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Pause, re-think, go virtual … pandemic adaptations from 20 diverse mental health promotion intervention projects across Canada

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ABSTRACT

The Government of Canada’s Mental Health Promotion Innovation Fund (MHP-IF) is a platform for learning across diverse projects, facilitated by a Knowledge Development and Exchange Hub. MHP-IF projects were getting underway before the COVID-19 pandemic escalated in 2020 and dramatically shifted their circumstances and activities. Using storytelling methods, this study explored 20 project experiences during the first year of the pandemic, including how and why assumptions, plans, and activities were adapted; early signals about what was working well or not; and how adaptations influenced equity, access, and cultural safety. Project teams generally navigated through four stages: pausing, re-thinking, adapting, and settling into adjustments. Within and across these stages, projects addressed similar processes, including meeting fundamental needs of participants and project teams, managing unanticipated benefits, and engaging with online formats. All projects experienced the pandemic’s influence of amplifying both inequities and public and political attention on mental health. This study provides experiential evidence from diverse settings and populations in Canada about pandemic adaptations. The multi-project model and storytelling methods can usefully contribute to additional research, including ways to address inequities and promote cultural safety.

1. Introduction

1.1. Pandemic impacts on mental health of children, youth, and families

One of the most consistent findings across COVID-19 studies is a deterioration in mental health and coping due to the pandemic (Magson et al., 2021). Concerns are especially high regarding the mental health of children and youth since the pandemic disrupted critical developmental periods (Magson et al., 2021). Commonly reported impacts include increased stress, anxiety, depression, social isolation, loneliness, and familial conflict (Boden et al., 2021; Loades et al., 2020; Magson et al., 2021).

Aligned with a socio-ecological understanding of health (Henderson, Schmus, McDonald & Irving, 2020), impacts on family, school and community environments increase concerns for the mental health of young people. Despite benefits experienced by some families during the pandemic (e.g., more family time, feelings of closeness, parents seeing resilience in their children), increased stressors and conflicts within families were most common (Gadermann et al., 2021). Since the start of the pandemic, parents reported increased concerns regarding their own mental health, the mental health and education of their children, finances, childcare, and fundamental needs such as food security (Gadermann et al., 2021).

These pandemic impacts on mental health were not distributed evenly (Loeb et al., 2020). Populations with health, social and structural vulnerabilities were harder hit (Loeb et al., 2020; Jenkins et al., 2021; International Union for Health Promotion and Education (IUHPE), 2021). For example, families with fewer financial and social resources, crowded homes, and limited technology and internet access were disproportionately affected by COVID-19 pressures (Gadermann et al., 2021; Jenkins et al., 2021; Strudwick et al., 2021). Similarly, school closures were more difficult for at-risk families since these families rely on schools for nutrition programs, after-school care, counselling, and other supports that help to mitigate social inequities (Gadermann et al., 2021).
1.2. Pandemic impacts on interventions for child and youth mental health promotion

Across the mental health continuum, mental health promotion is least understood and least developed (IYHPE, 2021). Yet the need to address universal determinants of mental health is well-known (Boden et al., 2021). Mental health promotion aims to address these determinants; it is a strengths-based orientation for enhancing positive mental health at individual, community, and population levels (IYHPE, 2021; Jenkins et al., 2021). The need for mental health promotion exists across all populations and is more pronounced for those at risk and experiencing pandemic-related distress (Jenkins et al., 2021).

To help meet this need is a strong and growing knowledge base on effective mental health promotion interventions (Barry, Clarke, Petersen & Jenkins, 2019; IYHPE, 2021). Even so, extending our understanding about what mental health promotion interventions work for whom and under what conditions is a priority research gap to fill (World Health Organization, 2004), especially with the onset of the pandemic (Boden et al., 2021; Holmes et al., 2020; IYHPE, 2021) and the ongoing contextual shifts (Holmes et al., 2020; Jacobson, Smith, Hirschhorn & Huffman, 2020; Taylor et al., 2020). Although the pandemic has drawn more attention to the importance of context-sensitive intervention research, a body of work on adapting interventions for different populations and settings was well-underway before the pandemic and continues to grow (Moore et al., 2021; Mvisiyana et al., 2021).

