

Investigating the Impacts of COVID-19 on the Mental Health of Adolescents in Alberta: Community Report

Community Report

Child and Youth Healthy Futures Lab, UBC Okanagan



AUTHORS

Dr. Carla Hilario, PhD, RN

Principal Investigator

School of Nursing | Faculty of Health and Social Development

The University of British Columbia | Okanagan campus | Syilx Okanagan Nation Territory

1147 Research Rd | Kelowna BC | V1V 1V7 Canada

Mischa Taylor

Research Coordinator

School of Nursing | Faculty of Health and Social Development

The University of British Columbia | Okanagan campus | Syilx Okanagan Nation Territory

1147 Research Rd | Kelowna BC | V1V 1V7 Canada

Gurleen Kaur

Research Assistant

Dominic Violo

Research Assistant

Designed by Jacklyn Awotwi-Pratt

Acknowledgments

We would like to recognize and thank the following youth for sharing their ideas and personal experiences throughout the course of this study. These were used to shape and guide the study activities, its results, and this report.

- Noa Csillag
- Gillian Nash
- Shaina Soetaert

Funding Source

Women and Children's Health Research Institute, Clinical/Community Research Integration Support Grant

TABLE OF CONTENTS

PROJECT OVERVIEW & RESEARCH DESIGN AND METHODS	3
KEY FINDINGS	5
LOOKING FORWARD	15
CONCLUSION	17
REFERENCES	18

PROJECT OVERVIEW

The COVID-19 pandemic and safety measures impacted Canadians' lives in multiple ways. These measures, known as public health measures (PHMs), were crucial to protecting the physical health of Canadians, and included: closing non-essential businesses and public places; practising physical distancing, and shifting to online schooling events (Canadian Institute for Health Information, 2022). Adolescents' daily lives and routines were significantly impacted as a result, which subsequently impacted their mental health (Montreuil et al., 2022; Richard et al., 2023). It is well known that youth mental health was affected during the pandemic, but what's less understood is how the PHMs in particular affected their mental health, and how youth themselves perceive their experiences. This report discusses a research project that explored youth's perceptions of how the PHMs affected their daily lives and mental health during the Covid-19 pandemic.

Focus of the study

The purpose of this project was to explore the impacts of COVID-19 related PHMs on the everyday lives of adolescents in Alberta. This project focused on answering two research questions:

- 1) What are the perspectives of adolescents on how Covid-related PHMs shaped their everyday lives?;
- and
- 2) What are the perspectives of adolescents on how these changes influenced their mental health?

RESEARCH DESIGN AND METHODS

To answer the research questions, a qualitative research approach was used to explore youth's experiences. Youth aged 14-19 from two regions in Alberta were invited to participate in the project, including youth with a mental health diagnosis, and those without any mental health diagnoses or concerns. The two regions included Edmonton, a large urban centre, and smaller suburban areas outside of the urban location, referred to as 'Grove County' in this report. Youth participants were recruited through youth-serving organizations and word of mouth. A total of 33 youth participated in a one-hour online research interview via Zoom (videoconference) between May and October 2022. During the interviews, we asked youth about their experiences, including changes to their daily lives due to the pandemic and the public health measures, and how these may have affected their mental health. The

information gathered from the interviews were then examined to identify similarities and differences in participants' experiences (Boeije, 2002), and determine the key findings. Ethics approval for this study was granted by the University of Alberta and University of British Columbia, where study activities were conducted.

This project also used a youth engagement approach, where youth, as the demographic group of interest in this study, shared their insights and experiences to inform and guide the study activities (Hawke et al., 2018). Four youth were engaged throughout the study as Youth Research Collaborators (YRCs), and provided valuable guidance on the recruitment activities, interview questions, and in identifying key results from the interviews. They also contributed to presentations and strategies for sharing project findings. Notably, during the analysis the YRCs identified the concept of a timeline as an organizing framework for youth's experiences during the pandemic. Their insights helped to organize and interpret the results according to how youth mental health was affected across the course of the pandemic.

