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EMPIRICAL STUDIES

See us, hear us! children, adolescents and families in Saskatchewan coping with mental health during the COVID-19 pandemic

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ABSTRACT

Purpose: To examine the lived experiences of children and adolescents coping with mental health issues and seeking mental health services in Saskatchewan during the COVID-19 pandemic.

Methods: In our descriptive phenomenological qualitative study, we interviewed forty-six individuals, including children aged 8–15 and their parents. Thematic analysis was applied to interpret the interview data.

Results: Our analysis identified three key themes: pyscho-behavioural impact, academic impact, and social impact. The pandemic adversely affected children due to factors like changes in behaviours such as increased screen time and decreased physical activity, limited access to mental health services, and disruptions to schooling and social interactions. Coping mechanisms varied, ranging from the utilization of available mental health supports and services to individual and family-based strategies. Disparities in timely access to mental health services were evident, with financially stable families accessing private services, while others struggled, particularly in rural areas. Families demonstrated resilience through parental efforts to seek balance and prioritize safety amidst COVID-19 challenges.

Conclusions: Social connectedness served as a crucial buffer against pandemic-induced stress. Children faced difficulty in accessing timely mental health services and supports. Echoing participant experiences, our findings emphasize the urgency of targeted interventions and policy adjustments to address existing gaps in mental health service accessibility and availability.

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Introduction

Globally, the emergence of COVID-19 upended the lives and livelihoods of families, giving rise to mental health challenges for entire family units as they grappled with the implications of lockdowns and reduced external social interactions. The fallout that families encountered from the COVID-19 pandemic underscored the importance of prioritizing mental health services and exposed existing gaps occurring within an already strained healthcare system. Amid the persistent worldwide increase in COVID-19 cases during the spring of 2020, nearly 200 countries implemented school closures. This measure impacted children and youth leading to substantial disruption to their education (Organisation for Economic Co-operation and Development [OECD], 2020). The abrupt shift to remote learning, the cancellation of extracurricular activities, and limited social interactions were factors that adversely affected the mental health of children, surpassing the direct impact of the pandemic. The pandemic also placed a mounting strain on healthcare systems, social structures, and the economy, all of which continued to have a significant impact on the population (Nicola et al., 2020; Statistics Canada, 2022). This interconnected web of challenges in the context of a global phenomenon, the COVID-19 pandemic, emphasizes the importance of conducting comprehensive research not only to better understand the challenges but also to suggest ways that healthcare systems respond in the future.

A study conducted in China showed that the initial stages of the pandemic had moderate or severe psychological impact on about 54% of the general population aged 12–59 years (Wang et al., 2020). Subsequently, as the pandemic progressed, multiple research studies highlighted that children, as a demographic group, faced significant challenges such as low mood, social isolation, worry, anxiety, depression, and stress (Jiao et al., 2020; Meherali

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et al., 2021; O'Sullivan et al., 2021). Other studies emphasized that children with pre-existing/poorer mental health conditions and developmental disorders were at higher risk for poor mental health resulting from the pandemic restrictions (Cost et al., 2022; Muhajarine et al., 2023; O'Sullivan et al., 2021). The pandemic had additional effects, notably on parents of school-aged children, who experienced higher stress (Adams et al., 2021; Gadermann et al., 2021).

Even though studies have reported that compared to older adults, the pandemic's effect on outcomes such as deaths and hospitalizations in children were lower (Davies et al., 2020; Dong et al., 2020), this does not tell the whole story. The pandemic significantly disrupted some children's lives including their developmental processes. This is in part due to children's limited ability to communicate feelings and ongoing developmental process of acquiring coping strategies, therefore, the need to prioritize their mental health (Imran et al., 2020).

As part of back-to-school initiatives, Canadian provinces advocated for the inclusion of mental health supports and services (Government of Alberta, 2021; Government of Ontario, 2021). In alignment with the commitment to improve the health and wellbeing of students and staff in educational settings, the Saskatchewan government, for example, implemented strategies to respond to mental health crisis exacerbated by the pandemic. This strategy included the provision of mental wellness resources, collaboration with external organizations to address bullying, and financial support to school divisions for mental health and student safety initiatives (Government of Saskatchewan, 2020a).

The pandemic's impact on children's mental health was comprehensive as it was complex and dynamic. As theorized four decades ago by Bronfenbrenner (1979), various developmental contexts of a child, such as individual, family and relational, community, and societal factors have profound impacts on the health and wellbeing of a developing child. Guided by Bronfenbrenner's ecological theory (1979), our study examined the impact of the COVID-19 pandemic on the lived experiences of children and adolescents coping with mental health and seeking mental health services in Saskatchewan at multiple levels of contextual factors.

Methods

Study context and design

As part of a sequential study design, we conducted, first, a quantitative online survey from March to July 2021 that helped us understand the prevalence of mental health outcomes in children in Saskatchewan. In the study, See Us, Hear Us (SUHU) quantitative survey consisting of 510 child-parent dyads, we found that 38% of children and youth ages 8–18 reported that their overall mental health worsened, 22% reported having ups and downs, 4% recorded having experienced better mental health and 36% reported no real change to their mental health in the first year of the pandemic, 2020–2021 school year (Muhajarine et al., 2022).

Given the novelty of COVID-19, and the scarcity of prior research that captured the unique mental health experiences of children and adolescents during the pandemic, we wanted to understand the lived experiences of children and adolescents coping with mental health issues and seeking mental health services in Saskatchewan during the COVID-19 pandemic. Thus, qualitatively, we employed a descriptive phenomenological design as a second phase to the initial quantitative study. As described by Edmund Husserl, the aim of phenomenology is to reach a fundamental understanding of human consciousness by elucidating the shared attributes among individuals experiencing a phenomenon (Lopez & Willis, 2004; Wojnar & Swanson, 2007). Grounded in Husserl's philosophical underpinnings, this form of inquiry provided our study a robust methodology to uncover deeper understanding of the common experiences specific to a group of people, i.e., children, regarding their mental health and access to services as response to the challenges presented by the novel COVID-19 pandemic (Lopez & Willis, 2004). The phenomenological approach applied is descriptive in that it offers in-depth descriptions of participants' experiences in their own words through direct engagement with children and their parents. A nuanced and holistic grasp of the phenomenon enabled us to identify areas of targeted interventions and inform policy decisions that cater to the unique needs of children and adolescents in Saskatchewan.

Participants

The interview participants were drawn from the pool of respondents in the preceding Muhajarine et al.'s quantitative study (2022) who had expressed interest in participating in follow-up interviews. These participants were contacted via email to coordinate and select a suitable time and date for the interview. There were 46 participants (11 children (8–11 years), 11 adolescents (12–15 years), 12 parents of the 8–11-year-old children and 12 parents of the 12–15-year-old adolescents) interviewed in this study. Two children from the scheduled interviews were unavailable to participate, however, their parents participated in the interviews. One child couldn't participate due to extracurricular

activities, while the other, facing mental health challenges, opted not to participate.

