RESEARCH BRIEF

April 7, 2022

See Us, Hear Us 1.0

MENTAL HEALTH EXPERIENCES OF CHILDREN, YOUTH, AND FAMILIES IN SASKATCHEWAN DURING THE FIRST YEAR OF THE COVID-19 PANDEMIC

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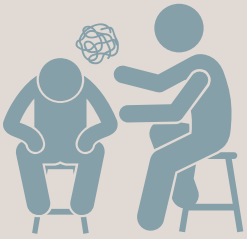
1. INTRODUCTION

Context

COVID-19 has presented unprecedented mental health challenges to children and families in Saskatchewan since the first case was identified on March 12, 2020. New challenges, with respect to mental health in families with children since schools closed, were identified in our Social Contours and COVID-19 study. Developmentally, young people—more than at any stage in the life course—are seekers of social connections for belonging, validation, and identity. The pandemic has seriously curtailed this.

Therefore, we aimed to measure mental health systematically and comprehensively in children and youth in families in the first year of the COVID-19 pandemic.



What we already knew

Population mental health worsened markedly during the pandemic. Although COVID-19 impacts both child and adolescent mental health, these impacts manifest and present in different ways. Precise information on the impact of COVID-19 on mental health among children is critical for effective geographic and epidemiological targeting of prevention and treatment interventions.

What we wanted to know

- Prevalence of mental health of children, youth, and their families during the first year of the COVID-19 pandemic in Saskatchewan.
- How are children, youth and families coping with mental health issues?
- Are they receiving the mental health support they need?
- How satisfied they are with the services they have received since the COVID-19 pandemic began?

About SUHU

See Us, Hear Us (SUHU): Children, youth, and families in Saskatchewan coping with mental health during the COVID-19 pandemic is a multi-project research[1]. The first of these projects, SUHU 1.0, focuses on the mental health impact on and experiences of children during the first year of COVID-19 and is funded by Mental Health Research Canada (MHRC) and Saskatchewan Health Research Foundation (SHRF).

In this report, we present results from the SUHU 1.0 survey, the project's quantitative component. A complementary qualitative component, forthcoming, focuses on the lived experience of children, youth, and caregivers' and the impacts on their quality of life and mental health in the first year of COVID-19.

1. "Children' represent respondents who are 8-11 years old; "adolescents/youth" represent those who are 12-18 years old.

2. METHODOLOGY

How was this survey conducted?

