

Active Rehabilitation for Concussion Management in Youth

Danielle Dobney CAT(C) MSc.
PhD Candidate

Lisa Grilli BSc, MSc pht., Helen Kocilowicz BScN, Christine Beaulieu BSc., PT, Meghan Straub B.Sc., M.Sc., A. PhT, Debbie Friedman BSc. pht. M. Mgmt. & Isabelle J. Gagnon pht, PhD.



Active Rehabilitation Program



Aerobic Exercise



Coordination Drills



Visualization



Education

1. Initiated in clinic
2. Continued as home program

Objectives

1. Estimate the influence of active *rehabilitation participation* on symptoms;
2. Estimate the influence of *sex* on symptoms

Study Description

Design: Case Series (analysis of prospectively collected data)

Inclusion:

1. Symptomatic for at least 3 weeks post-concussion
2. Started active rehab 3 to 4 weeks post-concussion
3. Follow-up 4 to 8 weeks post-concussion

Sample size: n=277

Outcome: 22-item Post-Concussion Symptom Scale

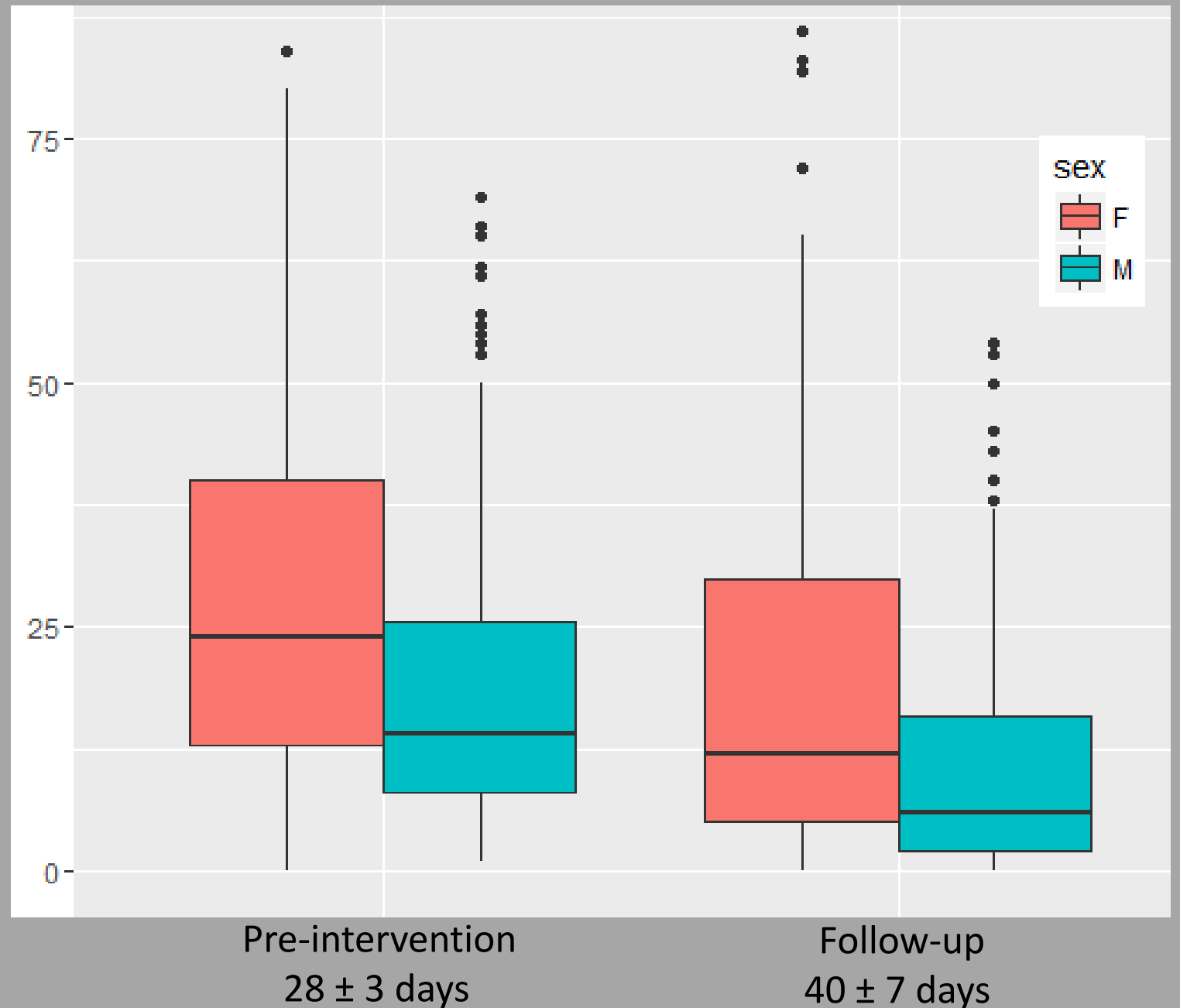
- total score and clusters (physical, emotional, cognitive, sleep)

