

Jovana Miladinovic, Vaidehi Pisolkar, Tamara Hinz, Nazeem Muhajarine

INTRODUCTION

- In 2020, the first year of the pandemic, measures implemented to curb the spread of COVID-19 restructured the daily lives and routines of children and adults alike.
- Key factors contributing to good mental health – regular physical activity, adequate sleep, and social interactions – were disrupted by these measures. As a result, many children experienced a decline in their mental health.¹
- Youth living in rural communities face unique challenges but also supports that help maintain mental health. For example, accessing formal mental health supports can be difficult for rural youth. On the other hand, the social cohesion in these communities can promote mental health and discourage risky behaviours.²
- This project aimed to answer the question: In the first year of the COVID-19 pandemic, how did children from rural communities fare (mental health and wellbeing) compared to children living in mid-size towns and urban centres?

OBJECTIVES

- Identify mental health and wellbeing outcomes associated with place of residence.
- Assess children's coping strategies and access to mental health services, noting barriers, and disparities between rural vs urban settings.

METHODS

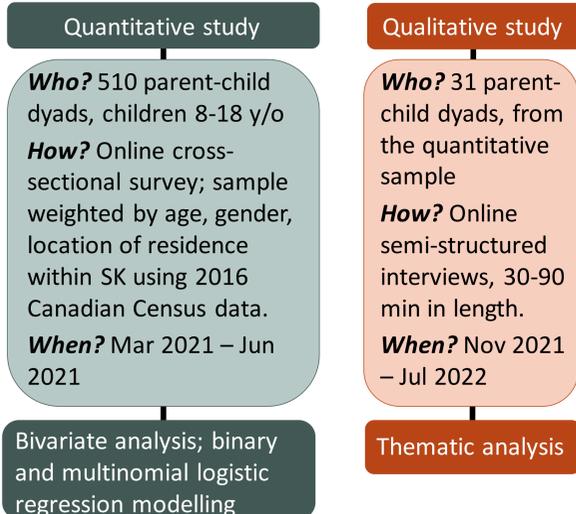
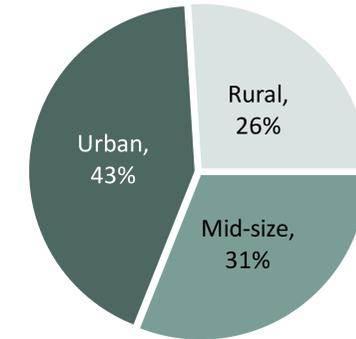


Figure 1: See Us, Hear Us 1.0 Study methodology

RESULTS

- Mental health outcomes investigated included:
 - Anxiety (RCADS-25)
 - Depression (RCADS-25)
 - Emotional dysregulation (CEER9)
 - Quality of life (KIDSCREEN10)
 - Changes in mental health
 - Overall life changes
 - Need for help
- There was an association between place of residence and:
 - Emotional dysregulation ($\chi^2(3) = 16.15, p = .001$)
 - Quality of life ($\chi^2(3) = 15.04, p = .002$)
 - Change in mental health ($\chi^2(9) = 37.31, p = <.001$)
 - Overall life changes ($\chi^2(6) = 22.79, p = <.001$)
- There was no statistically significant association between place of residence and anxiety, depression, or getting help.

Figure 2: Sample (n = 290) place of residence, not including missing responses.



Urban = Saskatoon, Regina; Mid-size = Estevan, Weyburn, Yorkton, Buena Vista, Moose Jaw, Prince Albert, North Battleford, Swift Current, Lloydminster, Meadow Lake; Rural = rest, i.e., S0A to S0Z.

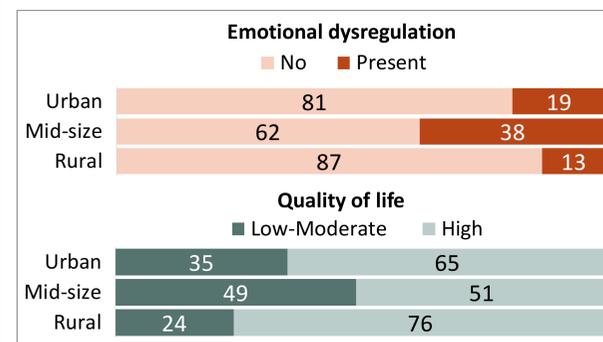


Figure 3: Percentage (weighted) of children & youth experiencing mental health outcomes in the 7 days prior to taking the survey

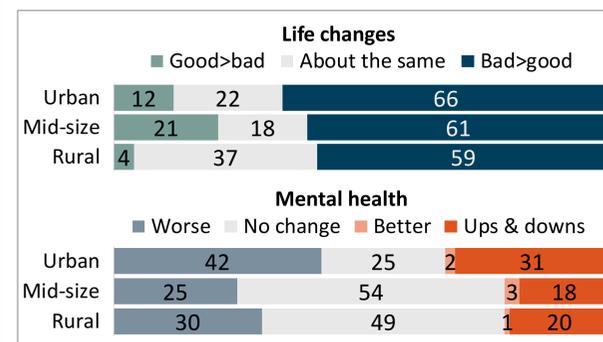


Figure 4: Percentage (weighted) of children & youth experiencing mental health outcomes since the COVID-19 pandemic began