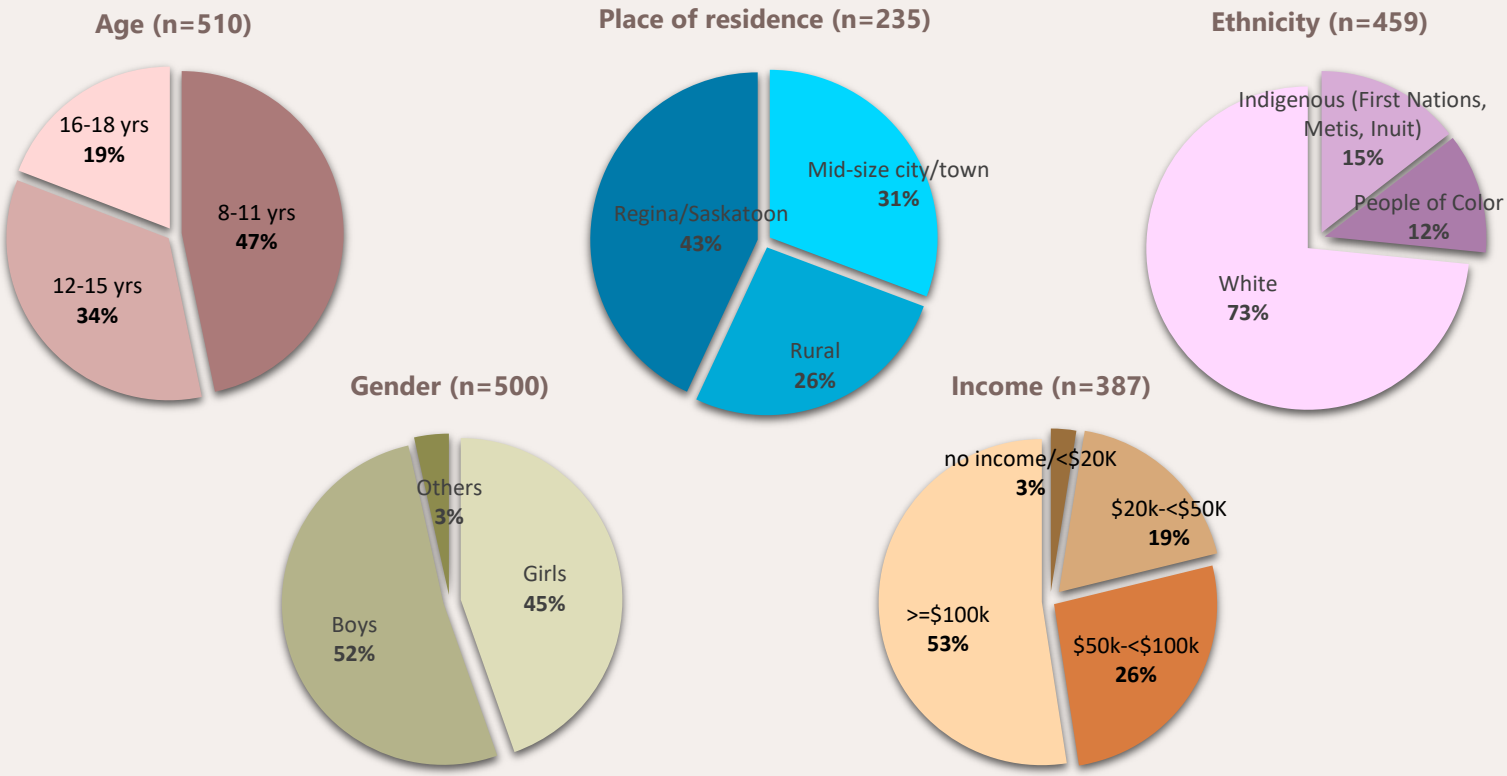
The quantitative data were collected from 510 dyads of children and youth (8-18 years of age) and their parent/caregiver via an online survey conducted between March 19 and July 27, 2021[1]. Participants were recruited via Canadian Hub for Applied and Social Research (CHASR) Saskatchewan Community Panel and participating Saskatchewan public and Catholic school divisions, First Nations-administered schools, and independent schools. The survey was conducted in English and French; paper and telephone- and paper-based surveys were available upon request. Data analysis was conducted by researchers from the Saskatchewan Population Health and Evaluation Research Unit (SPHERU).

Weighting

To ensure data representativeness, samples were weighted by age, gender, and location of residence within Saskatchewan using the 2016 Canadian Census data.

3. SAMPLE CHARACTERISTICS

Figure 1 *Demographic characteristics of children, youth, and families (weighted percentages)*