Participants

Thirty-three youth aged 14-19 participated in this project. Half of the participants lived Edmonton (51.5%) during the pandemic while the other half (48.5%) resided in Grove County. The majority of participants identified as young women (54.5%), with the remainder identifying as young men (36.4%), and as other genders (6.1%). Although participants represented all included ages, 60% were 18-19 years old. See the chart below for more demographic information (Chart 1).

Chart 1. Participant demographic information

Demographic Categories	N (33)	Percentage (100%)
Residence during pandemic		
Rural site	16	48.5
Urban site	17	51.5
Gender identity at time of interview		
Identify as young woman	18	54.5
Identify as young man	12	36.4
Identify as other	2	6.1
Undisclosed	1	3.0
Age at time of interview		
14	1	3.0
15	2	6.1
16	5	15.15
17	5	15.15
18	12	36.4
19	8	24.2

KEY FINDINGS

Before the pandemic began, the majority of participants felt that their overall mental health had been positive and stable. Participants gave various reasons for good mental health such as their life stage and having nurturing relationships, extracurricular activities, and positive educational experiences. During the pandemic, participants described their mental health according to a 'timeline', dividing the pandemic into different periods according to PHMs in place at a given time. In Alberta, public health measures were instituted to greater or lesser degrees between March 2020 and March 2022. Three states of emergency formally demarcated changing infection rates and PHMs into 'waves', however, participants generally divided the years of the pandemic according to the following categories: Initial lockdown (March-May 2020); Post-initial lockdown (June 2020-March 2022); and Post-PHMs (March 2022 onwards). The timeline shown in Figure 1 illustrates the formal timeline of PHMs in Alberta over the full two years of restrictions including the states of emergency when PHMs were most stringent, and the timeline of PHMs as perceived by youth. This section outlines the main effects of the PHMs on mental health shared by participants according to the categories: Initial lockdown; Post-initial lockdown; and Post-PHMs.

The timeline shown in Figure 1 illustrates the formal timeline of PHMs in Alberta over the full two years of restrictions including the states of emergency when PHMs were most stringent, and the timeline of PHMs as perceived by youth. This section outlines the main effects of the PHMs on mental health shared participants according to the categories: Initial lockdown; Post-initial lockdown; and Post-PHMs.

Figure 1. Timeline of Alberta public health measures, states of emergency, and participants' perceptions of the pandemic timeline and mental health impact

	March - May 2020	May - Nov. 2020	Nov. 2020 - Feb. 2021	Feb. - Sept. 2021	Sept. 2021 - March 2022	March 2022 - Onwards
State of public health measures*	<ul style="list-style-type: none"> All gatherings prohibited Online schooling for all grades Indoor public spaces closed 	<ul style="list-style-type: none"> Phased removal of measures Some public spaces reopened, gatherings permitted 	<ul style="list-style-type: none"> Online schooling for grades 7-12 Indoor gatherings prohibited Indoor public spaces closed 	Intermittent implementation and removal of online schooling, physical distancing, and public space measures	<ul style="list-style-type: none"> Youth (younger than 18) indoor recreation permitted only with distancing and masking Curfew, distancing, and capacity limits to public spaces 	All public health measures permanently removed: School returns to in-person, no physical distancing, public spaces open with no restrictions
State of emergency*	March 17: First state of public health emergency declared	June 15: State of public health emergency lifted	Nov. 27: Second state of public health emergency declared	Feb. 22: State of public health emergency lifted	September 15: State of emergency declared	June 15: State of emergency lifted
Participant perceptions of pandemic timeline	Initial lockdown	Post-initial lockdown				Post-pandemic
Perceived mental health impacts	<ul style="list-style-type: none"> Sudden shift in mental health <ul style="list-style-type: none"> Diminished mental health = Sadness, depression, and anxiety Improved mental health = Happier, more relaxed 	<ul style="list-style-type: none"> Mental health stabilized as some measures were lifted, but was not restored <ul style="list-style-type: none"> Reduced fear and anxiety, feelings of hope Mental health diminished with time as the pandemic continued <ul style="list-style-type: none"> Depression, emotional exhaustion, stress 				<ul style="list-style-type: none"> Mental health was restored or exceeded pre-pandemic mental health <ul style="list-style-type: none"> Excited, relieved hopeful Mental health remained low <ul style="list-style-type: none"> Ongoing anxiety, uncertainty, loneliness