The pandemic amplified needs for intervention adaptations. The most common adaptation to mental health and other interventions was a switch to remote program delivery (Boden et al., 2021; Strudwick et al., 2021). Even though more research is needed on digital and other remotely delivered mental health interventions, recent findings suggest they may help to mitigate negative impacts on population mental health (Rauschenberg et al., 2021).

1.3. Study context: Mental Health Promotion Innovation Fund

The Government of Canada’s Mental Health Promotion Innovation Fund (MHP-IF) provides a platform for relevant and timely studies that involve multiple projects (Riley, 2021). The MHP-IF funded 20 projects from across Canada in late 2019. Consistent with the goals of the MHP-IF, all projects aim to develop, implement, and test interventions that address determinants of mental health for diverse and vulnerable groups of children, youth, and their caregivers. Learning across the set of projects is facilitated by a Knowledge Development and Exchange (KDE) Hub, also funded by the MHP-IF (KDE Hub, 2021).

The learning potential from the MHP-IF is enhanced by the diversity of the 20 funded projects with respect to populations, settings, and intervention approaches. The projects funded by the MHP-IF for at least the first three years of the program engage diverse populations (e.g., Indigenous, LGBTQ2S+, newcomer/immigrant/refugee, rural, caregivers and service providers), in a range of settings (e.g., schools, virtual platforms, multiple intervention sites, northern), and using a variety of intervention approaches (e.g., experiential, land-based, youth-led, arts-based, strengths-based).

Projects were just getting underway before the pandemic escalated in 2020 and dramatically shifted their conditions, assumptions, and plans. The MHP-IF therefore was poised to address some important knowledge gaps outlined above, such as what might be promising mental health promotion interventions for diverse populations and settings, especially online approaches for children and youth and their impacts on equity, access, and cultural safety. The chance to learn about adaptation processes as contextual conditions shifted was also possible. As a result, understanding project experiences as they adapted to evolving pandemic conditions was identified as the priority for new knowledge development within the MHP-IF.

1.4. Study purpose and research questions

The purpose of this study was to understand the influence of the COVID-19 pandemic on population health interventions for child and youth mental health promotion in Canada. This understanding would inform efforts to improve mental health promotion interventions, especially under evolving (pandemic) conditions. The study explored MHP-IF project experiences during the first year of the pandemic and an early phase of development for most projects. This included how project adaptations were influencing aspects of health equity and cultural safety, and perceptions of longer-term impacts. The study had four main research questions:

- What pandemic adaptations were made by MHP-IF project teams and what were the processes needed to make those adaptations?
- What were the barriers and enablers in implementing the adaptations and how did these differ across contexts?
- How were different types of pandemic adaptations influencing equity, access, and cultural safety?
- What longer-term impacts do project teams perceive the pandemic and resulting adaptations will have on their MHP-IF project, the field of mental health promotion, and child and youth mental health and wellbeing?

2. Material and methods

This study used a storytelling methodology (Greenhalgh, 2016; McCall, Shallcross, Wilson, Fuller & Hayward, 2019) to explore how projects adapted to the COVID-19 pandemic. Storytelling involves participants sharing personal stories of their life experiences and has been used in multiple fields such as public health, nursing, and social sciences (cf McCall, Shallcross, Wilson, Fuller & Hayward, 2019). This method can be used to investigate a research question and to disseminate information for change (Bourbonnais & Michaud, 2018). According to Greenhalgh (2016), narrative storytelling needs to be grounded in some way. This study collected multiple stories about the influence of a common event (i.e., the COVID-19 pandemic) on the experiences of projects funded by the MHP-IF and seeking to develop promising approaches to mental health promotion.

