



Fall 2020



COVID-19 CHILD AND YOUTH STUDY: Healthy Movement and School Experience



Preliminary Findings Prepared by
Maximum City

November 2020



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Introduction

In the spring and fall of 2020, Maximum City conducted parallel pan-Canadian and Toronto-based studies of the downstream impacts of COVID-19 on the self-reported behaviours, school experiences, and feelings of children (aged 9-12) and youth (13-16). A cross-sectional sample of over 2100 pairs of children/youth and a parent/caregiver have participated in the study thus far, with a third wave of data collection to take place in spring 2021. Previous reports can be found [here](#).

New analysis of the spring data shows **strong correlation between not maintaining healthy movement behaviours and declines in subjective well-being** tied to negative emotions.

- Children/youth who were less physically active or spent more time on digital screens during the lockdown were more likely to belong to the group that evaluated their daily emotional life as worse than pre-COVID-19.
- Access to outdoor spaces to play or exercise (in addition to access to quality indoor spaces) was significantly associated with a lower likelihood of decreased well-being.
- Having a friend to share feelings with reduced the likelihood of belonging to the group with decreased well-being.

This report provides some preliminary findings from the **fall survey**, specifically related to school experiences and changes in healthy movement such as physical activity levels, screen time, time outdoors, sleep quality and duration.

Summary of Preliminary Findings: Fall vs. Spring (Figures 1-4)

Compared to the spring, children/youth are reporting moderate improvements in their healthy movement levels but there is still a significant proportion reporting a decline in physical activity, increase in screen time, decline in time outdoors, and decline in sleep quality compared to pre-COVID-19. Children/youth are more worried about getting COVID-19 compared to the spring, and are reporting better levels (i.e. lower declines) of school engagement and less increase in school stress. In each season's survey, respondents were asked to retrospectively compare behaviours and feelings to pre-COVID-19.

- 46% of children/youth report a decline in physical activity, compared to 57% in the spring.
- 70% of children/youth report an increase in recreational screen time, compared to 84% in the spring.
- 27% of children/youth report a decline in sleep quality, compared to 32% in the spring.
- 42% of children/youth report going outside less than once a day, compared to 48% in the spring.
- 27% of children/youth do not feel safe outside, compared to 19% in the spring.
- 73% of children/youth are worried about getting COVID-19, compared to 59% in the spring.
- 28% of children/youth report a decrease in school engagement, compared to 44% in the spring.
- 90% of children/youth report miss seeing their friends face-to-face, and 84% worry about how the pandemic is affecting their parents.
- 34% of children/youth of East Asian background report experiencing racism or discrimination related to COVID-19 (37% in the Greater Toronto Area vs. 28% in the rest of Canada).

Figure 1: Percentage of children/youth with changes in healthy movement levels spring vs. fall