Data collection

During the 2021–22 school year, the Saskatchewan government had eased COVID-19 restrictions in schools, resembling pre-pandemic years (Government of Saskatchewan, 2021). This phase coincided with our qualitative data collection period (Fall 2021-Summer 2022). We conducted semi-structured, in-depth interviews from November 2021 to July 2022. The average interview ranged from 30–90 minutes. Interviews were conducted online via Zoom in home settings. Prior to the interviews, children (8 to 11 years old) and adolescents (12 to 15 years old) provided oral assent, and parents provided verbal informed consent. Our decision to conclude the interviews at 46 participants stemmed from our observation of data saturation.

First, we conducted parental interviews to uncover their understanding of the overall impact of the pandemic on their children. Subsequently, children and adolescents were interviewed. Parents and children had the option of sitting in during each other's interview. There were two researchers (VP, ID) and a student research assistant (MH) involved in the interview process. Each interview had a designated primary interviewer (VP/ID) and one observer (MH/VP). The observer was responsible for notetaking and troubleshooting technical issues during the interviews. All interviews were conducted in English and were audio-recorded. The recordings were transcribed verbatim by the same researchers who conducted the interviews.

Following a sequential design, we developed the interview guides based on the survey findings of our primary quantitative study and literature reviews. We also sought input from team members with expertise in the existing provincial and national mental health services and three child-parent dyads from the parent-child advisory council to gather advice regarding current levels of accessibility and utilization. The interview guides were piloted with four children selected from the community through convenience sampling. The entire assent process was conducted with these children to evaluate the effectiveness of the assent forms. No data from these pilot interviews informed our analysis. Based on the feedback received during the pilot testing, the guides were revised to include two distinct sets of questions for parents and children. Additionally, recognizing the attention span and inability of children 8–11 years to answer intricate questions, we streamlined the number of questions in the interview guide. All the guides included questions and prompts to facilitate conversations with participants (see supplementary file).

Research ethics

The University of Saskatchewan Behavioural Research Ethics Board approved this study on ethical grounds (Beh-2561). Participants (children and their parents) received information about study ethics and consent procedures before the interview. Children and adolescents provided oral assent and parents provided verbal informed consent. Information on local mental health resources and services was available to all participants, if needed, at any point during or after the interview.

Data analysis

We organized the transcripts and coded data using the NVivo (Version 12) software (QSR International Pty Ltd., 2018). To guide the data analysis process, we also followed Braun and Clarke's (2006) six phases of the thematic analysis approach. We (VP and ID) applied an iterative process of reading and rereading transcripts to familiarize ourselves with the data. We coded data using pre-defined codes based on findings from our larger study (Muhajarine et al., 2022) (e.g., quantitatively, increased screen time affected mental health, therefore, we used this code to understand qualitatively how screen time habits were impacting mental health) and used inductive coding to derive new patterns from the interview data. We then organized similar codes into preliminary themes. Emerging themes were noted and discussed among the researchers and advisory team. We reviewed and finalized the identified themes to ensure they captured the study purpose and provided labels to them to represent their essence. Finally, we identified some potential quotes to support these themes.

Trustworthiness

To enhance the trustworthiness of the interpretation of findings, we used strategies such as maintaining field notes, peer debriefing, reflexivity, thick descriptions through memoing, and disseminating findings to stakeholders (Tracy, 2010). Field notes were made after each interview with the family. The researchers met regularly for peer debriefing, to regularly compare codes, discuss coding discrepancies, and reach a consensus after reviewing the codes and, if necessary, original transcripts. Researchers also convened regularly with the broader study's team members from various backgrounds (epidemiology, psychiatry, and social work) and other community collaborators to ensure that other perspectives were considered while interpreting findings.

Husserl's approach engages in a process of "bracketing," wherein researchers set aside their beliefs and interpretations (Wojnar & Swanson, 2007). We made efforts to minimize potential biases through team

reflexivity. We acknowledged our own experiences of the pandemic, documented our reflections after interviews, and met regularly among team members to address biases that arose. We conducted multiple checks on the coding process to ensure no key interpretations were missed. Furthermore, direct quotes from participants were incorporated to support findings. Pre-published findings were extensively disseminated, and feedback was sought from the community, from school divisions and at various local presentations.

Results

Participant characteristics

We conducted interviews with two age cohorts—8–11 years and 12–15 years. Within the 8–11 years age group, 11 children and their corresponding 12 parents participated in the interviews. Within the 12–15 years age group, 11 children and their respective 12 parents participated in the interview.

The household composition included single and two-parent households, only-child and multiple children's households, children and parents with mental health diagnoses and those without, and children with learning and developmental disabilities. One family in our study self-identified as immigrants. Parental employment categories included working outside the home, homemakers, those who lost employment during the COVID-19 pandemic, and parents who worked from home. We also had families from rural and urban settings from different socioeconomic backgrounds. We had diverse representation from families, as shown in Table I.

Table I. Research interview participants by various characteristics.

Interview participants	
Variable	Number
Age groups	
8–11 years	
Children	11
Parents	12
12–15 years	
Children	11
Parents	12
Gender of children	
8–11 years	
Female	5
Male	6
12–15 years	
Female	5
Male	5
Non-binary	1
Parents interviewed	
8–11 years	
Mother	11
Father	1
12–15 years	
Mother	10
Father	2
Self-identified immigration status	1

Three themes emerged from our analysis of the data: (1) pyscho-behavioural impact, (2) academic impact, and (3) social impact. Each theme reflects both the negative and positive aspects as reported by participants. Supporting our findings, participant quotes are included, and each is labelled for clarity. Each quote was assigned letters and numbers. Parent quotes are denoted by "P," while quotes from children are indicated by "C." Numerical identifiers align with those utilized in the study to anonymize participants. Specifically, "A" denotes the age group of 8–11 years, while "B" signifies 12–15 years. For example, the label C1A would mean Child #1 in the age group 8–11 years; P1B would mean Parent #1, to a child in the age group 12–15 years.

Psycho-behavioural impact

Our study found that children experienced heightened psychological and behavioural responses to the COVID-19 pandemic that impacted their well-being in adherence and adjustment to public health measures. Children expressed a range of negative and positive emotions; while behavioural changes impacted physical activity, sleep, eating habits and screen time. Additionally, barriers to accessing mental health services were exacerbated during this time. While acknowledging these difficulties, families also emphasized resilience and positive experiences amidst adversity.