*Canadian Institute for Health Information, 2022

Initial Lockdown

Youth felt that the public health measures during the first three months (March to May 2020) were the most strict compared to the following months. Often referred to as the ‘initial lockdown’, many aspects of daily life involving interactions with others were limited during this period. This included closing non-essential business and public spaces, canceling events, and switching to online school. Many participants considered the first three months as a distinct period compared to the rest of the pandemic, with different mental health outcomes. The sudden and sweeping PHMs caused widespread changes to their everyday lives, requiring them to adjust and adapt quickly. One youth shared, “[I] couldn’t see my friends, no school, no sports, no being outside... So it was a lot to go in one piece” (Amy, age 15, Grove County). For another youth (Stacey, age 18, Edmonton), the start of the pandemic drastically changed various aspects of her life. Stacey felt she had lost many personal freedoms and social connections and that her physical well-being became worse. Reflecting on these changes, Stacey commented, “when the pandemic started everything just turned opposite for me, in a negative way”.

Online schooling and physical distancing meant that youth spent more time at home and caused participants to feel “trapped” (Trisha, age 17, Grove County) and “lost” (Nicholas, age 19, Edmonton). One participant (Amanda, age 18, Grove County) discussed how the pandemic disrupted her high school experience. As a graduating student Amanda felt that, due to the PHMs, she had missed out on many of the typical high school experiences and activities.

“[I] couldn’t see my friends, no school, no sports, no being outside... So it was a lot to go in one piece” – Amy (Age 15, Grove County)

“When the pandemic started everything just turned opposite for me, in a negative way” – Stacy (Age 18, Edmonton)

Most commonly during the first lockdown, participants experienced negative emotions and poorer mental health. For instance, they felt "shocked" (Amy, age 15, Grove County), "restricted" (Christine, age 18, Grove County), and "empty" (Amanda, age 18, Grove County) because their lives had significantly changed due to the PHMs. Participants were especially distressed about the impact of the public health measures, and how long youth could expect disruptions to their everyday lives. They also expressed concern about the implications on their futures. Other youth worried about how the public health measures could impact their future plans and opportunities. They described feeling uncertainty Reggie, age 18, Edmonton). Sarah (age 18, Edmonton) shared, "in that period I almost lost my mind. As an extrovert it was completely new being forced to be indoors. So it affected a lot. I became more depressed, I started keeping more to myself".

Other youth, however, did not find these adjustments difficult as they now had fewer academic expectations and pressures, more free time, and flexible schedules. Spending time at home also suited some youth's personalities, making them feel happier. For Trisha (age 17, Grove County), the initial lockdown felt like a long vacation. Some youth felt that while they experienced negative emotions, these were balanced by positive outcomes of the PHMs. Angela (age 17, Edmonton) described feeling anxious and sad more frequently during the initial lockdown. However, she also appreciated the opportunity to get more sleep and grow closer to their family during this time. For Angela, the initial lockdown was a combination of both good and bad experiences.

"In that period I almost lost my mind. As an extrovert it was completely new being forced to be indoors. So it affected a lot. I became more depressed, I started keeping more to myself" – Sarah (Age 18, Edmonton)

" I started developing new ideas on how to adapt to the system, and it became automatic... So I slowly became accustomed to the system, and slowly the anxiety started reducing, the fear reducing" – Peter (Age 18, Edmonton)

Post-initial lockdown

Between June 2020-March 2022, some public health measures were gradually lifted. Participants considered this period, where some PHMs remained in place but others had been lifted, as different from the initial lockdown. During this period, some aspects of daily life returned to normal, such as in-person school, while others, such as most extracurricular activities and large social gatherings, were still restricted by the PHMs.