Changes in Healthy Movement Behaviours: Spring vs. Fall

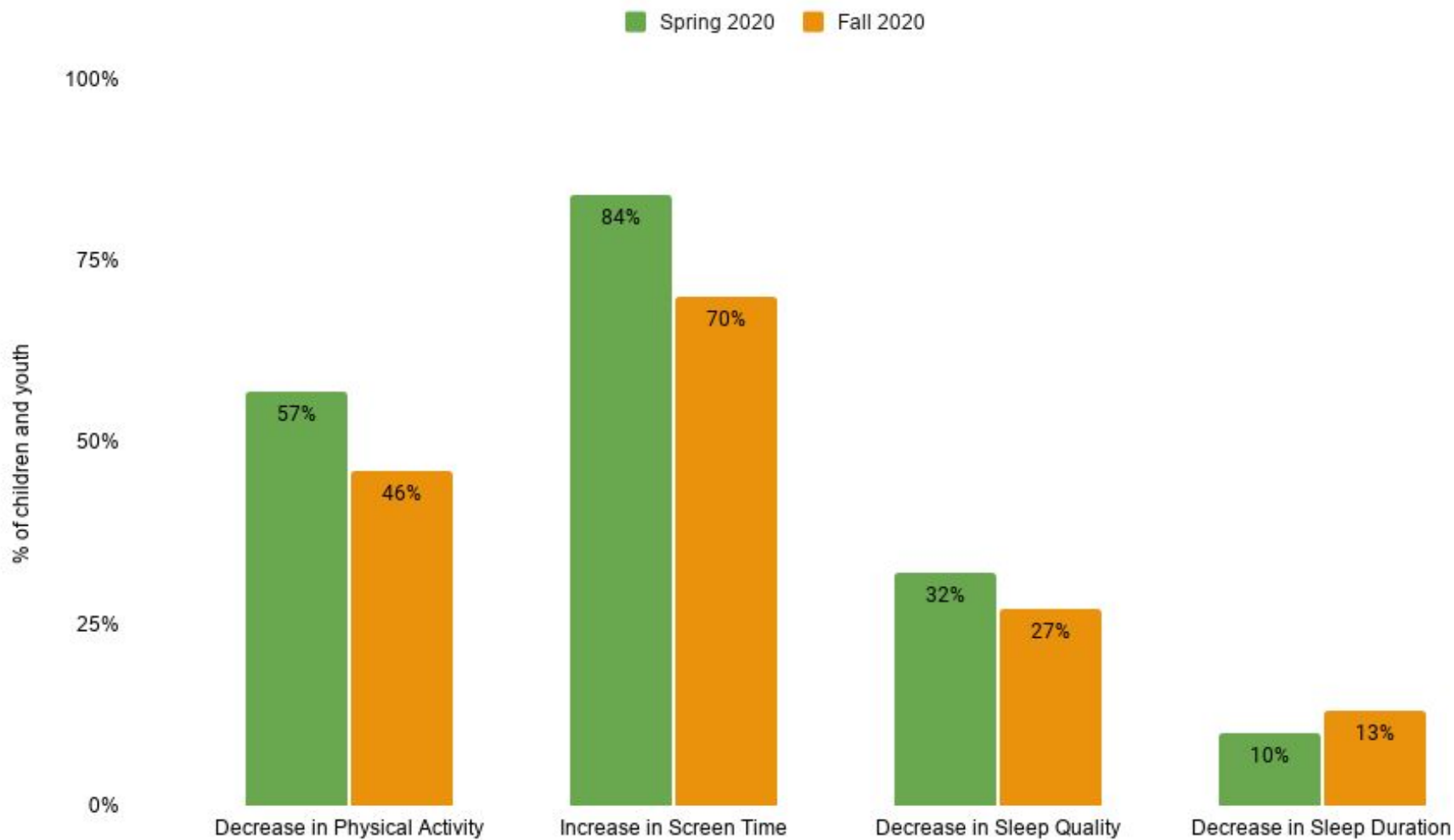


Figure 2: Secondary effects of COVID-19 conditions spring vs. fall

COVID-19 Effects: Spring vs. Fall

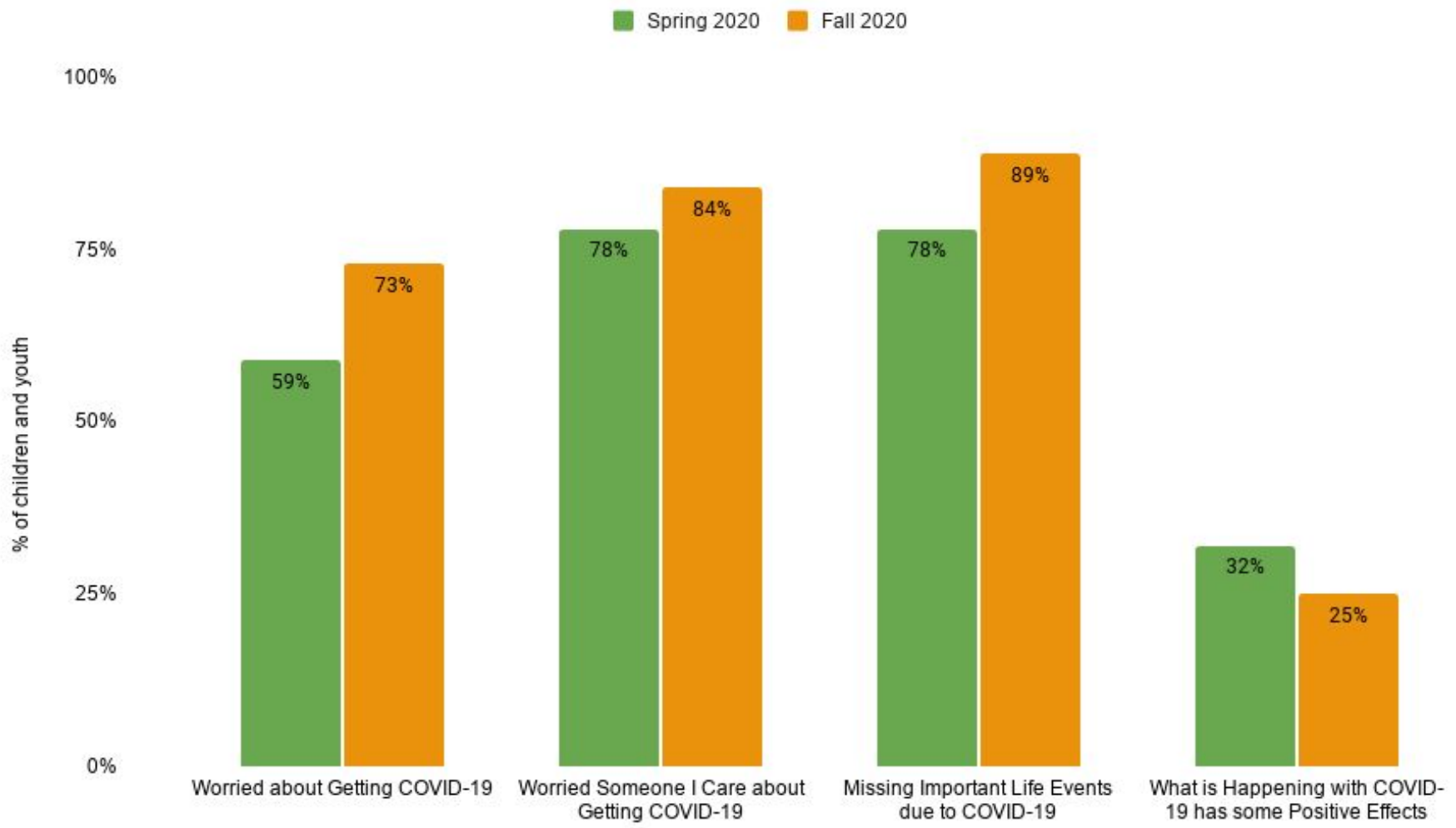


Figure 3: Feelings of safety and frequency of going outside spring vs. fall

Going Outside: Spring vs. Fall

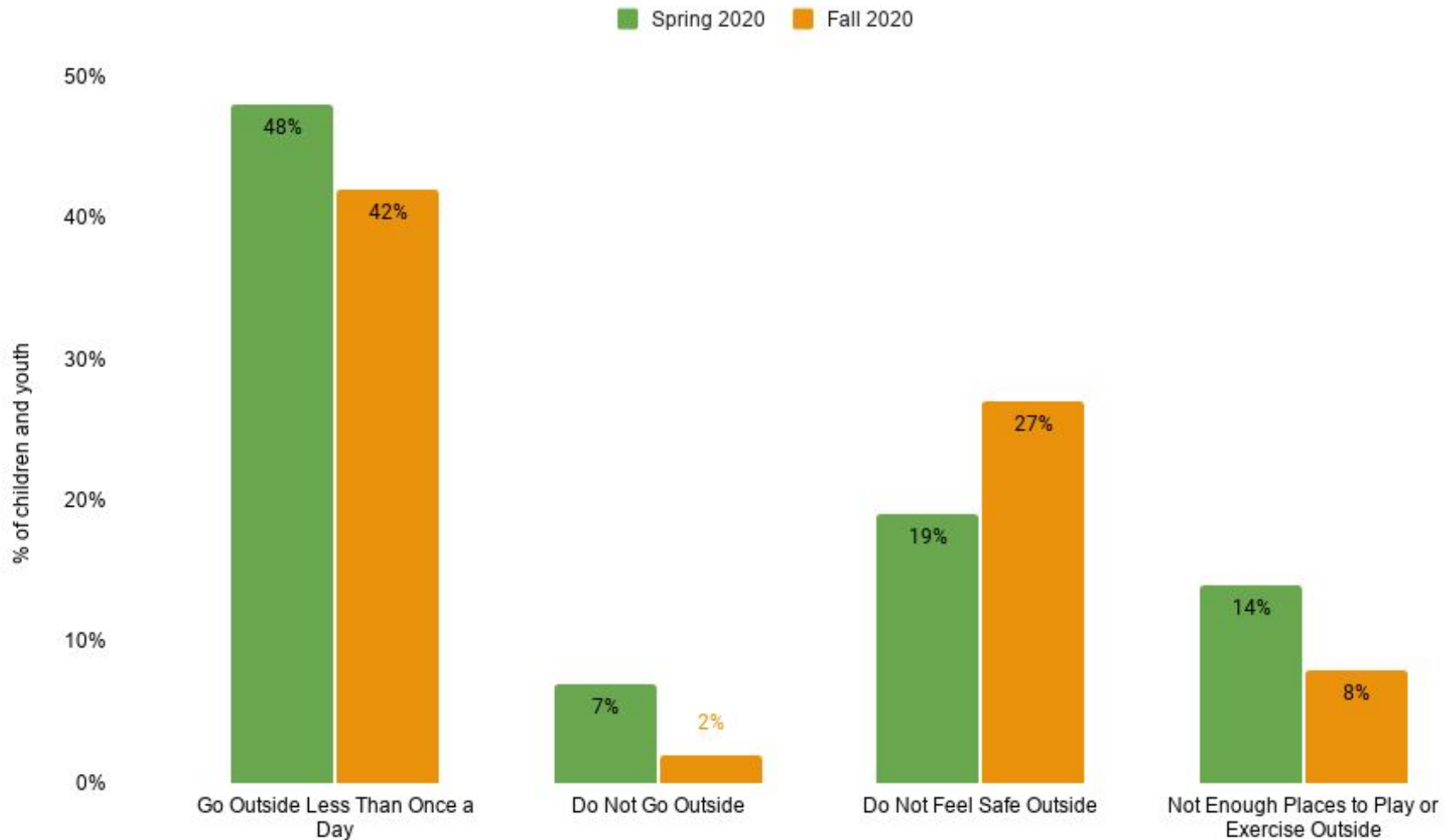
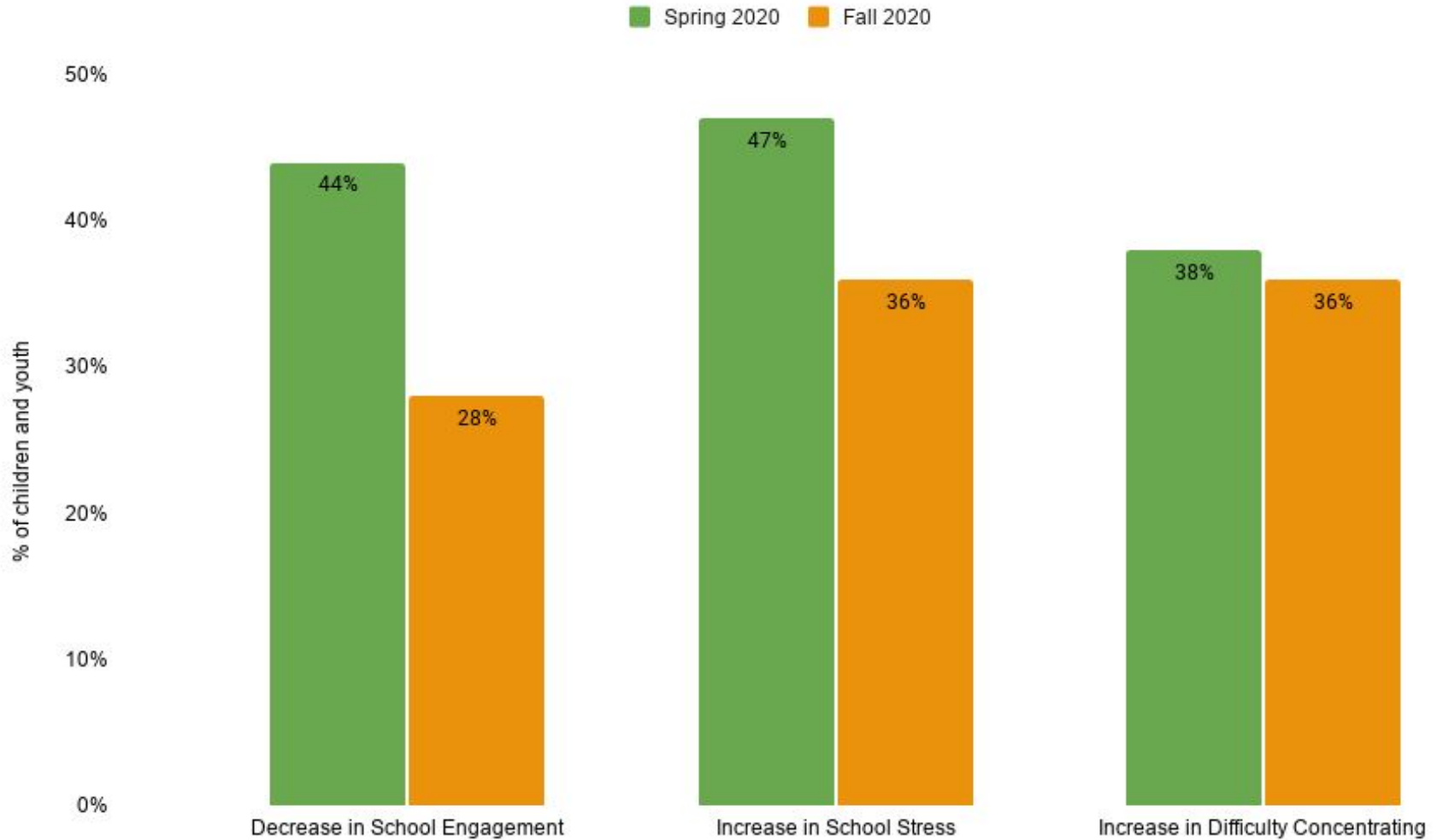