Emotional effects

Children reported feeling "sad," "unmotivated," "lonely," "anxious," "angry," and "frightened" during the pandemic. A child participant with a pre-existing mental health condition in the 8–11 age cohort said:

> To be honest, my anxiety got a bit worse … worst things about my anxiety is being sick. It always triggers my anxiety, especially knowing that if you have COVID there's a chance that you might throw up. So, I was hoping to not get it, but it's just still a big worry the entire time, pretty much. [C11A (Child #11, 8–11 years)]

Certain families expressed apprehension regarding the potential risk of contracting COVID-19 at school or public places and subsequently transmitting the infection to family members with compromised immune systems or pre-existing medical conditions. A few were also worried about being excluded from activities due to incomplete vaccination statuses. A parent of a child in the 12–15 age cohort said they had to test often for COVID-19 to compensate for their unvaccinated status. "We just have to test,

we're testing every week and … that'll continue … that is probably weighing on her [child]." [P18B]

Meanwhile, some families in rural areas faced challenges complying with COVID-19 mandates while living within communities that held different views about the COVID-19 mandates. According to a parent of a child (12–15 years),

> That has been a large struggle for our family that we are making decisions that are not popular in our community, and our children have often felt isolated because we are doing things so differently from everybody in our area. [P12B]

Many of the children experienced anxiety and uncertainty when contemplating what awaited them due to the prolonged nature of the pandemic. During free time, many children turned to finding new hobbies, arts and crafts, and reading books. Some children said they lacked appropriate coping strategies or that they had reached the limit for available coping options—as exemplified by the following quote from a child in age group 12–15 years. The child stated, "My self-esteem was low. I just didn't know what to do at that point. I was out of options almost. I was throwing the bone in my backyard for my dog all the time." [C2B]

Conversely, there were moments throughout the pandemic when both children and parents experienced a sense of improvement in their emotional wellbeing. Positive emotions emerged, such as gratitude for the increased family time during lockdowns and the presence of a social support system consisting of family and friends who provided solace during such challenging times. A parent of a child, 12–15 years mused, "We've been a safe space for each other, and I think that's been a really positive thing." [P12B]

Behavioural effects

Participants noted impacts on behaviours such as physical activity (PA), screen time, eating habits, and sleep patterns, which had played a key role in children's mental health. Children noted that disruptions in their PA routines at school and outside the home during the first year of the pandemic affected their ability to manage stress. Due to cancellation of activities at school and extracurricular activities, children felt disappointed about not being able to travel and participate in sporting events that year. Other barriers that participants mentioned included being unable to participate in physical activities that required close contact for fear of catching COVID-19, because they wanted to comply with COVID-19 mandates, or they lacked motivation to engage in activities, or lack of space at home (especially those living in urban areas), or because of lack of or closure of sports facilities.

There were also positive aspects of physical activity reported by families. Some children said their teachers gave them activities to engage at home during online schooling, which they found helpful. During the summer, there was an increase in physical activity for many children. Living in rural areas where families had a farm, especially contributed to physical activity, even during winters. A child aged 12–15 years living in rural area with more space conveyed the feasibility of engaging in physical activity during the pandemic: "Since we live on the farm, have pigs, so we'll walk to the barn to feed them… depending on how cold or what season." [C15B]

Most parents and children reported increased screen time because children used electronic devices to interact with friends and family, play video games, and use other social media platforms. These devices also served as a means for children to alleviate boredom. Families mentioned that watching movies together also contributed to increased screen time. Parents who worked from home used screen time to facilitate work-life balance. One parent said they would allow screen time when working from home if the child had no other activity to do or was feeling lonely. In the parent's words,

> During the pandemic, she used way, way more screen time than I would like … we decided because she was so isolated, and because, you know, my husband and I were still working full time. [P14A]

Parents raised concerns that it was difficult to "police" what their children watched and ensure if they were engaged in online schoolwork. Overall, it was common that most children turned to video games as a standard method to connect with friends. We found that screen time helped to increase social connectedness. A child in the age group 12–15 years informed us, "Yeah, there was probably a big increase there. I was still using my phone to just talk to my friends or through social media, that kind of stuff." [C2B]

We also found that most parents and children reported that children went to bed and woke up later than usual when they were not attending school. Several parents relaxed their children's sleep schedules during the pandemic. While most children reported no sleep disturbances throughout the night, children with mental health issues such as anxiety said they had considerable challenges with sleep. Younger children with anxiety co-slept with their parents to cope with sleep challenges. A parent of a child between the ages 8–11 years reported that their child would call out for them to ensure their presence and proximity during bedtime. The parent noted, "We, his dad and I, would go to bed when he [child] went to bed, and that seemed to be the only thing that

reassured him enough that we weren't going anywhere." [P3A] Another parent said,

> … pre-pandemic, [child] would still sleep with me every once in a while … it was definitely increased, like it was noticeable, the increase of how much he started coming into my bed … I think he just … wanted … the comfort and to be close. [P6A]

When it comes to eating habits, many families tried to adopt healthier dietary practices at the beginning of the pandemic. Families took the opportunity to cook meals together. Some children mentioned that their eating habits remained unchanged. Conversely, others noted significant shifts in their eating patterns, such as consuming meals in front of the computer, rarely eating at the table or with family members, and irregular eating schedules due to the absence of school routines. A child 12–15 years old commented on their eating habits: "…often I would eat lunch in front of the computer. I would often never come to eat at the kitchen, or, with other people, we would be in front of the computer." [C15B]

Seeking mental health services and supports

Children and parents conveyed facilitators and barriers to accessing mental health services and supports. Families reported that pre-existing mental health conditions were worsened for children due to the pandemic. Some children with severe mental health difficulties also struggled with suicidal behaviours.