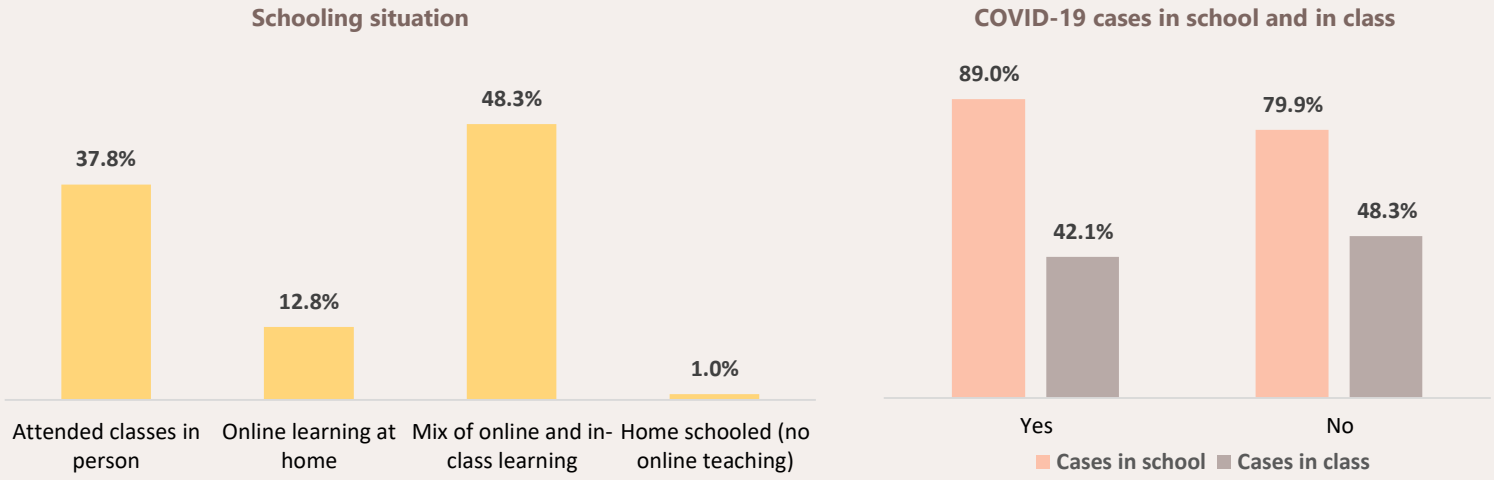


As shown in Figure 1, the sample was well represented in terms of age and geography. Children and youth who self-identified as boys were slightly higher (52%, as compared to 45% girls). The Indigenous population was slightly underrepresented (15%). About 53% of the sample belonged to highest income group (≥ $100K) – overrepresented.

1. The majority of survey responses (88%) were collected following the release of the Government of Saskatchewan's "Re-Opening Roadmap"(May 4, 2021), a 3-step plan culminating in the lifting of remaining public health orders on July 11, 2021, including gathering and capacity limits, indoor masking, physical distancing requirements, and restrictions on youth and adult sports.

4. SCHOOLING AND COVID-19

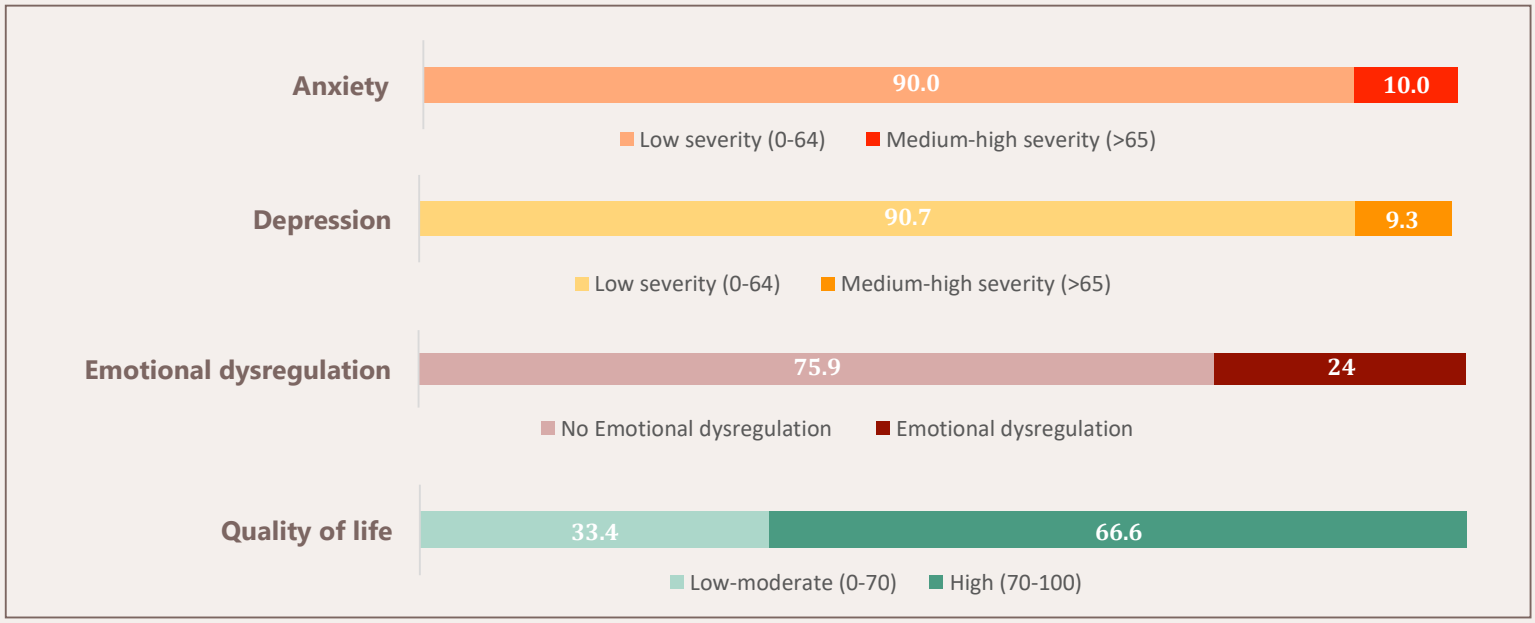
Figure 2 *Schooling situation and COVID-19 cases in school and in class*