During this time, several participants perceived that their mental health improved as they were able to engage in some of their pre-pandemic routines and activities. Other youth felt that their mental health improved as the PHMs became familiar. As Peter (age 18, Edmonton) explained, “I started developing new ideas on how to adapt to the system, and it became automatic... So I slowly became accustomed to the system, and slowly the anxiety started reducing, the fear reducing”. While an improvement from the initial lockdown, most participants felt that their mental health in this period was still comparatively lower than prior to the pandemic. As a result, although youth felt better after the lockdown, the mental health impacts were not entirely ameliorated. The easing of PHMs also inspired hope for some participants that the pandemic would eventually come to an end (Reggie, age 18, Edmonton).

However, as some PHMs such as social distancing remained in place, other participants noticed that their mental health did not improve. One youth (Chelsey, age 16, Grove County) described her mental health as becoming grayer and grayer.

“The first time the PHMs were turned down a bit, I was happy. But as time continued and they were back again, it really made me realize that there is nothing permanent.”
– Emily (Age 17, Edmonton)

“I felt relieved, the kind of feeling that you get when something that has been pressing on you for a long time gets lifted off you. I could do what I couldn't do during Covid” – Nicholas (Age 19 Edmonton)

Compared to being like a rainbow before the pandemic, she felt that metaphorically, she became duller as disruptions to her daily life in the post-initial lockdown period extended. In other cases, the return to in-person school and more social interaction with peers was a difficult transition after months of isolation. This was especially true for Lisa (age 15, Edmonton), whose mental health had improved during the initial lockdown due to less social pressures. Lisa shared feeling emotional exhaustion and stress in the post-lockdown period as she attempted to readjust once again.

Mental well-being fluctuated for some youth as the public health measures changed. Each time their routines shifted due to the implementation or removal of public health measures, so too did their mental health as hope accompanying fewer measures turned to disappointment and uncertainty when more measures were reintroduced. As Emily (age 17, Edmonton) shared,

The first time the PHMs were turned down a bit, I was happy. But as time continued and they were back again, it really made me realize that there is nothing permanent. I was thinking that the pandemic is gone, so we are back to our normal life. So, my mental health [improved] in the first instance. But later on, I think it was constant [low].

Post-PHMs

The public health measures in Alberta were fully lifted in March 2022 allowing regular routines to resume.

“The first time the PHMs were turned down a bit, I was happy. But as time continued and they were back again, it really made me realize that there is nothing permanent.”
– Emily (Age 17, Edmonton)

Nicholas (age 19, Edmonton) shared, “I felt relieved, the kind of feeling that you get when something that has been pressing on you for a long time gets lifted off you. I could do what I couldn't do during Covid” (P19). The removal of all PHMs and the return to pre-pandemic routines sparked a renewed sense of hope for the future, as experienced by Christine, (age 18, Grove County). While most participants reported improved mental health, the degree and manner of improvement varied. Jacob, 19 (Edmonton), felt his mental health was better than before the pandemic, describing feeling “overexcited” due to the complete removal of PHMs. Others noted their mental health was restored to being similar to how it had been before the pandemic.

Although ‘normal life’ absent of PHMs had been restored, youth’s routines did not automatically or immediately return to normal. Some youth found readjustment a slow or challenging process, while others felt that a ‘new normal’ had been established during the pandemic. For example, some youth now preferred the more solitary pastimes and routines they had developed during the pandemic, resulting in weaker social connections with peers. Joshua (age 19, Edmonton) reflected that although playing soccer had been his primary interest before the pandemic, it was no longer as exciting as both he and his friends had developed different interests due to the PHMs which had limited their opportunities to play together.

The pandemic caused changes to habits that continued after the pandemic formally ended. Eric (age 14, Edmonton) felt that he and his peers were “glued to our phones” after the PHMS were lifted, and attributed this to habits acquired during the pandemic.