A majority of parents voiced that a major barrier to seeking mental health services was the long wait times to see therapists during the pandemic, which delayed getting timely help for their children. One parent whose child was in the 8–11 age cohort recalled, "We did end up seeing a therapist, and we had to wait several weeks." [P2A]

Participants largely agreed on the need to increase mental health supports and services outside school hours (evenings and weekends). Second, participants voiced a need to expand mental health crisis units and providers in rural areas. A parent said, "But booking … only during the day, like when they're in school hours… And then having to drive across town to take them to an appointment; that's fairly disruptive to their [children's] schedule." [P14A]

Parents suggested incorporating mental health training and awareness in the school curriculum, reducing stigma in accessing support in mental health teachings, and educating parents on the signs and symptoms of mental illness. A parent mentioned, "I'm going to detect there is a problem, maybe not, but I'm trying and I'm not informed sufficiently, to be able to see, you know, when or how, [child] has a mental health issue." [P8B]

Another barrier to seeking mental health services was dissatisfaction with the help received from providers. A child expressed dissatisfaction with the help received from a psychologist and stated, "I think [the psychologist] was focusing more on other things, and I was never sad for a specific reason. It was just feeling isolated, so it was hard to get like help with that." [C14A]

Other barriers to seeking mental health services were making decisions about the choice of treatments the family preferred, cost of services, and challenges when sibling/s and other family members also dealt with mental health issues. While most families dealt with long wait times to access services, some families with work benefits and financial resources got help promptly. One parent of a child in the 8–11 age cohort on behalf of their family, claimed,

> We're lucky enough that we can pay for them … didn't matter whether we were covered or not … by benefits … and we didn't have to wait for referrals … mental health services or anything like that, we were able to go direct to counsellors. [P5A]

Participants with prior mental health lived experiences noted it was easier to receive help due to their familiarity with the healthcare system. In addition, having a family doctor proved advantageous for families to receive support and referrals. Children who found providers that matched their needs were more satisfied with the service than those who did not, as stated by one child between 12 and 15 years. "I find [the psychiatrist] really nice, really, he's quite young … in a certain way, he gets the idea of what I'm going through." [C2B]

Academic impact

The stress induced by school closures and the transition to online learning affected both children and parents. While some students continued with online learning throughout the year, others chose to return to in-person classes when schools reopened. The challenges associated with online learning and concerns about adherence to COVID-19 protocols in schools prompted a few to opt for homeschooling as an alternative.

Online schooling

When the pandemic first hit in March 2020, numerous children expressed happiness about not having to attend school. However, for some, this feeling of happiness was short-lived. One child in the 12–15 age cohort shared,

> The first couple days of online school, and we were all there like, Yay! Freedom! This is so cool! But then

> a week passed, and then a month, and then yeah, the end of the year, then it became, very sad, there wasn't as much fun as there was in in-person school. [C8B]

Online schooling presented various barriers, including poor concentration and motivation, difficulty receiving assistance from parents, unfamiliarity with online systems, internet connectivity issues and lack of devices at home especially for families with multiple children or those living in rural areas, and social disconnection from school activities and events. One child participant in the 8–11 age cohort shared, "It was super hard to follow everything posted on like the website … it was really hard to get questions answered because we have to email our teacher and then wait for our response." [C14A]

A prevalent observation among children and parents was a decline in academic performance and grades. Parents often attributed this decrease to factors such as diminished concentration and motivation, which they perceived as being more challenging to support in comparison to traditional in-person schooling. Some children voiced feelings of boredom that were attributed to online learning. Mathematics was a popular subject that children needed help understanding during online learning, mainly due to a lack of direct/in-person access to teachers. Participants also mentioned that when parents helped with schoolwork, they often employed different teaching methods, such as using older approaches to solve mathematical problems. These methods differed from the ones used by their teachers. The scarcity of teachers also played a role in contributing to subpar learning experiences for children.

When doing online schooling, children and parents stressed the significance of providing time for interaction. Second, parents emphasized regular check-ins with students and increased safe school-based activities regardless of school-health measures/restrictions.

> The fact that they went online … and the teacher had almost zero interaction with those kids or them with each other was, really disappointing in my opinion…if they're in an online format–that there's some attention given to interacting with their peers, outside of a classroom time. [P1B]

Children and parents highlighted the positive aspects of online schooling which included the ability to get help from siblings/parents, self-directed learning in their spare time, and learning to troubleshoot issues through email communications. Other aspects included improved computer skills, opportunities to engage in virtual games, interactions with teachers and peers and a relaxed schoolwork load. Children noted that they also educated themselves to use computers and participated in online meetings by effectively using apps and microphones.

A parent of a child with a learning disability mentioned that it was helpful for their child to work on the computer instead of the traditional pencil and paper method. They found that their child encountered fewer distractions while learning and experienced a more focused and productive learning environment when using a computer. This parent of the child in the age group of 12–15 years noted,

> He's [the child] got some learning disabilities and being able to use a computer for his learning actually, really helped him dramatically, especially with things like writing. Whereas in the classroom, that wasn't always available to him, so he struggled a lot more with the pen and pencil-pen and paper-tasks … He had tools that allowed them to succeed. [P1B]

In-person schooling

The perceptions surrounding COVID-19 mandates presented challenges for families during the transition to in-person schooling. These challenges included dissatisfaction with measures such as the block and quint system (a system where the density of students in the classroom was reduced), staggered recesses, and the requirement to wear masks. Some children specifically reported struggles learning French while wearing a mask. Other concerns reported were having fewer or no school activities/sports and being placed in cohorts.

After spending a substantial amount of time doing online schooling during the lockdowns, children described the transition phase from online/home-schooling back to in-person schooling as "awkward," and they felt "nervous," and "scared." These feelings were especially true for children who had changed to new schools. A child participant in the 8–11 age cohort expressed,

> I think I was a little bit nervous and scared to go back to school because, like, there were so many things that we had to do, and we had to wear masks, and I wasn't used to masks yet, and, you'd have to sanitize, and all that kind of stuff and a bunch of stuff was off limits. [C5A]

Decreased class participation was another negative aspect noted. A child aged 12–15 years remarked about this decrease: "…there was less participation [at school] and that could have been…for many reasons but…for me, I felt like it was because…with masks, you can't really see people as much, like their faces." [C18B]

Factors that contributed positively to in-person schooling included a willingness to adapt to mask-wearing, reinstatement of back-to-school routines, the accessibility of teachers, the capacity to perceive and comprehend emotions more clearly in face-to-face interactions, the opportunity to console friends, and finding an environment where they felt a sense of belonging and comfort with the teacher. Most parents

and children shared that uniting with friends again contributed to enhanced mental wellbeing. For example, a parent of child between the ages 8–11 years shared, "I think that [being with friends] did improve her mood, somewhat, being back in school with her friends." [P14A]

Homeschooling

Some of the parents in our study, who typically homeschooled their children shared that the COVID-19 pandemic mandates placed challenges to their homeschooling routines. These parents could not rent spaces like libraries; thus, inhibiting their homeschooling groups from meeting and taking away an essential social outlet. A parent of child in age group 12–15 years expressed,

> Just because of all the restrictions on gathering and that we couldn't … rent spaces like at the library … all of those things were also taken away, so like the kind of our social outlet. [P10B]

Some favourable aspects of homeschooling expressed by families were avoidance of challenges with online learning system and flexibility to create a personalized curriculum. Homeschoolers were also content not to be bound by COVID-19 mandates including the requirement to wear masks.

Social impact

As a result of the pandemic, our study observed the need to adapt to new ways of maintaining social connections in interpersonal relationships. The role of peer and family support became increasingly critical for coping during this time.