- 38% of respondents attended classes in person while 13% did online learning at home.
- 48% reported a mix of online and in-class learning.
- 89% reported having COVID-19 cases in school and 42% reported having cases in class. (Figure 2)

5. PREVALENCE OF MENTAL HEALTH-RELATED OUTCOMES

Figure 3 *Percentage (weighted) of children and youth experiencing mental health outcomes (in the seven days prior to taking the survey)*



- **Anxiety and depression levels measured using Revised Children's Anxiety and Depression Scale-25 (RCADS-25).** Chorpita, B. F., Yim, L. M., Moffitt, C. E., Umemoto, L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A Revised Child Anxiety and Depression Scale. Behaviour Research and Therapy, 38, 835-855
- **Emotional regulation measured using the Clinical Evaluation of Emotional Regulation–9 (CEER-9) tool**. Pylypow, J., Quinn, D., Duncan, D., & Balbuena, L. (2020). A Measure of Emotional Regulation and Irritability in Children and Adolescents: The Clinical Evaluation of Emotional Regulation–9. Journal of Attention Disorders, 24(14), 2002–2011
- **Quality of life measured using 10 item tool – KIDSCREEN-10.** The KIDSCREEN Group Europe. (2006). The KIDSCREEN Questionnaires - Quality of life questionnaires for children and adolescents. Handbook. Lengerich: Pabst Science Publishers.