Figure 4: Changes in school engagement and stress spring vs. fall

Changes in School Engagement and Stress: Spring vs. Fall



Summary of Preliminary Findings: Fall School Experience (Figures 5-12)

- 28% of children/youth report a decline in school engagement and 30% report a decline in self-reported learning.
- 36% of children/youth report an increase in stress and 27% report a decrease in resilience.
- Nearly half (46%) of students report an increase in difficulty collaborating with their peers and more than a third (36%) report an increase in difficulty concentrating.
- More than a third (35%) report an increase in feelings of empathy and more than a quarter (26%) report an increase in sense of citizenship.
- Children/youth who attend school in person report lower declines in school engagement and self-reported learning compared to those who participate in school online or hybrid online/in-person.
- Children/youth in the Greater Toronto Area report slightly worse outcomes across healthy movement behaviours compared to those in the rest of Canada.
- Greater Toronto Area children/youth who attend school in person report lower declines in physical activity compared to those who participate in school online or hybrid online/in person
- Greater Toronto Area children/youth who attend school in person report lower increases in recreational screen time compared to those who participate in school online or hybrid online/in person, and lower declines in sleep quality.
- Greater Toronto Area children/youth who attend school in person report lower declines in time outdoors compared to those who participate in school online or hybrid online/in person.