Friends and peer support

Friends played a crucial role in providing support and solidarity during the COVID-19 pandemic. Due to limited in-person socializing opportunities, children maintained connections with friends through various means, for example, virtual socializing using phone calls and video chats. Engaging in online video games, together, was a common method for many to stay connected and feel a sense of togetherness despite being physically apart.

A child participant among the 8–11 age cohort mentioned video gaming with friends helped them feel closer to their friends during the pandemic. They noted, "The video games definitely helped because I had a bunch of friends who did them and I could just do that, with them. And then I could kinda feel a little bit closer to them." [C5A]

A child between ages 8–11 years with MH issues articulated about having friends and its positive MH effects, "[If] I'm at school and I'm anxious, I go to my friends, and they often either distract me from it or like help me with it." [C11A]

Family

Amidst the lockdowns, families found themselves confined to their homes, becoming the primary source of interaction for one another. Throughout our interviews, children and parents offered reflections on their family dynamics. The closure of childcare centres and the shift to work-from-home, required parents to oversee their children's schooling, adding to their workload and necessitating a balance between work commitments and providing support for their children's learning activities. Children's screen time increased as parents had commitments to fulfil including work from home and children were already experiencing a sense of isolation. Some parent-child relationships were affected as parents also went through stress and mental health issues. Some parents also dealt with job loss and made conscious efforts not to let it affect their children. Some other challenges to families were the lack of adequate space and devices for everyone to work and study simultaneously. As one parent participant put it:

> I was probably working, more than I should … and I think in terms of the impact on [child], I was probably not as patient … you know when she would need
>
> something during the day and I'm in the middle of something at work … it was hard for me to switch gears. [P5A]

Families dealt with grief and loss of close relations during this period. Some parents mentioned that they struggled with recognizing the signs and symptoms of their children's mental health, making it challenging to provide timely support. Children missed seeing their extended family members and missed significant family events. A child, 12–15 years old noted, "I've gotten to see my extended family less … just over the summer my cousin got married and I didn't get to be there." [C18B]

With restrictions on social gatherings and other outdoor activities, families became closer as children spent more time together with their parents. Children did indoor and outdoor activities with their parents. Children also helped their parents with household chores. A child from the 12–15 age group expressed:

> I think that I was more helpful during COVID … I helped my dad fix the garage door … when we were putting in the new water system, I helped with that as well … I made a flower box with my dad for my mom's birthday. [C6B]

Some other positive aspects that helped children and their families to cope with the pandemic were having

a home and being financially stable and staying as "normal" as possible as a family. For some younger children with mental health issues, co-sleeping with their parents was found to be beneficial. Families also adopted pets—dogs being most common during the pandemic.

Overall, parents emphasized the importance of prioritizing children's wellbeing and urged the government to implement programmes and initiatives that specifically focus on benefiting children's welfare. Their call highlighted the need for concerted efforts and policies that address the unique needs and challenges faced by children and ensure their overall wellbeing is safeguarded. One parent lamented,

> … but when we see other families, the lack of support or the support that is decreasing from the government for instance with the X program … that's really, I think, tough. And the first victims are the kids. So, I think that I would like to see a government that has, you know, kids in perspective and less politics and economics. [P8B]

Discussion

Our study deepens the understanding of how the pandemic impacted Saskatchewan children and families. Our results also expand our knowledge of the pandemic's effect on mental health issues for children with pre-existing mental health conditions. These findings illustrate the pandemic's implications on children's and families' health determinants.

Overall impact on mental health

Several research studies during the pandemic documented that children experienced heightened levels of anxiety, depression, and stress (Ellis et al., 2020; Jiao et al., 2020; Marques de Miranda et al., 2020; Racine et al., 2021). Given this accumulating evidence from various studies, our study further enriches our grasp of the interplay between individual, relational, community and societal factors. Applying Bronfenbrenner's Ecological Model, we identified several factors impacting mental health during the pandemic, spanning emotional state, closure of school and extracurricular activities, changes to modes of learning, social supports, coping skills, access to mental health services, schooling, parental work-from-home, family income and COVID-19 infection and associated mandates situated within the various interconnected domains (individual, relational, community and societal) (Elharake et al., 2022; Singh et al., 2020).

Additionally, in concordance with existing evidence, our study also found that children with existing mental health conditions encountered difficulties coping with the pandemic, leading to further declines in mental health (Cost et al., 2022). These findings emphasized that it is critically important to pay attention to children's mental health conditions when designing mental health services and interventions, whether within educational settings, communities, or healthcare systems.

Participants highlighted certain protective factors acting as buffers against pandemic-related stress. These factors included preserving social connectedness with peers and family through online platforms, having access to outdoor spaces, companionship of pets, and presence of supportive family members who helped manage stress and anxiety. Cultivating resiliency skills in children is crucial to confront unforeseen challenges effectively, highlighting the importance of equipping children with the necessary adaptive capabilities to overcome such obstacles.

Changes to behaviours

Public health restrictions and subsequent home confinement reduced physical activity, increased sedentary behaviours, and disrupted sleep patterns (Dunton et al., 2020; Moore et al., 2020; Zhang et al., 2020). During our interviews, we consistently encountered a complex interaction of these behaviours.

According to the Canadian Community Health Survey, during the early pandemic, physical activity decreased among adolescents (12–17 years) in urban areas compared to those living in rural areas (Colley & Watt, 2022). Our findings support differences in physical activity between children living in urban versus rural areas. Children in rural areas exhibited higher physical activity throughout the day and consistently year-round, likely due to ample space and physically demanding chores. In contrast, urban children faced consistent challenges in finding innovative methods to engage in activities.

We found noticeable changes in sleep among some children, attributed to reduced physical activity and disrupted school routines. Excessive use of electronic devices during bedtime contributed to sleep and mental health problems, as also reported by other authors (Bergmann et al., 2022; Guerrero et al., 2019; Li et al., 2021).

In line with previous research, we found that children resorted to digital technology as a means of connecting with friends and family (Pandya & Lodha, 2021). Social connections are essential for healthy childhood development. Interestingly, even typically strict parents relaxed screen time rules during the pandemic. This change in parental norms was driven by children's increased boredom, reduced opportunities for physical activity, schooling at home, and juggling household responsibilities with work-from-home. However, it remains imperative to encourage healthy digital habits in children and support innovative indoor physical activities. Parents, educators, and

health professionals are urged to actively collaborate in developing innovate solutions for this purpose.

A significant concern from our interviews was the unequal access to devices and the internet. While children in cities did not have internet issues, there remained disparities in the availability of devices in the home. Devices had to be shared among siblings and/or with parents. In rural areas, limited devices and internet access hindered online schooling, causing anxiety and stress. For effective remote learning, equitable access to the internet and devices is crucial to prevent educational disparities caused by technological limitations.