6. PREVALENCE OF MENTAL HEALTH RELATED OUTCOMES, cont.

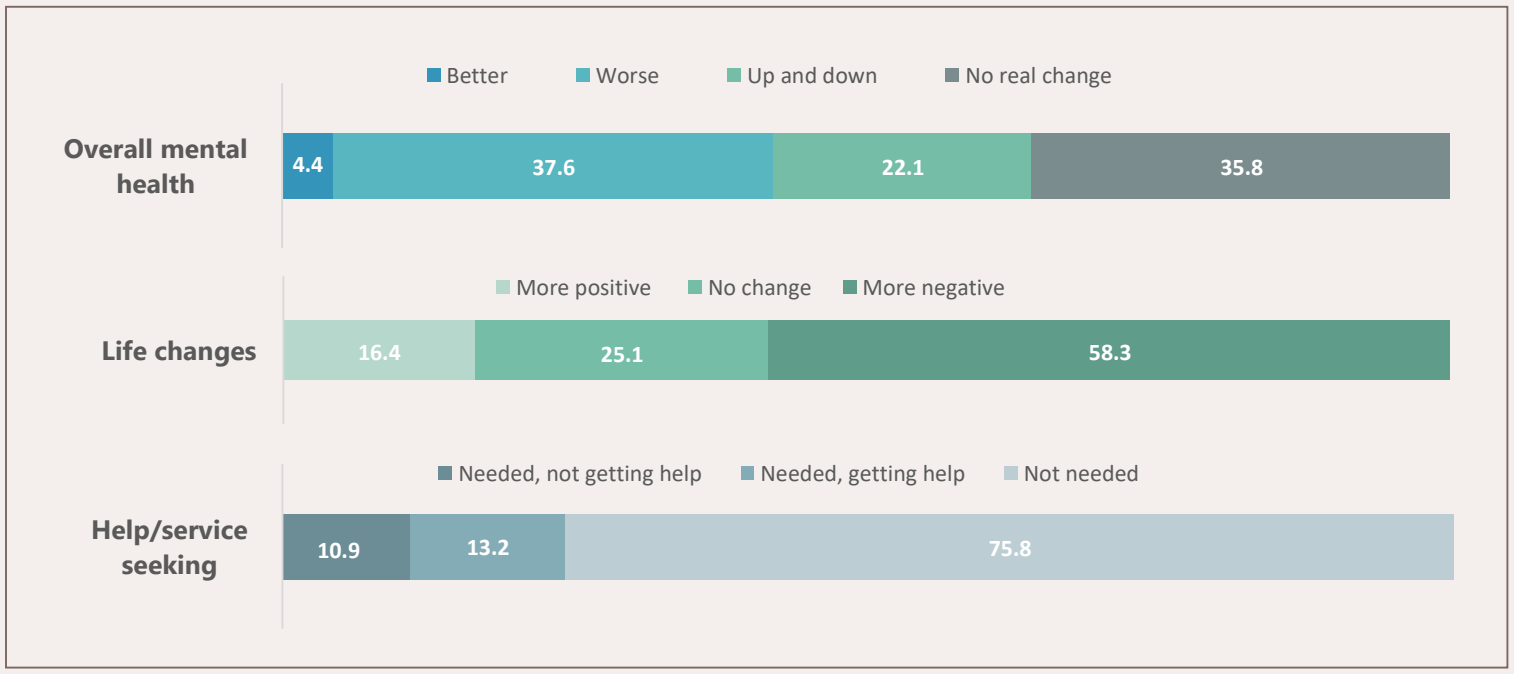
In the 7 days prior to taking the survey:

- 1 in 10 children and youth indicated they experienced moderate to high depression or anxiety.
- 1 in 4 children and youth indicated emotional dysregulation (i.e., irritability and inability to regulate their emotions). This was highest in the 16-18-year-old age group (30%), as compared those 8-11 (24%) and 12-15 (21%).
- 1 in 3 children and youth indicated their quality of life (QoL) was low or moderate. This prevalence was lowest in the 8-11-year-old age group (29%), next in 12-15-year-olds (34%); the highest QoL was the 16-18-year-old group (43%) (Figure 3).

Since the COVID-19 pandemic began:

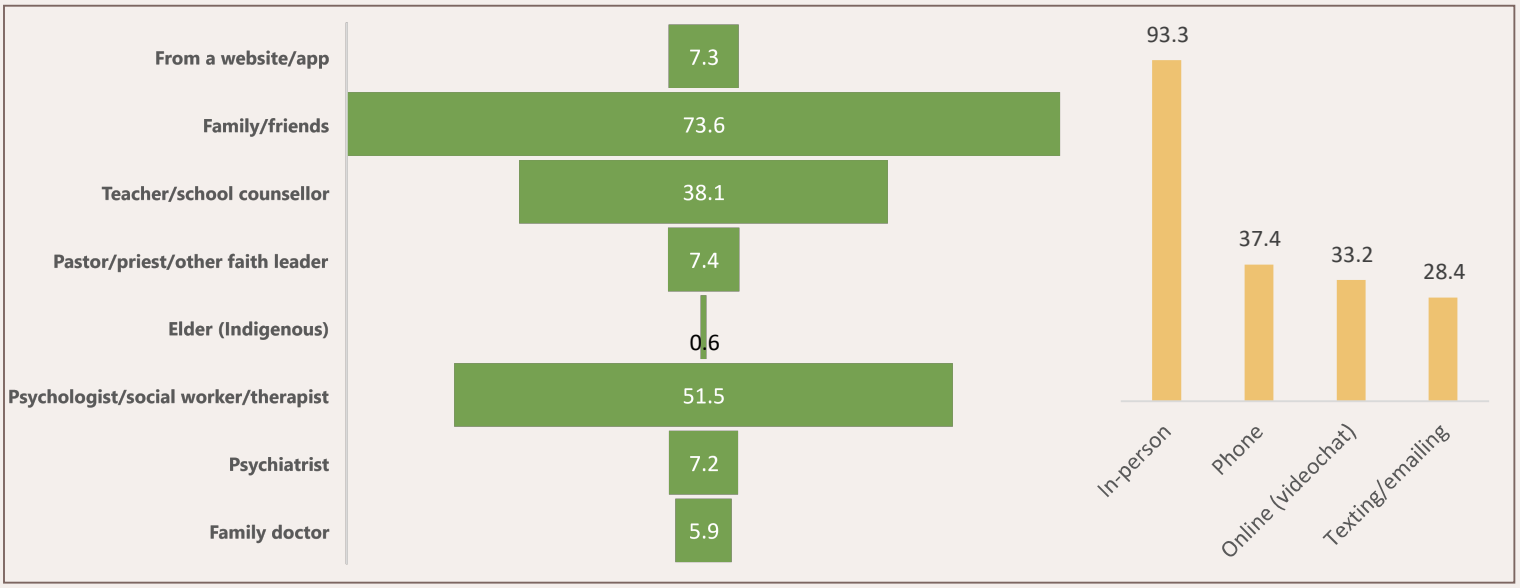
- 38% of children and youth said their overall mental health has been worse and 22% said there were lot of fluctuations. Only 4% said their mental health was better than before the pandemic and, for 36%, the pandemic had no real impact on their mental health.
- More than half the children and youth surveyed (58%) experienced more negative than positive life changes.
- 1 out of 4 kids (24%) said they needed mental health support. 13% of those children and youth were getting the help that they need, 11% were not (Figure 4).

Figure 4 *Percentage (weighted) of children and youth experiencing mental health outcomes (since the COVID-19 pandemic began)*



7. WHERE ARE THEY GETTING HELP FROM?

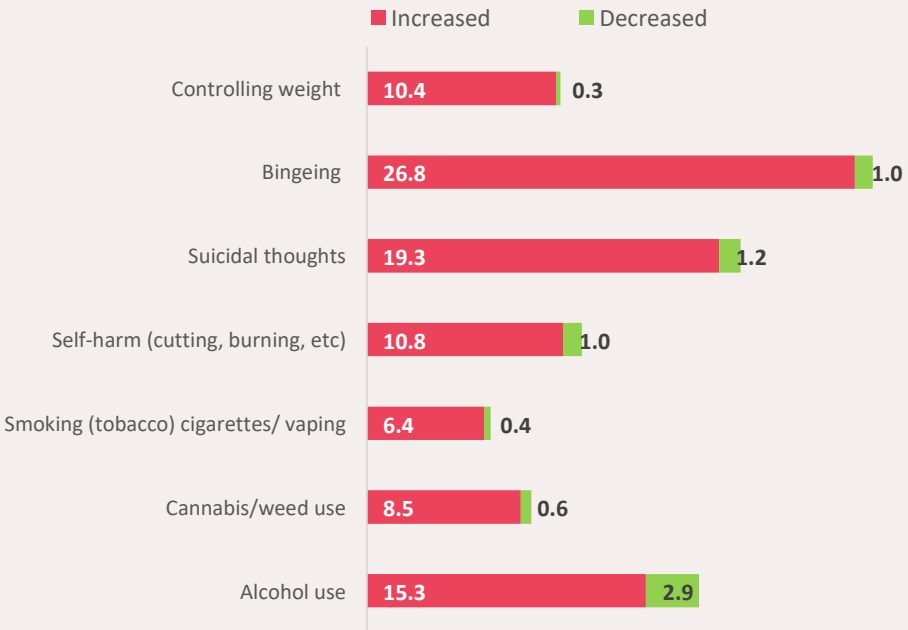
Figure 5 *Percentage (weighted) of children and youth reporting sources and channels of help (multiple responses accepted)*[1]