Figure 5: Changes in self-reported learning and resilience fall

Changes in Self-Reported Learning, Engagement & School Stress

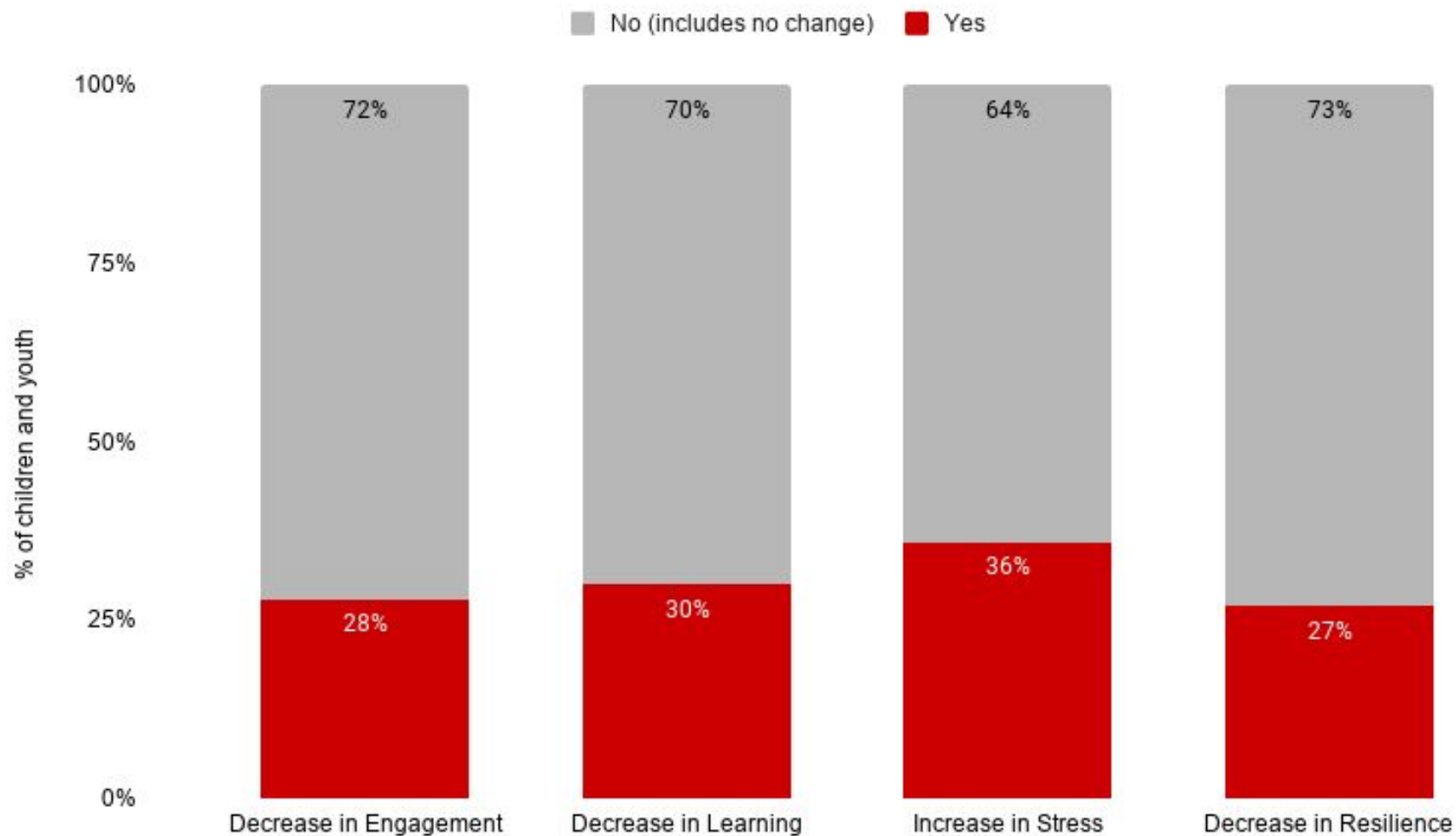


Figure 6: Changes in skills and competencies fall

Changes in Skills and Competencies

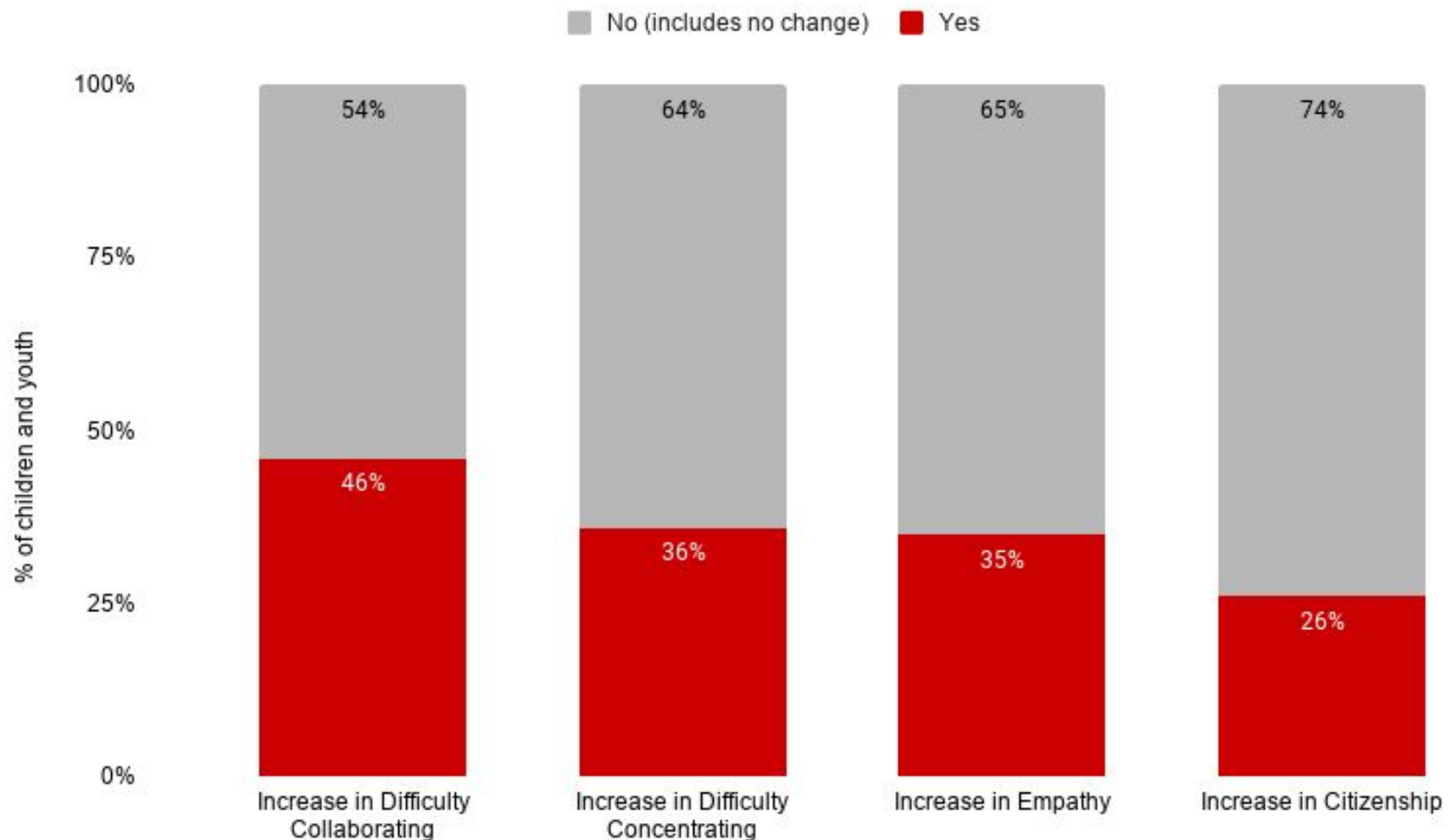


Figure 7: Changes in academic engagement by school type fall

Changes in Engagement by School Type

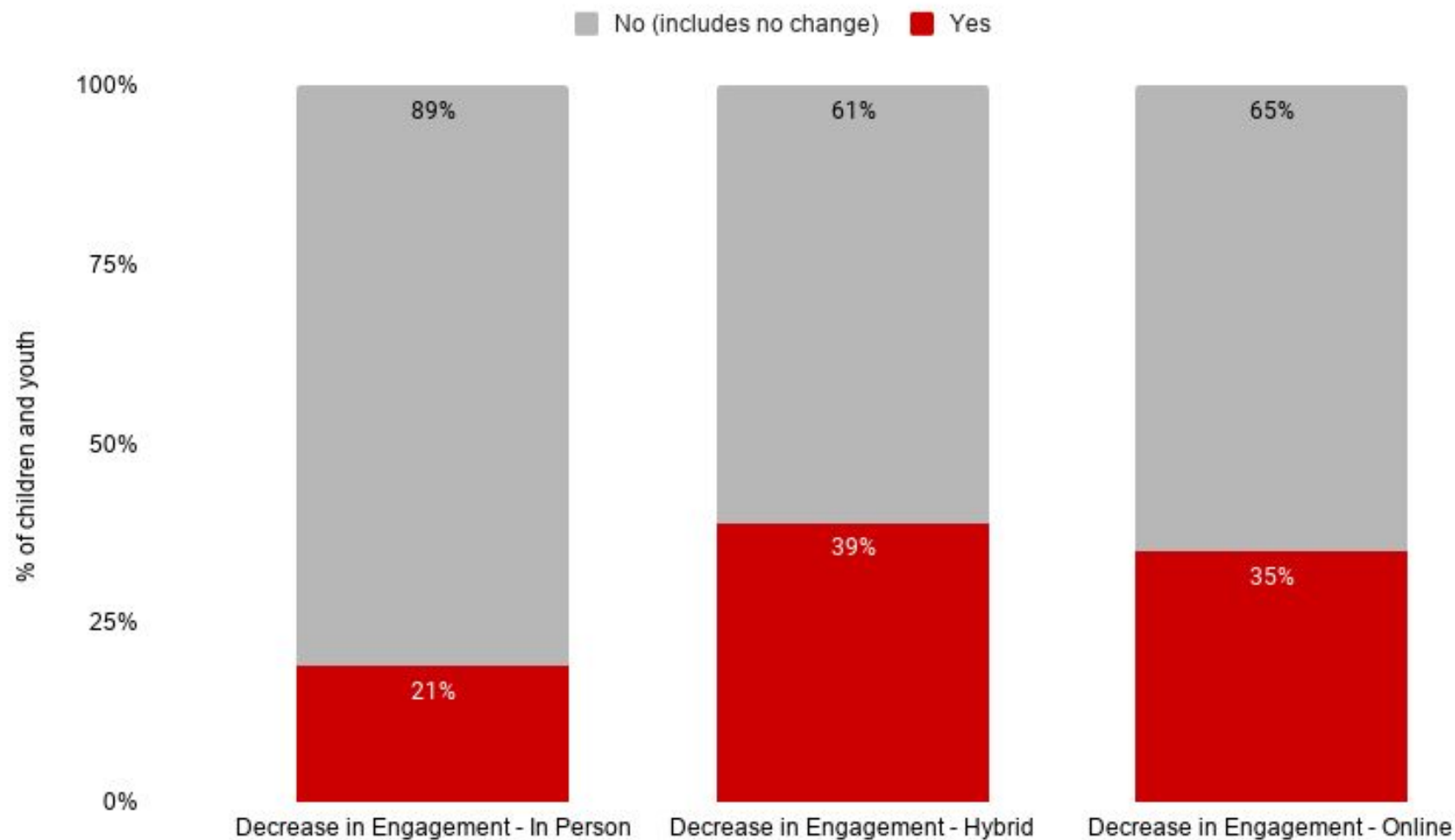


Figure 8: Changes in self-reported learning by school type fall

Changes in Self-Reported Learning by School Type