A subset of parents and children in our study reported disruptions to everyday eating etiquette including meal frequency and screen-based eating. Returning to school may provide children with an opportunity to restore these routines and regain normalcy in their behaviours. Contrarily, some positive changes were also highlighted in the research, such as families cooking meals together and involving children during mealtimes (Clarke et al., 2021). Canada's food guide accentuates the benefits of shared meals for overall wellbeing (Government of Canada, 2020). Therefore, we strongly suggest interventions aimed at nurturing and reinstating adequate eating habits in children which were disrupted during the pandemic.

Overall, promoting healthy movement behaviours in children will be essential to empowering them regain their developmental trajectory and cultivate positive mental health.

Lack of mental health literacy and access to mental health services and supports

A surprising and profoundly significant finding from our study was the lack of awareness among certain parents regarding the signs and symptoms of mental health issues in their children. This limited understanding inhibited parents from seeking timely mental health services. Equipping parents with mental health literacy is essential for prompt intervention for children, as it is known that timely psychological interventions following a traumatic event yield superior results (Newman et al., 2014).

The pandemic exacerbated prevailing problems in accessing mental health services. Financially stable families or families with work benefits could access private mental health services when needed, while those who struggled financially encountered difficulties, including long wait times. Additionally, families in rural areas faced a scarcity of mental health service provisions. This finding contributes to the ongoing discussion on equity issues in access to mental health services, especially in rural communities (Kourgiantakis et al., 2022; Morales et al., 2020).

Based on the identified challenges and the recommendations provided by participants, we suggest the development of policies and interventions to bridge gaps in access to mental health services and supports. These could include enhancing access to mental health services in schools and rural communities, reducing wait times and providing financial assistance to those in need. There should also be clear efforts to integrate mental health education into school curricula.

Changes to schooling

Our study revealed that while children felt happy about not attending school at the onset of the pandemic, this happiness faded over time as they longed for reunion and in-person interaction with teachers and friends. Second, navigating online schooling and troubleshooting academic problems at home caused immense familial stress. For some, it was fundamental to have the physical presence of teachers to enhance their learning experiences. Schools play a major role in children's socialization, and the loss of this sense of belonging made it challenging for most children to cope. This finding concurred with that of Cost et al. (2022) study that was conducted in Canada during the pandemic. Teachers and parents play a crucial role in supporting children to navigate through complex emotions, underscoring the importance of educating them as children return to school post-lockdowns (UNICEF, 2020a, n.d.).

Following the period of stringent pandemic restrictions, although children were happy with the return to a hybrid or in-person learning mode, the transition had a few caveats. Many children grappled with feelings of isolation, fear and stress—for different reasons. Adjusting to the "new normal" with modified recess schedules, intensified sanitization measures, mask-wearing, cohorting practices, transmission of virus and limited activities proved overwhelming for many children. To ensure the mental wellbeing and safety of students, it is imperative to foster a positive learning environment irrespective of the mode of schooling. Some strategies may include transparent communication about safety measures, tailored interventions for children at risk and promotion of PA (UNICEF, n.d.; World Health Organization, 2020).

Social dynamics

Most families had to adapt quickly to the different waves of the pandemic. Children identified social connectedness to be a very important protective factor and research demonstrates the association of social connectedness with reduced mental health symptoms

(Eugene, 2021). This finding emphasizes the importance of initiating supportive relationships with family and friends during times of uncertainty.

Parental stress emerged in our findings, as parents adjusted their roles to facilitate children's learning at home. Particularly parents with multiple children faced challenges such as financial constraints for acquiring computers or insufficient space. In alignment with the findings of a qualitative study (Dawes et al., 2021), our research identified another challenge—the strain on parent-child relationships. A national study in Canada further revealed that throughout the pandemic 22% of parents reported experiencing more negative communication such as conflicts with their children (Gadermann et al., 2021). Consequently, addressing diverse family needs during a crisis is imperative, including targeted financial assistance to economically challenged families, especially those with multiple children. Promoting mental health services such as counselling and stress management for families including parents/caregivers could be instrumental in alleviating stressors.

Strengths and limitations

Fewer studies have focused on understanding the combined perspectives of the child and their parent on the wide-ranging effects of the pandemic across different age groups. This study adds to this sparse knowledge base. Our study demonstrated inclusivity as we had participation from children 8–15 years and their parents, including individuals of diverse gender identities—male, female, and non-binary. The sample consisted of participants residing in rural and urban areas, families with and without mental health issues, and children attending online, in-person and homeschooling. Furthermore, our study highlighted disparities in access to mental health services seen among children and contributes to the limited literature on access issues to mental health services in rural communities compared to urban areas.

This study has limitations such as the study lacked participation from families who identified as Indigenous. Future studies should prioritize investigating the impact of the COVID-19 pandemic on children from Indigenous communities as they possess distinct and unique experiences that necessitate careful consideration. Owing to the study's scope, an in-depth exploration of the nuanced experiences of children with developmental disabilities was beyond its purview. Subsequent research endeavours may prioritize this population.

Conclusion

This descriptive phenomenological study builds upon quantitative findings to enhance the evolving understanding of the lived experiences of children and adolescents coping with mental health issues and access to mental health services in Saskatchewan. The findings shed light on the coping strategies articulated by participants and highlight the influence of various environmental and contextual factors on children's wellbeing. One of the key findings is the difficulty children face in accessing timely mental health services and supports. Additionally, our research identifies the importance of protective factors, including social connectedness as crucial buffers against pandemic-induced stress. Echoing participant experiences, our research highlights a need to allocate adequate resources to expand mental health system and address existing gaps in service provision. Educational organizations should aim to promote mental health awareness and resilience-building skills among children. Targeted interventions and policy changes are needed to develop mental health services for children that are more responsive to their needs. To deepen comprehension, we recommend that future research evaluate adaptive capabilities that facilitate more effective thriving in families during crises.

Contribution list

VP and ID collected and analysed the data and wrote drafts of the manuscript. NM, TH and KG conceived and designed the research. KG, YP-C, TH and NM provided critical feedback to the revisions of the manuscript. NM obtained funding and was the overall supervisor of the study.