Among children and youth who needed and received mental health help, the majority sought help from family or friends (73%) followed by psychologist/social worker/ therapist (52%), then teacher/school counsellor (38%); almost 93% were getting help in person (Figure 5).

8. CHANGE IN ADOLESCENT BEHAVIOURS SINCE THE COVID-19 PANDEMIC

Figure 6 *Percentage (weighted) of adolescents*[2] *who reported an increase or decrease in harmful behaviours (i.e., substance use, self-harm, suicidal ideation, disordered eating) since the pandemic (n=279)*



- More than a **quarter** of the adolescents reported an increase in bingeing (excessive eating) while **1 in 10** reported an increase in controlling weight by cutting back food intake, exercising excessively, or purging.
- **1 in 5** adolescents reported an increase in suicidal ideation and **1 in 10** reported an increase in self harm.
- **6-15%** reported an increase in smoking, cannabis use, or alcohol use.
- Overall, decrease in harmful behaviours was very low—reported by 1% or less (except alcohol use–2.9%).

1. *Percentage estimates presented in Figures 5 and 6 were derived from multiple responses, therefore do not add up to 100%*
2. *Adolescents represent youth aged 12-18 years.*

9. PREDICTORS OF MENTAL HEALTH RELATED OUTCOMES

Figure 7 *Predictors of mental health outcomes in children and youth (modelling results-main effects)*

	Point-in-time outcomes				Global change outcomes						
	High anxiety	High depression	Emotional dysregulation	Low quality of life	Overall MH: worse	Overall MH: better	Overall MH: up & down	Life changes: positive	Life changes: negative	Help, not received	Help, received
SOCIODEMOGRAPHIC											
8-11y (vs 12-15y)							RRR=3.26	RRR=0.13			
16-18y (vs 12-15y)					RRR=11.16		RRR=15.54				
BIPOC (vs white)	OR=27.80		OR=0.21					RRR=14.23	RRR=8.99		
Girl (vs Boy)		OR=0.30			RRR=2.74		RRR=3.03				
> 1 person/bedroon (vs <1)	OR=0.09	OR=0.11									
Rural (vs mid-size city/town)			OR=0.20					RRR=0.06			
<$100K (vs >= 100K)						RRR=4.82	RRR=3.37			RRR=5.11	RRR=2.40
one/none parent canadian born (vs both)				OR=0.07				RRR=0.005	RRR=0.03		
BEHAVIOUR/CONTRIBUTING FACTORS											
>= 3hrs screen time (vs <3hrs)		OR=8.22		OR=4.51	RRR=2.96			RRR=0.34			
>= 8hrs sleep (vs < 8hrs)		OR=0.06				RRR=0.05	RRR=0.12	RRR=0.23			
Schooling in-class/online (vs both)											RRR=0.38
HELP SEEKING											
Need, not receiving help (vs not needed	OR=47.57	OR=48.81	OR=14.93	OR=6.75							
Need, receiving help (vs not needed)	OR=14.41	OR=19.09		OR=3.44					RRR=4.24		

Point-in-time outcomes and global change outcomes were both significantly associated with age, gender, minority status, family income, number of people at home, screen time, and sleep.