“I felt relieved, the kind of feeling that you get when something that has been pressing on you for a long time gets lifted off you. I could do what I couldn't do during Covid” - Nicholas (Age 19, Edmonton)

Cheryl (age 19, Edmonton), for instance, lost interest in the dance group that she had been passionate about prior to the pandemic. After the PHMs were removed, she continued to spend her free time on social media as she had done during the pandemic, instead of rejoining her dance group. A common sentiment amongst youth was that, although their mental health had improved, it did not fully recover. Some felt the pandemic had initiated more profound, lasting changes. Mabel, 17 (Grove County), believed her mental health was still lower, even after the lifting of measures, because "the world can't be the same as before the pandemic." For instance, changes to social relationships during the pandemic had a lasting negative impact on mental health. Nicholas, 19 (Edmonton), found that spending less time with friends during the pandemic reduced feelings of connection and support in its aftermath. Ava (age 16, Grove County) found the abrupt return to pre-pandemic norms disorienting and challenging, noting the difficulty in overcoming long-term isolation:

That level of isolation that went on for that long, even when we were allowed to be connected again, those walls had already been built and we were still in the process of taking them down. So it wasn't this quick and easy shift back into how things are supposed to be. So, I felt like there was always going to be a little bit of leftover isolation.

Despite these difficulties, youth felt the experience of the pandemic also inspired self-awareness and personal growth. Jamie (age 16, Grove County) became more aware of her own and others' mental health, and discovered her personal interest in supporting mental

“That level of isolation that went on for that long, even when we were allowed to be connected again, those walls had already been built and we were still in the process of taking them down.”
– Ava (Age 16, Grove County)

wellness. For Amanda (age 18, Grove County), although the pandemic had been very challenging, she also acknowledged the positive learning experiences it provided. While she would never want to return to or relive the pandemic, Amanda felt thankful for the lessons learned during that time.

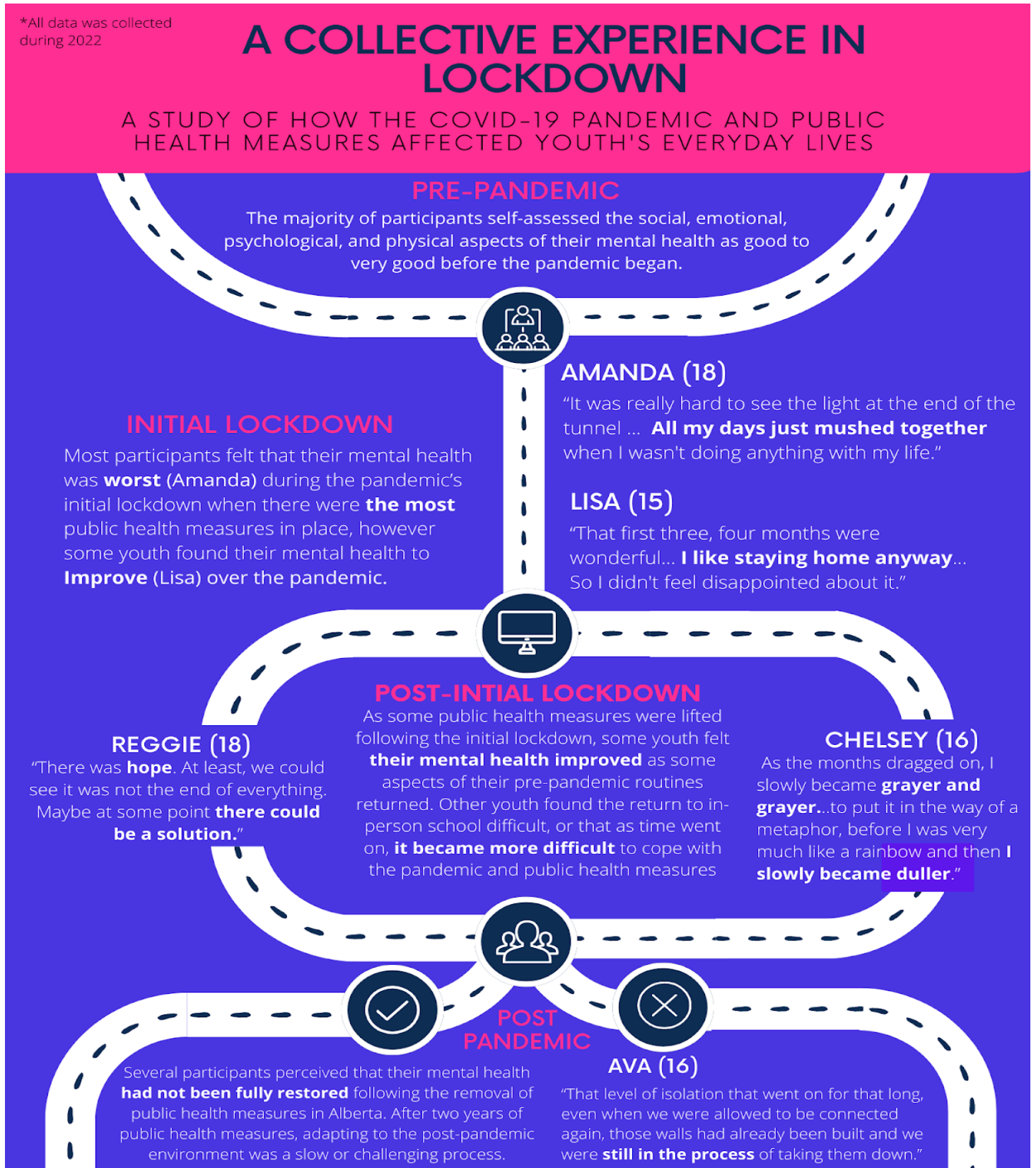
Summary of Findings:

The experiences of youth who participated in this study suggest that:

- Youth mental health was impacted by the PHMs in diverse ways and at various points across the pandemic.
- Youth mental health fluctuated with time throughout the pandemic as the public health measures were implemented and lifted.
- For many youth, their mental health continued to be negatively affected even after the PHMs were fully removed. Most commonly, youth experienced negative mental health impacts of the PHMs, but this is not standard for all youth. In some cases, youth experienced positive mental health outcomes during the pandemic.

These findings are represented in the graphic below, drawing on key reflections from participants.

Figure 2. Summary of findings of youth’s mental health experiences during the Covid-19 pandemic.



LOOKING FORWARD

Implications for youth mental health and support:

Youth and mental health service providers across sectors (non-profit, government, education, etc.) hold important roles that can impact youth mental health outcomes. Based on what was learned in this study, service providers can play a lead role in supporting youth mental health. Here we list some key ways that service providers can promote positive mental health amongst youth.

1. **Acknowledge the ongoing impact of PHMs on youth mental health:** Findings of this study indicate that the COVID-19 pandemic and associated public health measures (PHMs) significantly affected the mental health of adolescents. In several cases, the negative impacts of shifting routines outlasted the pandemic itself.

What can service providers do? Service providers should be prepared to respond to residual uncertainty and anxiety stemming from the pandemic. Youth may need support readjusting academically and socially to post-PHMs routines and expectations, and understanding the mental health repercussions. Service providers can support youth to identify these impacts, and address their specific needs.

2. **Offer tailored mental health services:** Youth shared diverse experiences of mental health impacts during the pandemic, with some youth being more significantly impacted by negative emotions, isolation, and uncertainty, while others felt relief from social pressures and academic and extracurricular requirements. Similarly, when PHMs were temporarily eased at different points in the pandemic, certain youth felt their mental health improved while others experienced increased anxiety and uncertainty.

What can service providers do? Keeping in mind the diverse ways that youth may have been affected can help service providers offer tailored support that responds to youth's unique experiences and subsequent mental health strengths and needs. This is relevant for supporting youth mental health needs resulting from the Covid-19 pandemic as well as other events or circumstances.

3. **Provide support during significant life changes:** Youth shared that adapting to the changes to routines initiated by the pandemic and PHMs was a major challenge. In other contexts where key aspects of daily life undergo significant change, service providers can play a crucial role in supporting them to navigate these shifts and develop effective coping strategies.

What can service providers do? Providing resources and therapeutic guidance in adjusting to new routines and environments can support youth to develop the skills to understand and respond constructively and proactively. These types of supports can help youth to maintain their mental wellbeing throughout transitions or challenging circumstances.

4. **Promote mental health literacy:** Some youth found that the pandemic enhanced their awareness of mental health and the importance of seeking help. In the post-pandemic context, service providers can play a vital role in maintaining a focus on mental health amongst youth.

