

Movement Behaviours and Guideline Adherence During the COVID-19 Pandemic: Children and Youth with Disabilities

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Background

- Daily healthy movement behaviours in children and youth include:
 - 60+ minutes of moderate-to-vigorous physical activity (**SWEAT**)
 - < 2 hours of screen time (**SIT**)
 - 9-11 hours (5-13 years) OR 8-10 hours (14-17 years) of sleep (**SLEEP**)

(Tremblay et al., 2016)
- Maintaining a healthy movement profile is important for optimal health (Carson et al., 2017).
- Public health restrictions caused by the COVID-19 pandemic have had a dramatic impact on the movement behaviours of children and youth.
- Increased concern from families and clinicians of this sudden 'time out' on the movement behaviours of children and youth with disabilities (CYD).

Objective

To assess the acute and longer-term impact of COVID-19 restrictions on the movement behaviours and guideline adherence in CYD.



Methods

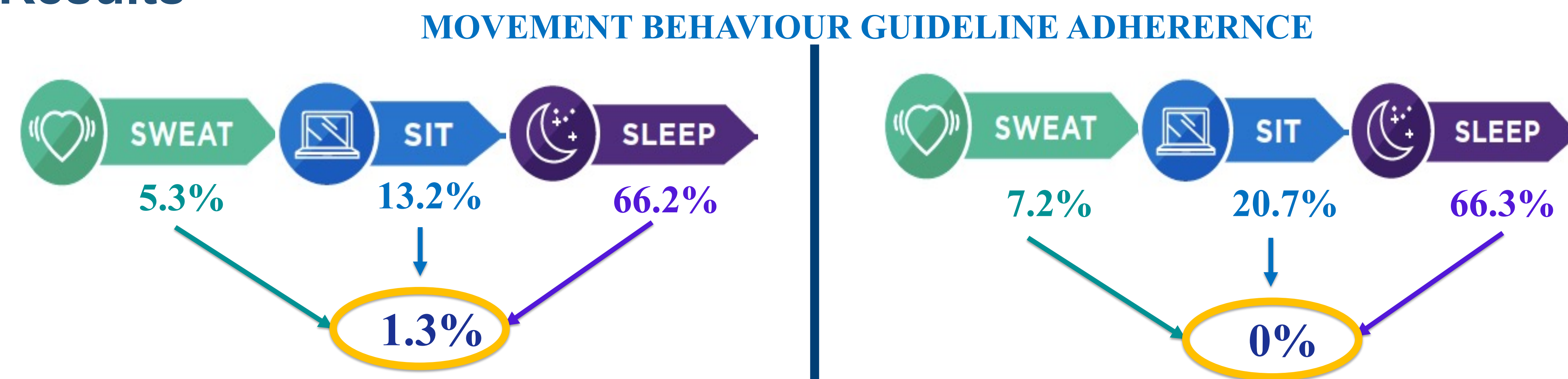
- Participants:** Canadian parents of school-aged CYD (ages 4 to 17 years)
 - Majority Caucasian, married mothers living in detached houses that included at least 2 adults and 2 children
- Eligibility criteria:** Able to speak/understand English; have internet access; participated in our team's larger National Physical Activity Measurement (NPAM) study.



Measure: 2020 COVID-19 & Childhood Movement Behaviours Survey (Moore et al., 2020)

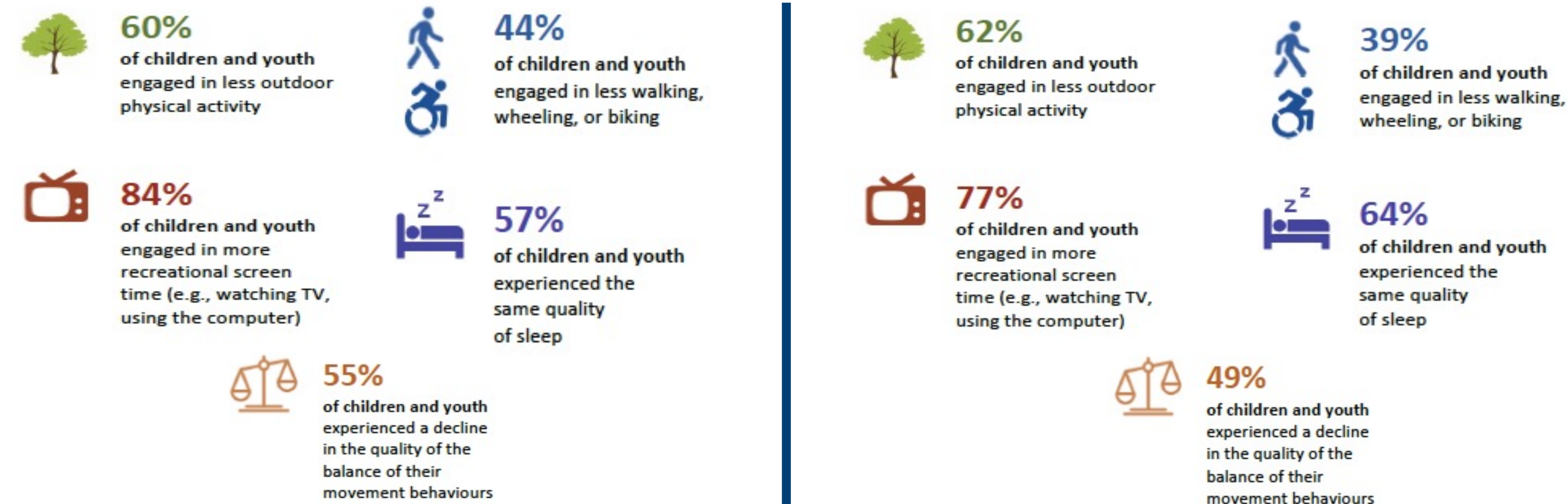
- Child and parent demographics
- Current movement behaviours (i.e., physical activity, screen time, sleep)
- Changes in movement behaviours (pre-pandemic to current levels)
- Survey administered via REDCap® at two time points: May 2020 and November 2020

Results



Note. Value shown in the yellow circle = adherence to all three guidelines

CHANGES IN MOVEMENT BEHAVIOURS



Time 1: May 2020 (n = 151)

Time 2: Nov. 2020 (n = 87)

Implications

- Very concerning physical activity and sedentary behaviour profiles of CYD during the COVID-19 pandemic from a behavioural science perspective.
- Immediate action at the program and policy levels is needed for more accessible and inclusive strategies to increase physical activity and reduce sedentary behaviour in CYD.

Recommendations

- Considerations for supporting physical activity in CYD:
 - Quality programming
 - Capacity building
 - Enhanced training of coaches and instructors
 - Infrastructure that is accessible and welcoming to *all* children and youth
 - Facilities
 - Parks and playgrounds
 - Neighbourhoods

Acknowledgements