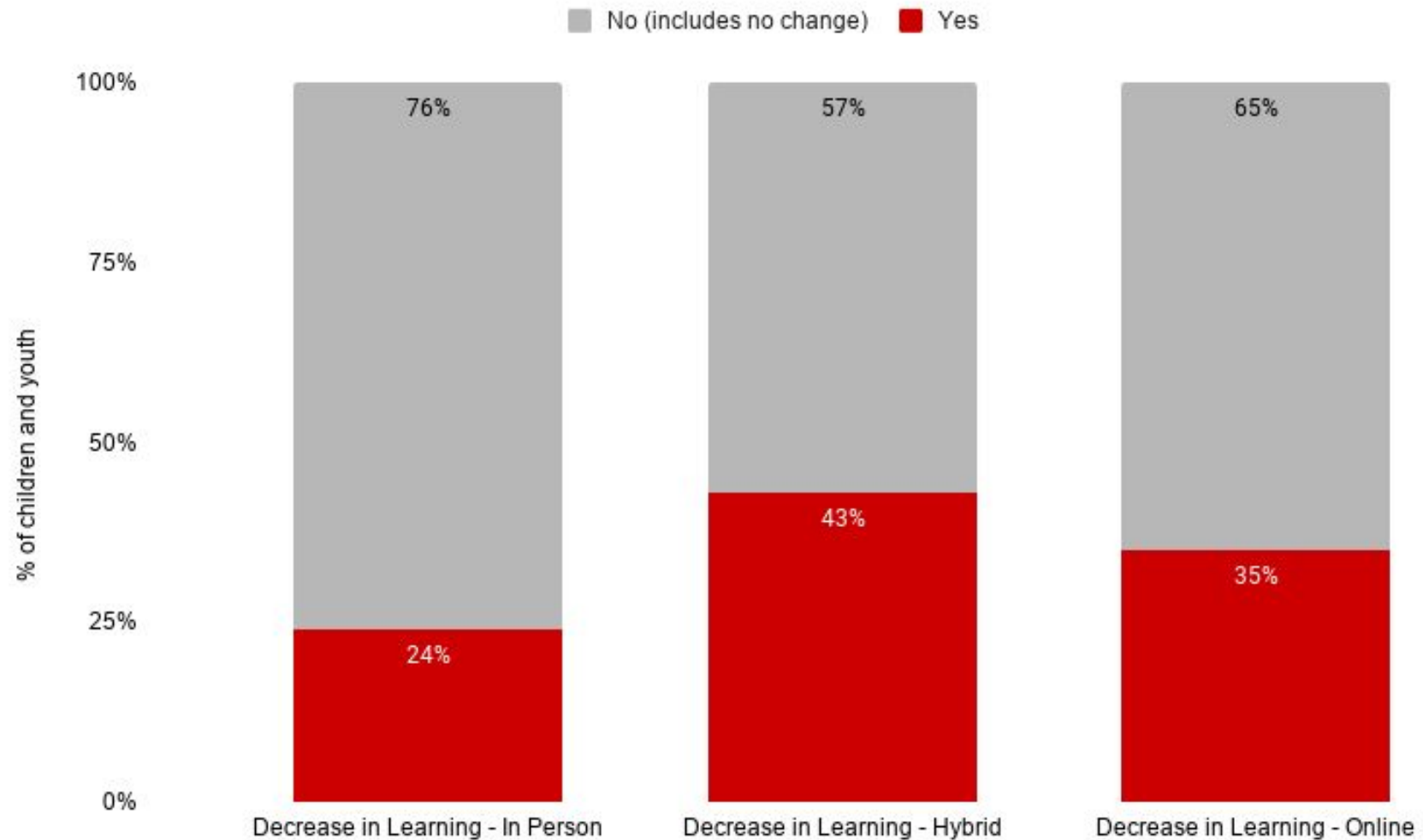


Figure 9: Changes in physical activity by school type Toronto

Changes in Physical Activity by School Type Fall 2020 Toronto

■ Decrease in PA ■ No Change in PA ■ Increase in PA

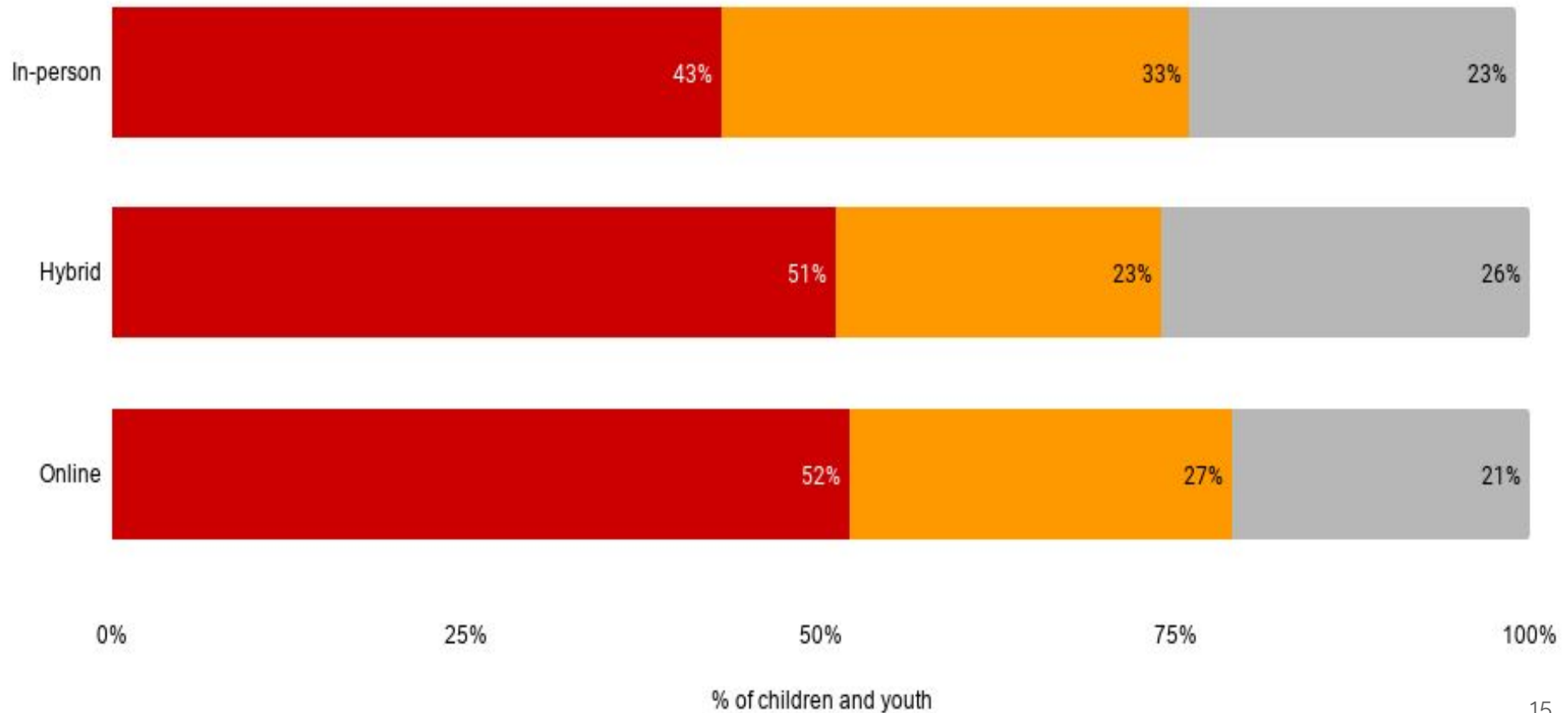


Figure 10: Changes in recreational screen time by school type Toronto

Changes in Recreational Screen Time by School Type Fall 2020 Toronto

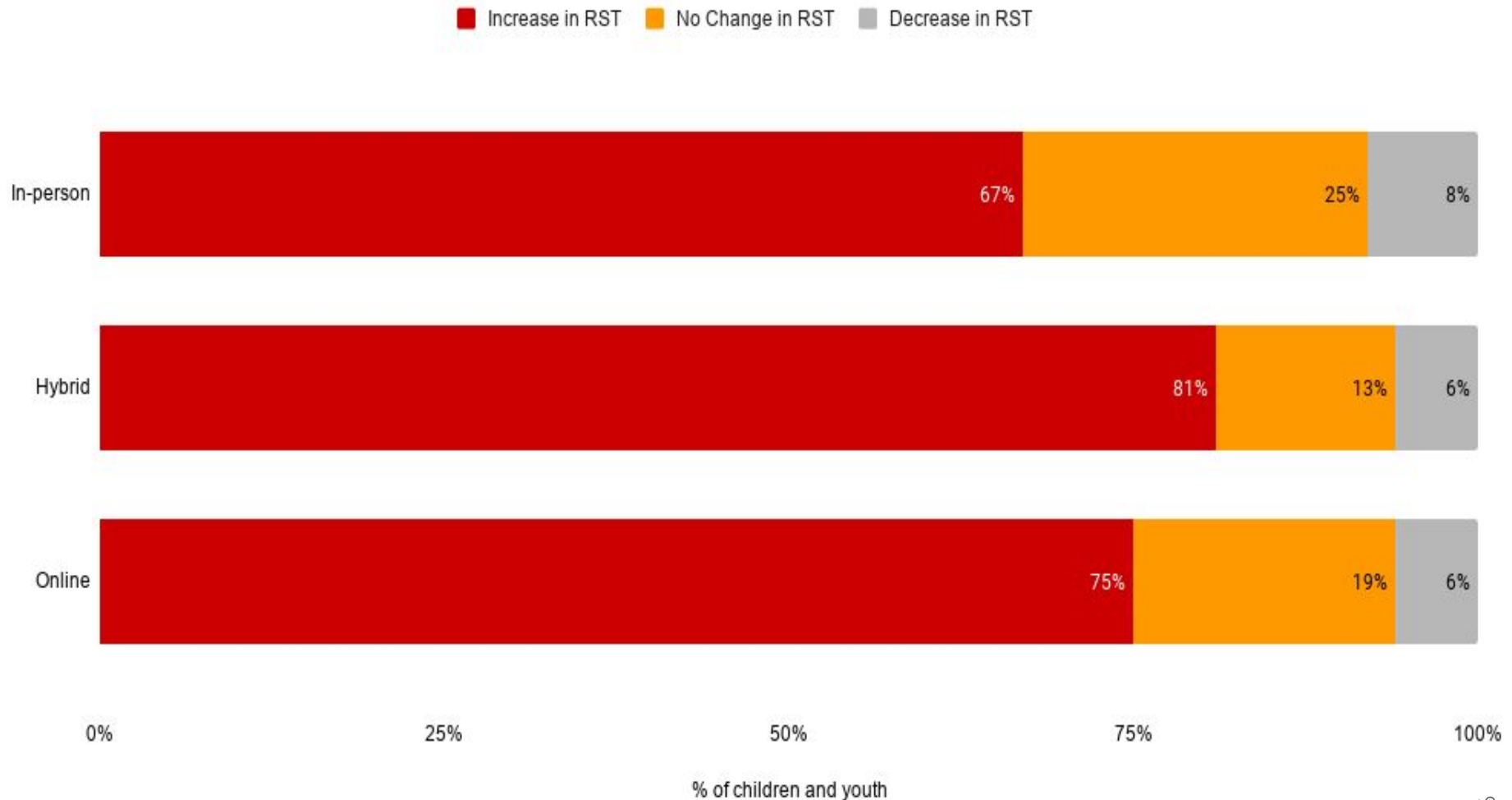


Figure 11: Changes in time outside by school type Toronto

