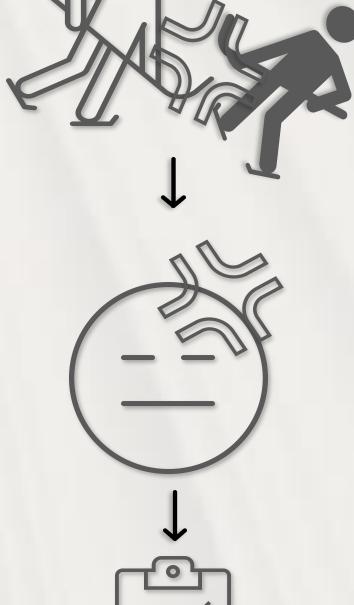
Baseline testing

6 men SHL players 3 women SDHL players Ages 17–28 3. No change in the cognitive measures after the concussion.

Background

Ice hockey players are prone to receiving concussions and many of them will then experience visual difficulties during near work (ex. reading).

Aim



Hit to the head

Concussion/symptoms

Follow-up testing

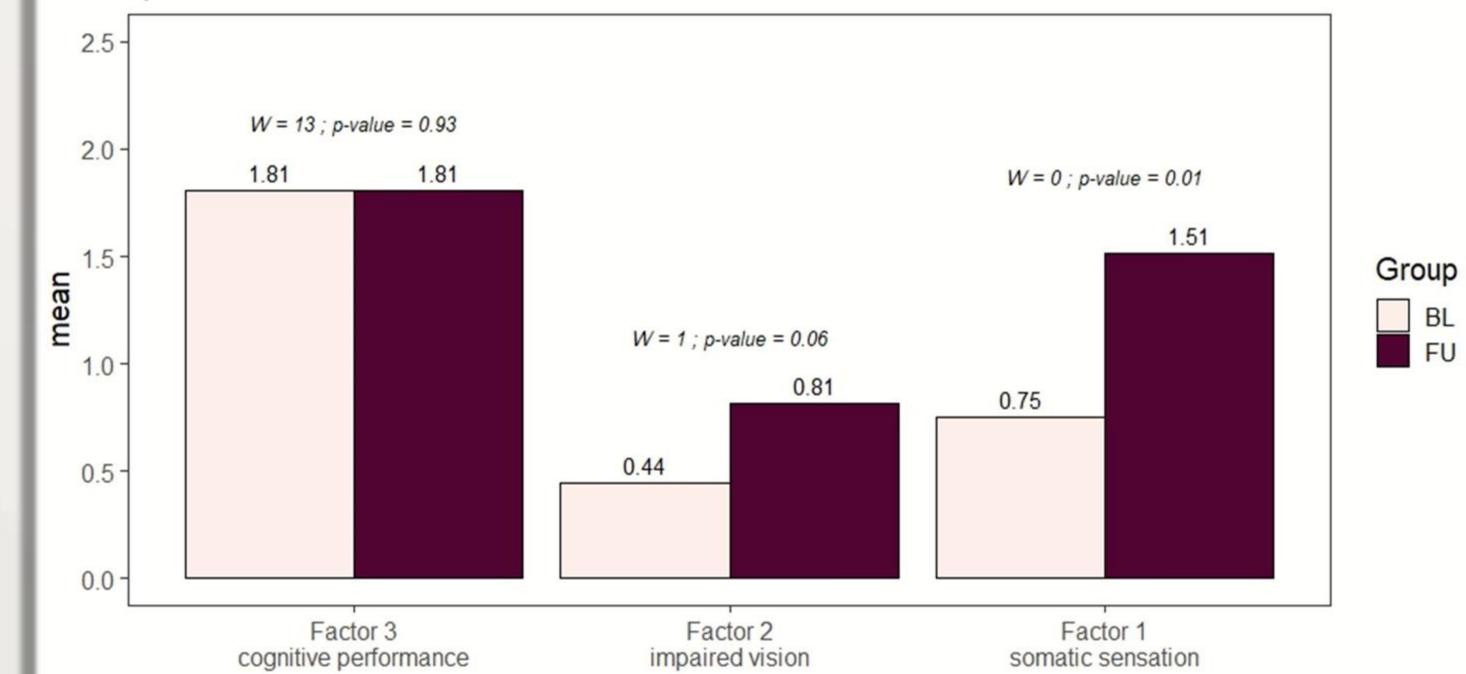
Procedure

Measured same participants twice:

1) <u>Baseline (BL)</u>: Ice hockey players before the hockey season started

The aim was to study how a suspected concussion affected the visual, oculomotor, and cognitive functions.

Convergence Insufficiency Symptom Survey (CISS) split into three factors



2) Follow-up (FU): Players who received a suspected concussion within the past two weeks



My background is in psychology and criminal justice. I am currently a research assistant at the Marianne Bernadotte Centrum with research primarily focusing on eye tracking, attention, and behavior. Factors

Factor 3: 4 questions (6, 9, 14, 15) Factor 2: 3 questions (7, 8, 13) Factor 1: 8 questions (1, 2, 3, 4, 5, 10, 11, 12)

Factors from: Nunes, A. F., Monteiro, P. L., & Nunes, A. S. (2020). Factor structure of the Convergence Insufficiency Symptom Survey questionnaire. PLoS ONE, 15(2). https://doi.org/10.1371/journal.pone.0229511

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