What can service providers do? Service providers can promote ongoing dialogue about the pandemic's impacts and mental wellness overall. Providing information on mental health and recognizing signs of distress can help to normalize mental health challenges or barriers, and empower youth to address and prioritize their mental wellbeing. Normalizing mental health promotes help seeking, and service providers can support youth to identify and access available resources and supports.

5. **Foster resilience and growth:** While the pandemic introduced substantial difficulties, youth also recognized the opportunities for personal growth and learning that it introduced. Youth shared their desire to restore mental wellness, as well as their ability to do so.

What can service providers do? Adolescents can build resilience by drawing on their strengths, developing coping strategies, and fostering a growth mindset. Service providers can offer group programs and one-on-one counselling that focus on supporting youth to develop these capacities so that they are equipped to respond positively to challenges and maintain their mental wellness.

CONCLUSION

This study examined the impact of COVID-19 pandemic-related public health measures (PHMs) on the daily lives and mental health of adolescents in Alberta. Thirty-three youth aged 14-19 participated in an interview and shared their experiences. Utilizing a youth-engaged approach, four youth were engaged in the research process as Youth Research Collaborators (YRCs) to refine study activities and add a youth lens.

During the initial lockdown period, youth faced disrupted routines, limited social interactions, and uncertainty triggering feelings of shock, emptiness, and anxiety which led to poor mental health for many youth. As some PHMs eased following the initial lockdown, some youth felt that their mental health began to recover as regular routines resumed, while readjusting to in-person interactions posed challenges for others. After the PHMs were fully lifted, some youth experienced mental health improvements due to restored routines and renewed hope. For other youth, however, their mental health continued to be negatively affected even in the absence of PHMs.

This study underscores the diverse impact of PHMs on adolescent mental health during and after the Covid-19 pandemic. Youth experiences and insights on their mental health emphasize the need for tailored supports to respond to youth's unique circumstances, and for ongoing awareness of and focus on the residual and longer-term impacts of the pandemic on youth mental health. Although the pandemic and subsequent PHMs impacted youth mental health, most commonly detrimentally, there is now an even greater impetus to prioritize youth mental health in the post-PHMs period, and opportunities to expand and improve supports for optimal youth wellbeing going forward.

REFERENCES

1. Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity*, 36(4), 391–409. <https://doi.org/10.1023/A:1020909529486>
2. Canadian Institute for Health Information. (2022). *Canadian COVID-19 intervention timeline*. Retrieved July 23, 2023, from <https://www.cihi.ca/en/canadian-covid-19-intervention-timeline>
3. Hawke, L. D., Relihan, J., Miller, J., McCann, E., Rong, J., Darnay, K., Docherty, S., Chaim, G., & Henderson, J. L. (2018). Engaging youth in research planning, design and execution: Practical recommendations for researchers. *Health Expectations*, 21(6), 944–949. <https://doi.org/10.1111/hex.12795>
4. Montreuil, M., Gendron-Cloutier, L., Laberge-Perrault, E., Piché, G., Genest, C., Rassy, J., Malboeuf-Hurtubise, C., Gilbert, E., Bogossian, A., Camden, C., Mastine, T., & Barbo, G. (2023). Children and adolescents' mental health during the COVID-19 pandemic: A qualitative study of their experiences. *Journal of Child and Adolescent Psychiatric Nursing*, 36(2), 65–74. <https://doi.org/10.1111/jcap.12404>
5. Richard, V., Dumont, R., Lorthe, E., Loizeau, A., Baysson, H., Zaballa, M.-E., Pennacchio, F., Barbe, R. P., Posfay-Barbe, K. M., Guessous, I., Stringhini, S., SEROCOVID-KIDS Study Group, Amrein, D., Arm-Vernez, I., Azman, A. S., Bal, A., Balavoine, M., Berthelot, J., Bleich, P., ... Zavlanou, C. (2023). Impact of the COVID-19 pandemic on children and adolescents: Determinants and association with quality of life and mental health—a cross-sectional study. *Child and Adolescent Psychiatry and Mental Health*, 17(1), 17. <https://doi.org/10.1186/s13034-023-00563-5>