Changes in Time Outdoors by School Type Fall 2020 Toronto

■ Decrease in TO ■ No Change in TO ■ Increase in TO

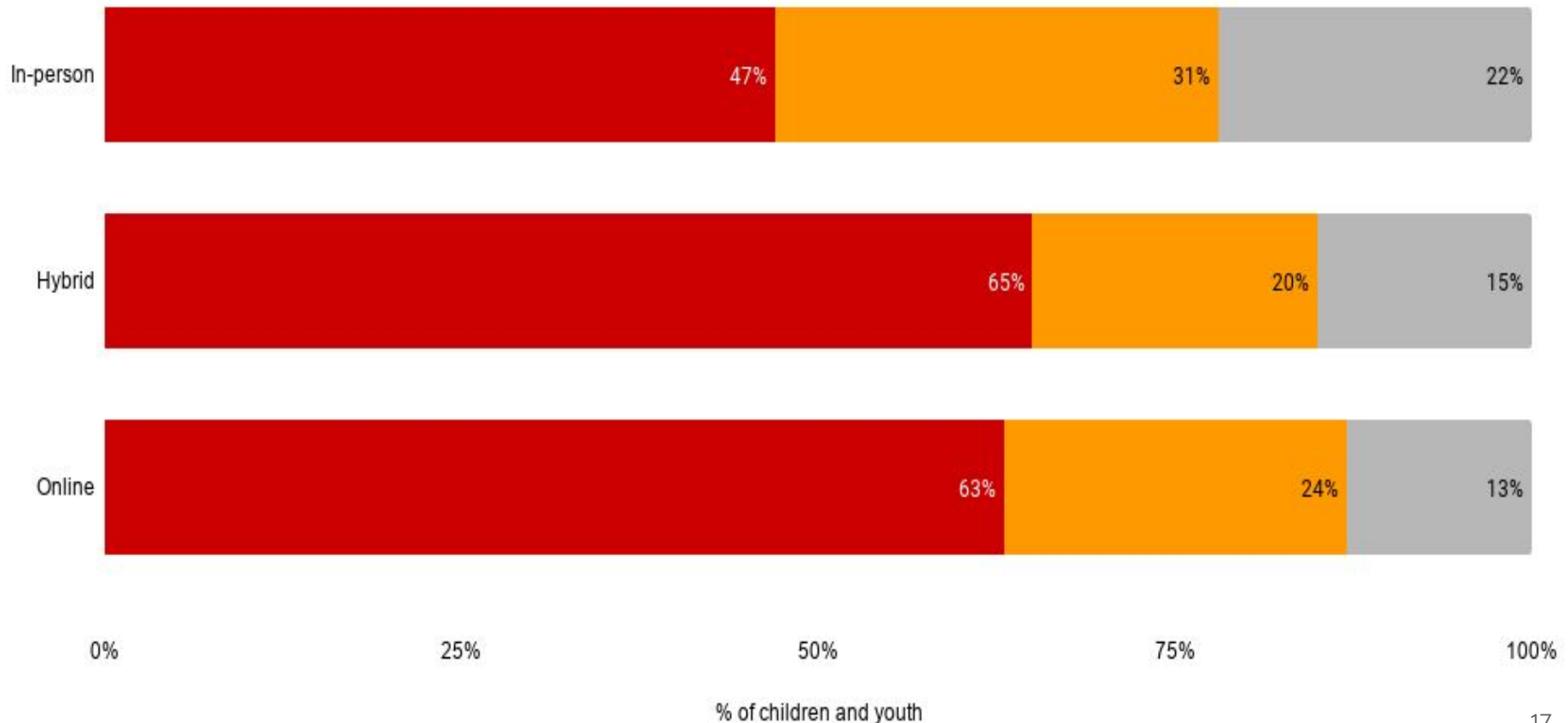
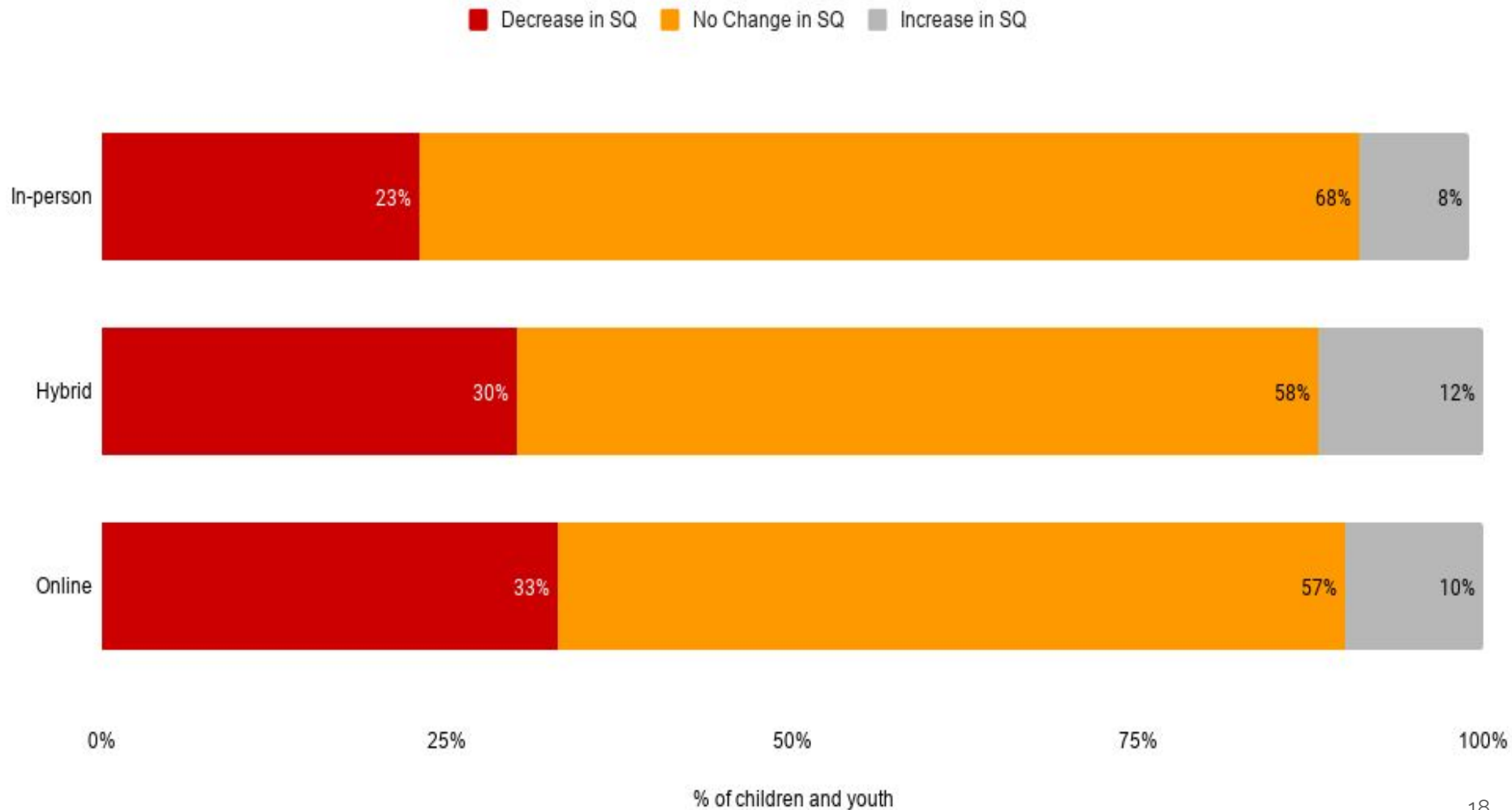


Figure 12: Changes in sleep quality by school type in Toronto

Changes in Sleep Quality by School Type Fall 2020 GTA



Summary of Preliminary Findings: Dwelling Type (Figures 13-15)

- Children/youth who reside in apartment buildings report greater declines in physical activity, time outdoors, and time playing compared to those who live in houses.