Participants

Characteristics		N (%) if not stated
Age (mean \pm SD)		14 \pm 2
Sex	Female	135 (49)
	Male	142 (51)
History of Concussion		104 (37.5)

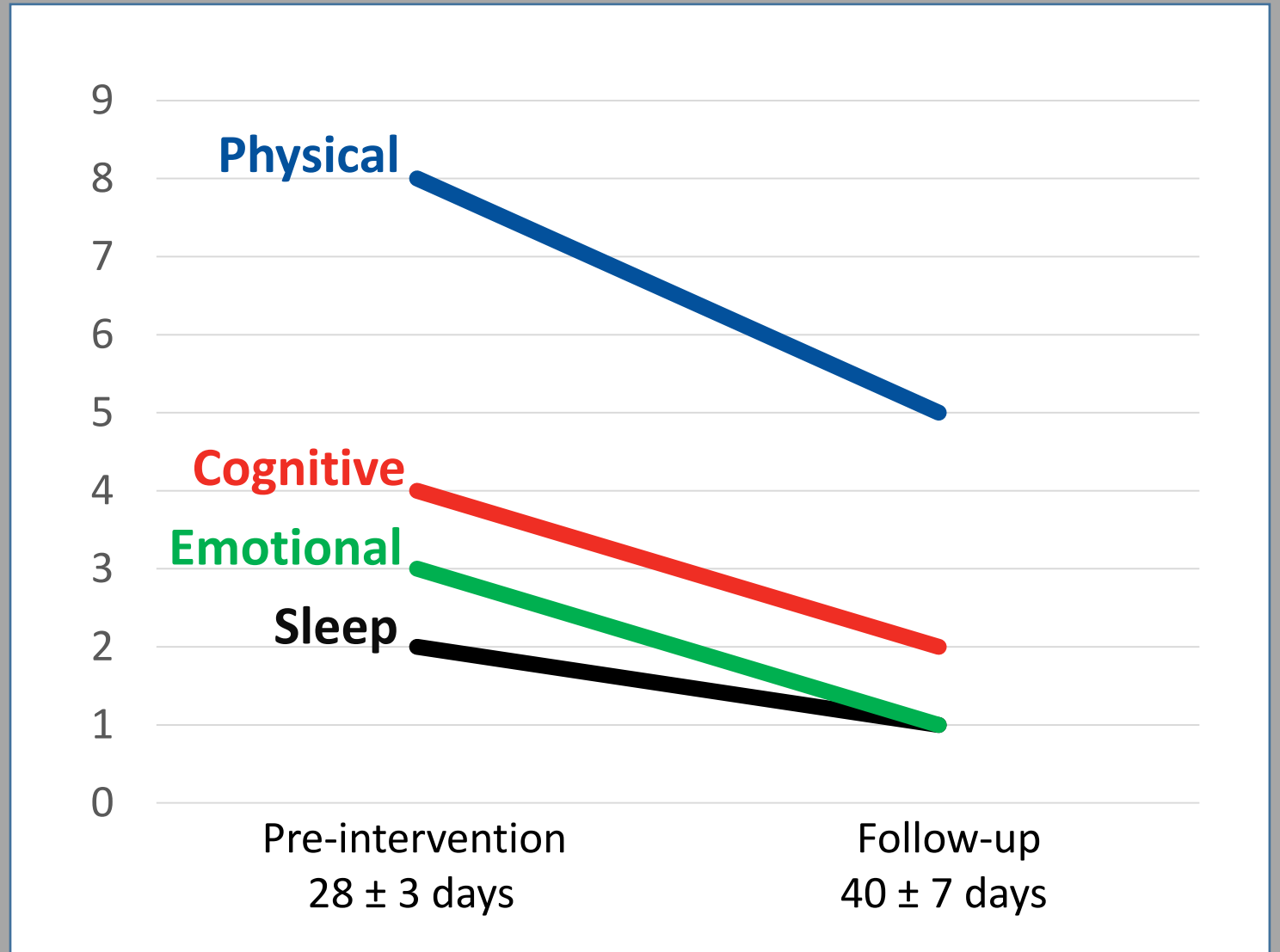
Results

1. *Significant improvement in symptom severity*
2. *Female sex predicted higher symptoms at follow-up vs. males*



Results

3. *Significant improvement in symptom cluster scores*



Take home messages

1. Continued support for Active Rehab
2. Consistency in large, diverse clinical sample

Acknowledgements

Dr. Isabelle Gagnon

Clinical team @ Montreal Children's Hospital

Patients and families