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References

Adams, E. L., Smith, D., Caccavale, L. J., & Bean, M. K. (2021). Parents are stressed! Patterns of parent stress across COVID-19. *Frontiers in Psychiatry*, *12*, 12. https://doi.org/10.3389/fpsyt.2021.626456

Bergmann, C., Dimitrova, N., Alaslani, K., Almohammadi, A., Alroqi, H., Aussems, S., Barokova, M., Davies, C., Gonzalez-Gomez, N., Gibson, S. P., Havron, N., Horowitz-Kraus, T., Kanero, J., Kartushina, N., Keller, C., Mayor, J., Mundry, R., Shinskey, J., & Mani, N. (2022). Young children's screen time during the first COVID-19 lockdown in 12 countries. *Scientific Reports*, *12*(1), 2015. https://doi.org/10.1038/s41598-022-05840-5

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Clarke, J., Kipping, R., Chambers, S., Willis, K., Taylor, H., Brophy, R., Hannam, K., Simpson, S. A., & Langford, R. (2021). Impact of COVID-19 restrictions on preschool children's eating, activity and sleep behaviours: A qualitative study. *British Medical Journal Open*, *11*(10), e051497. https://doi.org/10.1136/bmjopen-2021-051497

Colley, R., & Watt, J. (2022). *The unequal impact of the COVID-19 pandemic on the physical activity habits of canadians*. https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2022005/article/00003-eng.pdf?st=nTEEFv4Q

Cost, K. T., Crosbie, J., Anagnostou, E., Birken, C. S., Charach, A., Monga, S., Kelley, E., Nicolson, R., Maguire, J. L., Burton, C. L., Schachar, R. J., Arnold, P. D., & Korczak, D. J. (2022). Mostly worse, occasionally better: Impact of COVID-19 pandemic on the mental health of Canadian children and adolescents. *European Child and Adolescent Psychiatry*, *31*(4), 671–684. https://doi.org/10.1007/s00787-021-01744-3

Davies, N. G., Klepac, P., Liu, Y., Prem, K., Jit, M., Pearson, C. A. B., Quilty, B. J., Kucharski, A. J., Gibbs, H., Clifford, S., Gimma, A., van Zandvoort, K., Munday, J. D., Diamond, C., Edmunds, W. J., Houben, R. M. G. J., Hellewell, J., Russell, T. W., & Jarvis, C. I. (2020). Age-dependent effects in the transmission and control of COVID-19 epidemics. *Nature Medicine*, *26*(8), 1205–1211. https://doi.org/10.1038/s41591-020-0962-9

Dawes, J., May, T., McKinlay, A., Fancourt, D., & Burton, A. (2021). Impact of the COVID-19 pandemic on the mental health and wellbeing of parents with young children: A qualitative interview study. *BMC Psychology*, *9*(1). https://doi.org/10.1186/s40359-021-00701-8

Dong, Y., Mo, X., Hu, Y., Qi, X., Jiang, F., Jiang, Z., & Tong, S. (2020). Epidemiology of COVID-19 among children in China. *Pediatrics*, *145*(6), e20200702. https://doi.org/10.1542/peds.2020-0702

Dunton, G. F., Do, B., & Wang, S. D. (2020). Early effects of the COVID-19 pandemic on physical activity and sedentary behavior in children living in the U.S. *BMC Public Health*, *20*(1), 1351. https://doi.org/10.1186/s12889-020-09429-3

Elharake, J. A., Akbar, F., Malik, A. A., Gilliam, W., & Omer, S. B. (2022). Mental health impact of COVID-19 among children and college students: A systematic review. *Child Psychiatry and Human Development*, *54*(3), 913–925. https://doi.org/10.1007/s10578-021-01297-1

Ellis, W. E., Dumas, T. M., & Forbes, L. M. (2020). Physically isolated but socially connected: Psychological adjustment

and stress among adolescents during the initial COVID-19 crisis. *Canadian Journal of Behavioural Science / Revue Canadienne des Sciences du Comportement*, *52*(3), 177–187. https://doi.org/10.1037/cbs0000215

Eugene, D. R. (2021). Connectedness to family, school, and neighborhood and adolescents' internalizing symptoms. *International Journal of Environmental Research and Public Health*, *18*(23), 12602. https://doi.org/10.3390/ijerph182312602

Gadermann, A. C., Thomson, K. C., Richardson, C. G., Gagné, M., McAuliffe, C., Hirani, S., & Jenkins, E. (2021). Examining the impacts of the COVID-19 pandemic on family mental health in Canada: Findings from a national cross-sectional study. *British Medical Journal Open*, *11*(1), e042871. https://doi.org/10.1136/bmjopen-2020-042871

Government of Alberta. (2021, June). *2021-2022 school year plan*. https://open.alberta.ca/dataset/13d2242a-d310-419e-960c-6fe273d0f7b3/resource/ddac0c8a-a68d-46e1-9d76-2a4d34385273/download/edc-school-year-plan-2021-2022.pdf

Government of Canada. (2020, October 14). *Canada's food guide: Eat meals with others*. https://food-guide.canada.ca/en/healthy-eating-recommendations/eat-meals-others/#section-1

Government of Ontario. (2021, July 22). *COVID-19: Health, safety and operational guidance for schools (2021-2022)*. https://www.ontario.ca/document/covid-19-health-safety-and-operational-guidance-schools-2021-2022/mental-health-and-student-supports

Government of Saskatchewan. (2020a). *Primary and secondary educational institution guidelines*. https://paherald.sk.ca/wp-content/uploads/2020/06/school-guidelines.pdf

Government of Saskatchewan. (2021). *2021-22 safe schools' plan*. https://www.stf.sk.ca/wp-content/uploads/2021/07/safe_schools_plan_2021-22_002.pdf

Guerrero, M. D., Barnes, J. D., Chaput, J.-P., & Tremblay, M. S. (2019). Screen time and problem behaviors in children: Exploring the mediating role of sleep duration. *International Journal of Behavioral Nutrition and Physical Activity*, *16*(1), 105. https://doi.org/10.1186/s12966-019-0862-x

Imran, N., Zeshan, M., & Pervaiz, Z. (2020). Mental health considerations for children & adolescents in COVID-19 pandemic. *Pakistan Journal of Medical Sciences*, *36* (COVID19–S4), S67–S72. https://doi.org/10.12669/pjms.36.COVID19-S4.2759

Jiao, W. Y., Wang, L. N., Liu, J., Fang, S. F., Jiao, F. Y., Pettoello-Mantovani, M., & Somekh, E. (2020). Behavioral and emotional disorders in children during the COVID-19 epidemic. *The Journal of Pediatrics*, *221*, 264–266.e1. https://doi.org/10.1016/j.jpeds.2020.03.013

Kourgiantakis, T., Markoulakis, R., Hussain, A., Lee, E., Ashcroft, R., Williams, C., Lau, C., Goldstein, A. L., Kodeeswaran, S., & Levitt, A. (2022). Navigating inequities in the delivery of youth mental health care during the COVID-19 pandemic: Perspectives of youth, families, and service providers. *Canadian Journal of Public Health*, *113* (6), 806–816. https://doi.org/10.17269/s41997-022-00670-4