Figure 13: Changes physical activity by dwelling type

Changes in Physical Activity by Dwelling Type Fall 2020

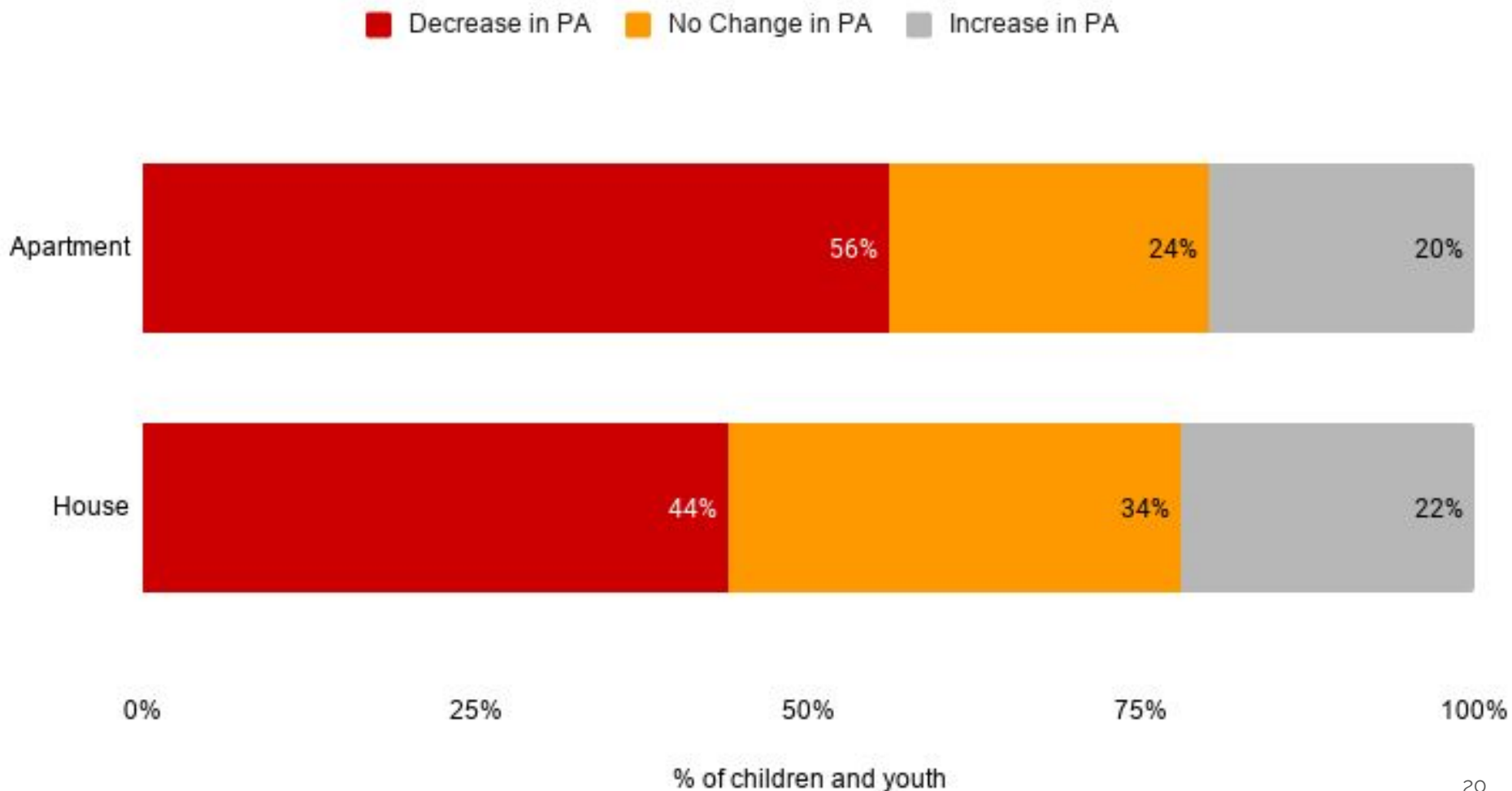


Figure 14: Changes in time outdoors by dwelling type

Changes in Time Outdoors by Dwelling Type Fall 2020

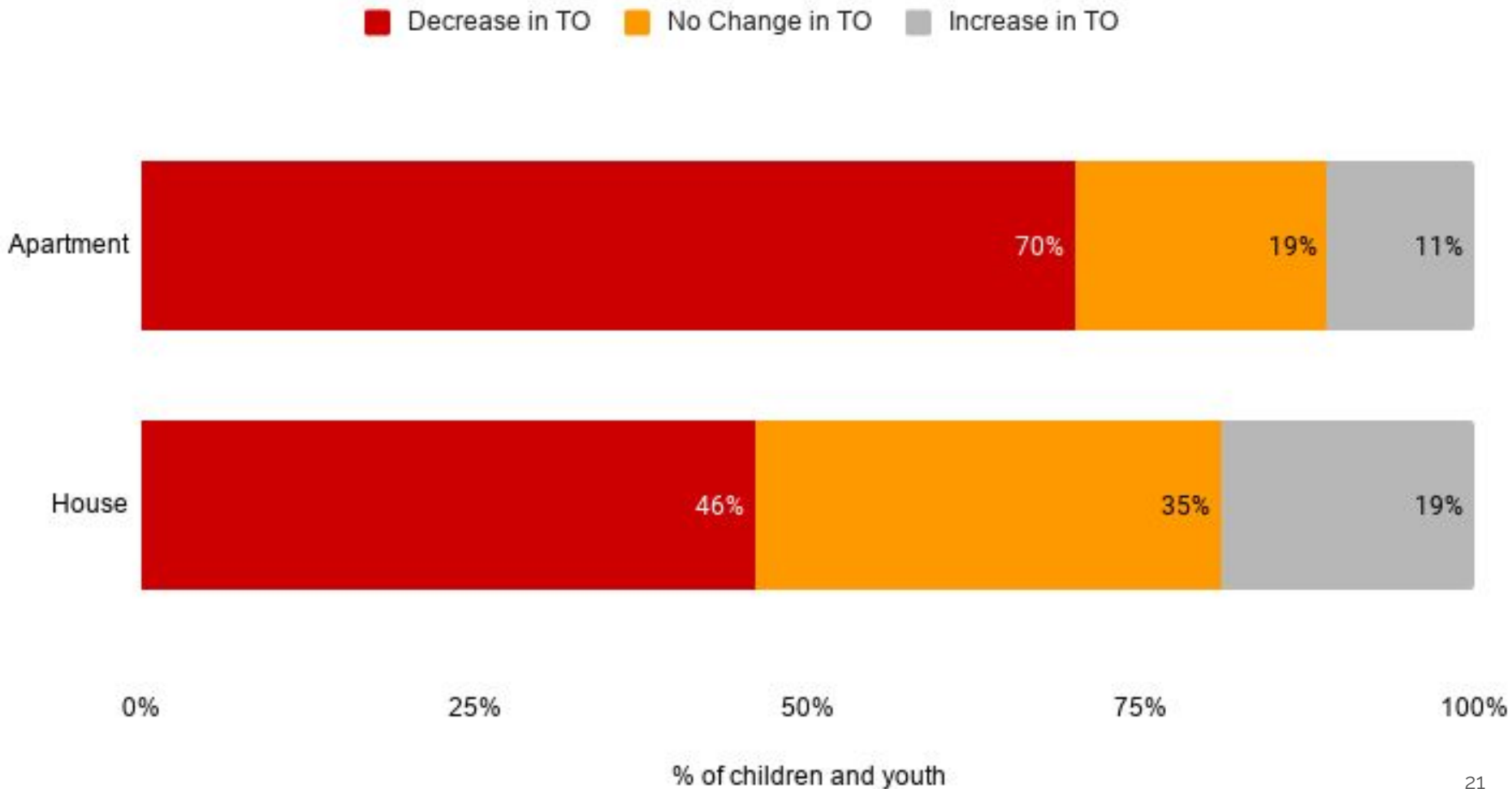


Figure 15: Changes in time playing by dwelling type

Changes in Play Time by Dwelling Type Fall 2020

■ Decrease in PT ■ No Change in PT ■ Increase in PT

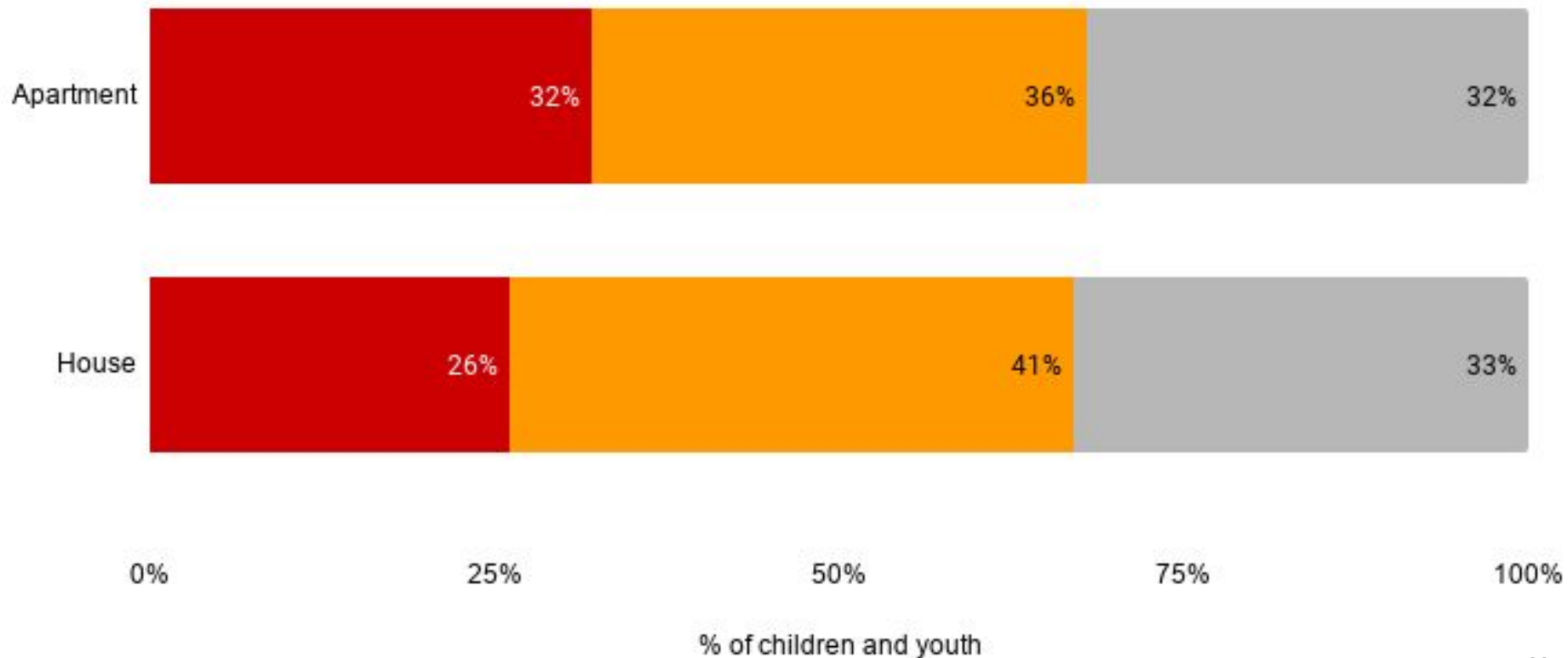


Figure 16: Frequency of time outside Toronto vs. rest of Canada

Frequency of Time Outside Fall 2020

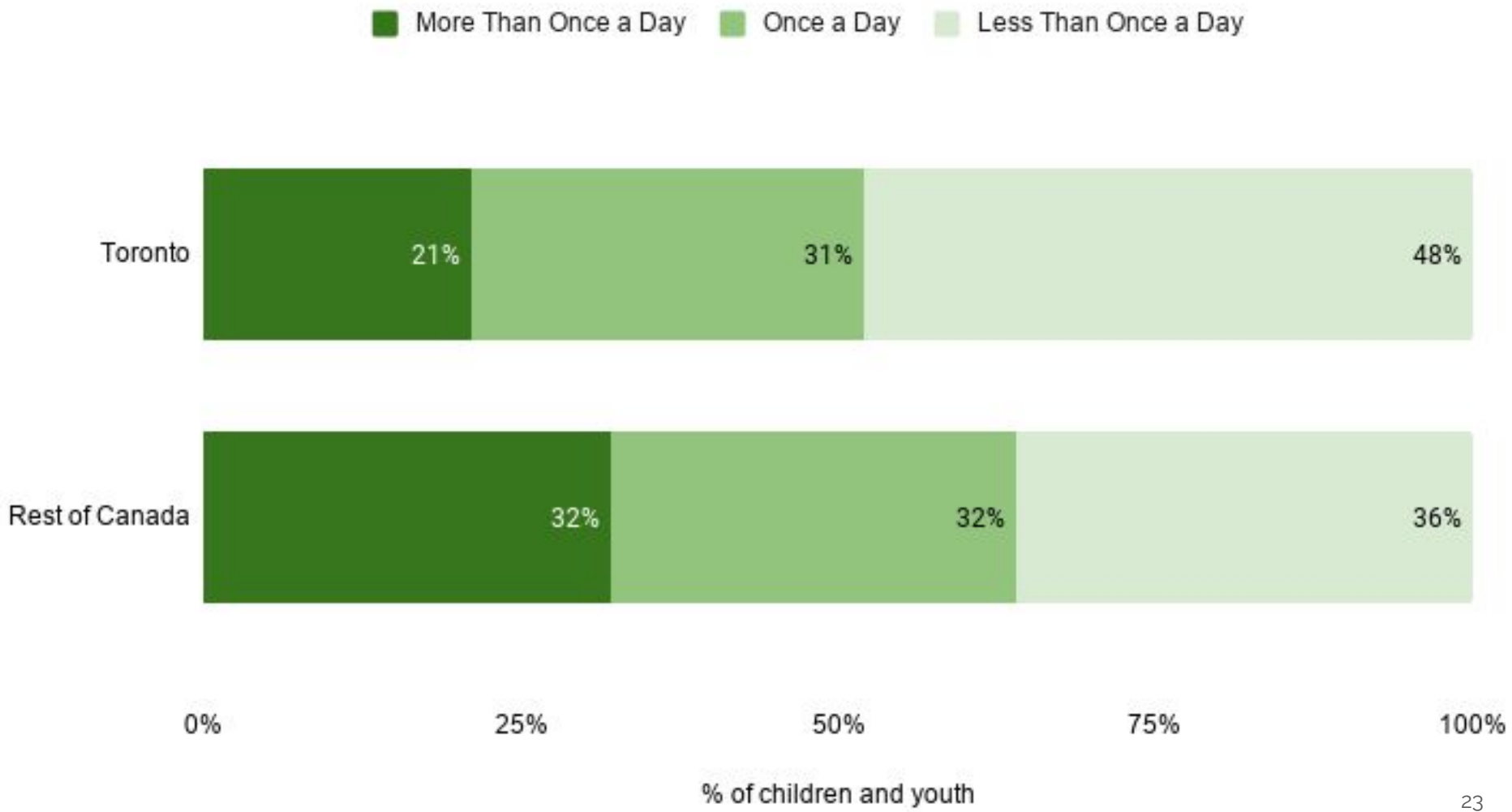


Figure 17: Frequency of time outside for online students Toronto vs. rest of Canada

Frequency of Time Outside Fall 2020 for Online Students

More Than Once a Day Once a Day Less Than Once a Day

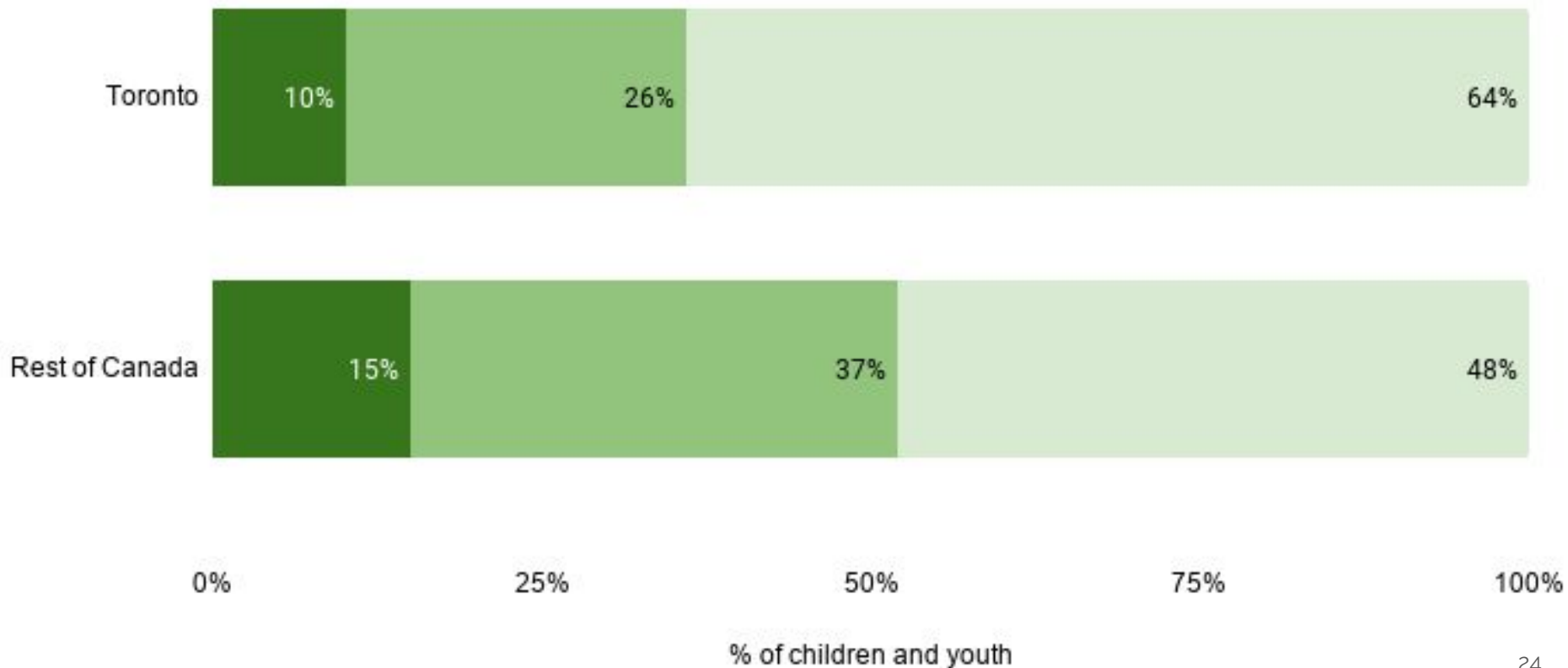


Table 1: Self-reported behaviours and conditions that correlate to increased resilience (or lower declines in well-being) vs. risk factors

RESILIENCE FACTOR*	RISK FACTOR*
Maintains or increases physical activity levels	Decreases in physical activity levels
Spends less time on digital screens	Spends more time on digital screens
Maintains or increases sleep quality and duration	Decreases in sleep quality or duration
Goes outside once or more per day	Goes outside less than once per day
Has access to indoor and outdoor space to play and exercise	Has limited access to indoor and outdoor space to play and exercise
Has a friend to talk to about how they are feeling	Does not have a friend to talk to about how they are feeling
Participates in school in person	Participates in school virtually or hybrid
Lives in a house	Lives in an apartment
Lives in an urban or suburban area	Lives outside an urban or suburban area
Has a pet	Has decreased feelings of safety outside
Increases in quality family time	Has decreased feelings of household harmony
maximumcity.ca/wellbeing	<i>*Draft criteria for evidence-based self-assessment tool to be released January 2021</i>

Research Team

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More info: <https://maximumcity.ca/wellbeing>