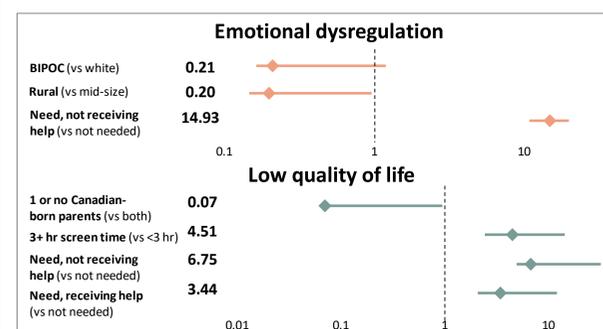


Figure 5: Odds ratio Forest plots of significant variables associated with emotional dysregulation and quality of life based on logistic regression modeling⁴

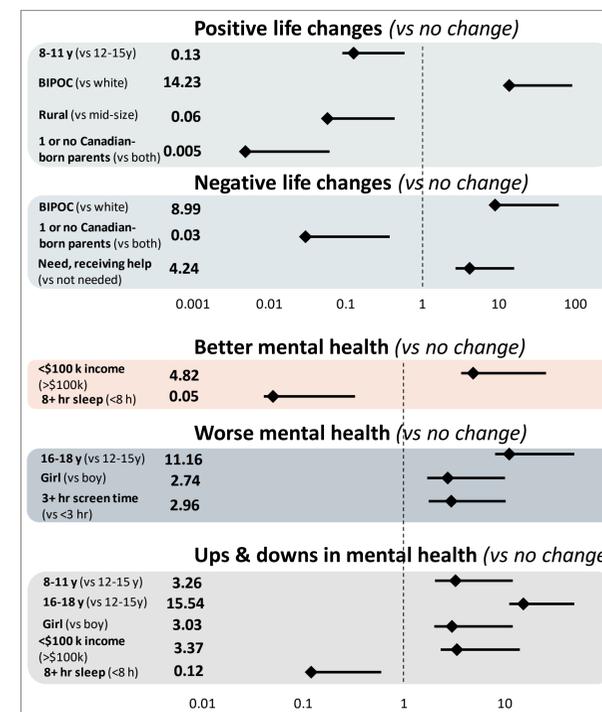


Figure 6: Odds ratio Forest plots of significant variables associated with life changes and mental health changes based on multinomial logistic regression modeling³

Based on **qualitative analysis**, experiences unique to rural communities included:

- Challenges seeking help** – must travel long distances, lack of rural mental health crisis units
- Safety** – some communities followed COVID rules, others did not
- Isolation** – activities often car-reliant, must be planned ahead of time
- Connectivity** – poor internet access a barrier to online learning
- Physical activity** – year-round activity facilitated by rural living

RESULTS

Table 1: Factors associated with coping with mental health challenges as reported by youth from both rural and urban areas during qualitative interviews

Facilitators ✓	Barriers ✗
-work benefits	-medication cost
-financial stability	-wait times
-prior lived experience	-mental health literacy of child & parent
-medication	-unvaccinated status
-having family doctor	-social isolation
-getting fresh air	-school closures
-physical activity	
-strong support systems	
-arts and crafts	
-reading books	

FINDINGS & RECOMMENDATIONS

- The experiences of children and youth in Saskatchewan in the first year of the pandemic varied based on sociodemographic factors and behaviours like screen time, sleep, and help seeking.
- While those living in rural areas were less likely to report emotional dysregulation, they were also significantly less likely to experience positive life changes compared to those from mid-size towns.
- Structural barriers – like lack of nearby mental health providers and facilities – made it difficult for children outside of urban areas to access the help they needed.
- There is a need to expand available mental health services in rural communities.
- Children and youth in SK will benefit from increased teaching about mental health in order to improve mental health literacy and awareness of effective coping strategies.

ACKNOWLEDGMENTS

Thank you to everyone on the SUHU research team, with special thanks to Vaidehi Pisolkar, Isabelle Dena, Marin Habbick, Daniel Adeyinka, and Natalie Kallio. This project was possible due to funding from the Office of Vice-Dean Research, CoM.

REFERENCES

- Cost KT, Crosbie J, Anagnostou E, Birken CS, Charach A, Monga S, Kelley E, Nicolson R, Maguire JL, Burton CL, Schachar RJ, Arnold PD, Korcak DJ. Mostly worse, occasionally better: impact of COVID-19 pandemic on the mental health of Canadian children and adolescents. *Eur Child Adolesc Psychiatry*. 2022 Apr;31(4):671-684. doi: 10.1007/s00787-021-01744-3. Epub 2021 Feb 26. PMID: 33638005; PMCID: PMC7909377.
- Scott C. Mental Health of Urban and Rural Youth in Saskatchewan [master's thesis]. [Saskatoon (SK)]: University of Saskatchewan; 2014. 106 p.
- Muhajarine N, Adeyinka D, Pisolkar V, Ramamoorthy S, Hinz T, Damodharan S, Balbuena L, McCutcheon J, Dena I, Green K, Kallio N. Research Brief: See Us, Hear Us 1.0. Saskatoon, Saskatchewan: Saskatchewan Population Health and Evaluation Research Unit (SPHERU). April 7, 2022. Mental Health Experiences of Children, Youth, and Families in Saskatchewan during the first year of the COVID-19 Pandemic.