Li, X., Vanderloo, L. M., Keown-Stoneman, C. D. G., Cost, K. T., Charach, A., Maguire, J. L., Monga, S., Crosbie, J., Burton, C., Anagnostou, E., Georgiades, S., Nicolson, R., Kelley, E., Ayub, M., Korczak, D. J., & Birken, C. S. (2021). Screen use and mental health symptoms in Canadian children and youth during the COVID-19 pandemic. *JAMA Network Open*, *4*(12), e2140875–e2140875. https://doi.org/10.1001/jamanetworkopen.2021.40875

Lopez, K. A., & Willis, D. G. (2004). Descriptive versus interpretive phenomenology: Their contributions to nursing knowledge. *Qualitative Health Research*, *14*(5), 726–735. https://doi.org/10.1177/1049732304263638

Marques de Miranda, D., da Silva Athanasio, B., Sena Oliveira, A. C., & Simoes-E-Silva, A. C. (2020). How is COVID-19 pandemic impacting mental health of children and adolescents? *International Journal of Disaster Risk Reduction*, 51(101845. https://doi.org/10.1016/j.ijdrr.2020.101845

Meherali, S., Punjani, N., Louie-Poon, S., Rahim, K. A., Das, J. K., Salam, R. A., & Lassi, Z. S. (2021). Mental health of children and adolescents amidst COVID-19 and past pandemics: A rapid systematic review. *International Journal of Environmental Research and Public Health*, *18* (7), 3432. https://doi.org/10.3390/ijerph18073432

Moore, S. A., Faulkner, G., Rhodes, R. E., Brussoni, M., Chulak-Bozzer, T., Ferguson, L. J., Mitra, R., O'Reilly, N., Spence, J. C., Vanderloo, L. M., & Tremblay, M. S. (2020). Impact of the COVID-19 virus outbreak on movement and play behaviours of Canadian children and youth: A national survey. *International Journal of Behavioral Nutrition and Physical Activity*, *17*(1), 85. https://doi.org/10.1186/s12966-020-00987-8

Morales, D. A., Barksdale, C. L., & Beckel-Mitchener, A. C. (2020). A call to action to address rural mental health disparities. *Journal of Clinical and Translational Science*, *4* (5), 463–467. https://doi.org/10.1017/cts.2020.42

Muhajarine, N., Adeyinka, D., Pisolkar, V., Ramamoorthy, S., Hinz, T., Damodharan, S., Balbuena, L., McCutcheon, J., Dena, I., Green, K., & Kallio, N. (2022). *Mental health experiences of children, youth, and families in Saskatchewan during the first year of the coviD-19 PANDemic*. https://spheru.ca/images/covid19-images/suhu1.0_researchbrief_final07042022.pdf

Muhajarine, N., Pisolkar, V., Hinz, T., Adeyinka, D. A., McCutcheon, J., Alaverdashvili, M., Damodharan, S., Dena, I., Jurgens, C., Taras, V., Green, K., Kallio, N., & Palmer-Clarke, Y. (2023). Mental health and health-related quality of life of children and youth during the first year of the COVID-19 pandemic: Results from a cross-sectional survey in Saskatchewan, Canada. *Children*, *10*(6), 1009. https://doi.org/10.3390/children10061009

Newman, E., Pfefferbaum, B., Kirlic, N., Tett, R., Nelson, S., & Liles, B. (2014). Meta-analytic review of psychological interventions for children survivors of natural and man-made disasters. *Current Psychiatry Reports*, *16*(9), 462. https://doi.org/10.1007/s11920-014-0462-z

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, *78*, 185–193. https://doi.org/10.1016/j.ijsu.2020.04.018

Organisation for Economic Co-operation and Development. (2020). *Education and COVID-19: Focusing on the long-term impact of school closures*. https://read.oecd-ilibrary.org/view/?ref=135_135187-1piyg9kc7w&title=Education-and-COVID-19-Focusing-on-the-long-term-impact-of-school-closures

O'Sullivan, K., Clark, S., McGrane, A., Rock, N., Burke, L., Boyle, N., Joksimovic, N., & Marshall, K. (2021). A qualitative study of child and adolescent mental health during the COVID-19 pandemic in Ireland. *International Journal of Environmental Research and Public Health*

Article Public Health, *18*(3), 1062. https://doi.org/10.3390/ijerph18031062

Pandya, A., & Lodha, P. (2021). Social connectedness, excessive screen time during COVID-19 and mental health: A review of current evidence. *Frontiers in Human Dynamics*, *3*. https://doi.org/10.3389/fhumd.2021.684137

QSR International Pty Ltd. (2018). *NVivo (version 12)*.

Racine, N., McArthur, B. A., Cooke, J. E., Eirich, R., Zhu, J., & Madigan, S. (2021). Global prevalence of depressive and anxiety symptoms in children and adolescents during COVID-19: A meta-analysis. *JAMA Pediatrics*, *175*(11), 1142–1150. https://doi.org/10.1001/jamapediatrics.2021.2482

Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry Research*, *293*, 113429. https://doi.org/10.1016/j.psychres.2020.113429

Statistics Canada. (2022, March 10). *COVID-19 in Canada: A two-year update on social and econoMic Impacts*. https://www150.statcan.gc.ca/n1/en/pub/11-631-x/11-631-x2022001-eng.pdf?st=JumpRUrf

Tracy, S. J. (2010). Qualitative quality: Eight a "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, *16*(10), 837–851. https://doi.org/10.1177/1077800410383121

UNICEF. (2020, September 24). *Supporting your child's mental health as they return to school during COVID-19*. https://www.unicef.org/northmacedonia/stories/supporting-your-childs-mental-health-they-return-school-during-covid-19

UNICEF. (n.d.). *8 ways teachers can support students' mental health during covId-19 school returns*. Retrieved June 4, 2023, from. https://www.unicef.org/coronavirus/8-teacher-tips-student-mental-health

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, *17*(5), 1729. https://doi.org/10.3390/ijerph17051729

Wojnar, D. M., & Swanson, K. M. (2007). Phenomenology: An exploration. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association*, *25*(3), 172–185. https://doi.org/10.1177/0898010106295172

World Health Organization. (2020). *Helping children cope with stress during the 2019-nCoV outbreak*. https://www.who.int/docs/default-source/coronaviruse/helping-children-cope-with-stress-print.pdf?sfvrsn=f3a063ff_2&ua=1&ua=1

Zhang, X., Zhu, W., Kang, S., Qiu, L., Lu, Z., & Sun, Y. (2020). Association between physical activity and mood states of children and adolescents in social isolation during the COVID-19 epidemic. *International Journal of Environmental Research and Public Health*, *17*(20), 1–12. https://doi.org/10.3390/ijerph17207666