- **BIPOC** (Black, Indigenous, People of Colour) children and youth were 27 times *more likely* to report **high anxiety** compared to White. However, BIPOC were 79% *less likely* to report **emotional dysregulation**.
- **Girls**, compared to boys, were 70% *less likely* to report **high depression**.
- Those **living in homes with more people** (per bedroom) were *less likely* to have **anxiety** (91% lower) and **depression** (89% lower).
- Children and youth from **rural areas** were 80% *less likely* to report **emotional dysregulation.**
- Children and youth from an **immigrant family** (i.e., at least one parent born outside Canada) were 93% *less likely* to report **low quality of life.**
- Those who reported **more than 3 hours of screen time** were 8 times *more likely* to report **depression** and almost 5 times *more likely* to report **low quality of life**.
- Those who had **8 or more hours of sleep** were 94% *less likely* to report high **depression** levels.

HOW TO READ THE SUMMARY RESULTS MATRIX IN FIGURE 7:

***Statistically significant (P<0.05) variables associated with the outcome is presented in the first column.**

- Numbers in red indicate higher risk for that outcome, e.g. BIPOC children, compared to white, 27.8 times more likely to experience high anxiety.
- Numbers in green indicate lower risk for that outcome, e.g. girls, compared to boys, 70% less likely to experience high depression.
- Reference categories: low anxiety; low depression; no emotional dysregulation; no change in overall mental health; no change in life, and mental health help not needed.
- Estimates for point in time outcomes were obtained using binary logistic regression model; global change outcomes using multinomial logistic regression model

9. PREDICTORS OF MENTAL HEALTH RELATED OUTCOMES, cont.

Respondents who **needed and received help** *and* those who **needed and did NOT receive help** reported **significantly higher anxiety, depression, and emotional dysregulation** and **lower quality of life**, as compared to those who did not need help.

- For those who **needed and received help** relative to those who did not need help, the relative risk for **negative life change** was 4 *times **higher***
- **16-18-year-olds** (relative to 12–15-year-olds) were 16 times *more likely* to experience overall mental health being **up and down** and 11 times *more likely* to experience **worse** overall mental health.
- **BIPOC** children and youth, relative to White, had **9 times** the risk of experiencing **negative life change** during the pandemic.
- **Girls**, relative to boys, had 3 times *higher risk* for either **worse or fluctuating mental health** since the pandemic began.
- Children and youth from families with **income less than 100k**, compared to those with more, were 3 times *more likely* to experience **fluctuation in mental health** and 5 times *more likely* to **need but not receive help** (Figure 7).
- Children and youth from **rural areas**, as compared to those from mid-size cities/towns were 94% *less likely* to report having **positive life changes.**
- Children and youth from an **immigrant family** (at least one parent born outside of Canada), compared to those with both parents born in Canada, had 97% *lower risk* of experiencing **negative life changes**.
- Children and youth who had **more than 3 hours of screen time**, compared to fewer, were 66% *less likely* to experience **positive life changes.**
- Children and youth who had **more than 8 hours of** sleep, relative to those who had less than 8 hours, had 88% *lower risk* of **fluctuating overall mental health.**
- Those who **needed and received help** relative to those who did not need help were 4 times *more likely* to report **negative life change** (Figure 7).

10. SUMMARY

IN THE 7 DAYS PRIOR TO TAKING SURVEY:

- **Anxiety and Depression:** Low (10% and 9%, respectively)
- **Emotional dysregulation:** 24%
- **Low/moderate quality of life:** 33%

SINCE THE PANDEMIC BEGAN:

- **More negative than positive changes to life due to the pandemic:** 59%
- **Worse mental health change since the pandemic:** 38%

10. SUMMARY, cont.

- Children and youth who had **more recreational screen** time were *more likely* to report overall mental health had worsened, experienced depression, and had lower quality of life
- Those who get **8 or more hours of sleep** were *less likely* to experience depression
- Those **who needed but were NOT getting help** were *more likely* to have anxiety, depression, and emotional dysregulation (compared to those who did not need help)
- Children and youth from **equity-seeking groups**—Indigenous, people of colour, those who had one or more immigrant parents—did not fare well with mental health outcomes and the effect varied by age, sex, and income.

SUHU 1.0 RESEARCH TEAM

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