The research team sent email invitations to project leads, who in turn extended the invitations to project members knowledgeable about pandemic adaptations. Project members (40 total) from all 20 projects participated in one-hour Zoom (online conferencing) calls between December 2020 and January 2021 and in projects’ language of choice. Participants on each call included two members of the research team (one as the primary facilitator and the other as observer and note-taker) and from one to seven project team members who brought diverse perspectives (e.g., planning, intervention delivery, evaluation). Three conversations were conducted in French and 17 in English.

The conversation guide followed standard storytelling practices using broad, open-ended questions that allowed participants to tell their story freely (see Table 1 for the conversation guide). Prompts were also used to explore aspects of project experiences related to the research questions (e.g., influence of adaptations on equity, cultural safety, access). The guide facilitated the collection of descriptive and prescriptive types of experiential evidence that could contribute to revealing issues and generating solutions (expansive purposes) as well as identifying shared views and experiences (convergent purposes) (Agency for Clinical Innovation, 2022). For conversations involving more than one project team member, teams were asked to keep in mind that the intention was to gather all aspects of a project story without needing to reach consensus.

Conversations were transcribed verbatim and French conversations were translated to English for analysis. Qualitative thematic analysis was conducted with support from NVivo 12 software. Initial first-level coding (Miles & Huberman, 1994) was conducted by one author. A
3.1. Adaptations as an evolving process

Project teams candidly shared successes and challenges as they were navigating project adaptations in the first year of the COVID-19 pandemic. Although each project's experience was unique (often influenced by their population of interest or geographic location), three overarching themes emerged across all 20 conversations: early adaptations to the pandemic was an evolving process, the pandemic amplified inequities, and mental health was coming further out of the shadows. Results are organized by these themes with reference to anonymized quotes from project team members displayed in Table 2.

3.1.1. Pausing

The COVID-19 pandemic had a disruptive effect on project implementation, particularly for those with in-person programming. Most project teams paused regular activities in response to the pandemic, especially as restrictions (including lockdowns) were introduced and with each new challenge and setback created by the pandemic.

In recalling the early days of the pandemic, projects spoke about increased levels of stress experienced by their team members and the need to prioritize team wellbeing. Examples of actions taken included offering greater workday flexibility (e.g., to accommodate childcare needs), adjusting ways of working as a team (e.g., shortening meetings, building in more frequent work breaks), and providing team members with wellness kits or self-care opportunities (Quote 1). Other types of support focused on increasing team capacity to work virtually (e.g., providing necessary equipment, training, technical support) (Quote 2).

In addition to addressing team needs, projects also adjusted to meet immediate community needs such as for housing, food security, and safety. Projects were focused on supporting those struggling with job loss, increased stress, depression or anxiety, and limited access to services and technology. Project teams described an increased level of concern for vulnerable participants and population groups within their communities. These included newcomers and refugees for whom the pandemic may be triggering or re-traumatizing, and LGBTQ2S+ populations for whom isolation and safety is of greater concern. Some of the actions taken to meet the needs of populations at high risk for negative impacts included adapting services (e.g., distributing food boxes), supporting those in frontline service delivery, and partnering with community organizations who were providing additional support and services for these populations (Quote 3).

Beyond the initial disruption to implementation with the onset of the pandemic, project teams continued to navigate various setbacks. These included the loss of participants, colleagues, implementation sites, and community partner support due to competing priorities and changing population needs. Staff training sessions were also interrupted for some projects, which delayed implementation. Some projects lost opportunities to collect valuable research and evaluation data because of lockdowns (Quote 4). As it became apparent that initial restrictions would be extended, and with each new setback, projects were faced with decisions about whether to change project plans, when and how (Quote 5).

3.1.2. Re-assessing and re-thinking

Decisions to adapt project plans were typically followed by a period of stepping back before moving forward (Quote 6). Projects re-assessed their situation (e.g., population needs, current circumstances, available resources) and re-thought how they might achieve desired outcomes (e.g., possibility of virtual programming, adjustments to program elements and team roles). This stage required working closely with key stakeholders (e.g., partners, participants, funders) so that any adaptations were acceptable and feasible.

Without downplaying challenges, project teams appreciated the chance to be more strategic in their decision-making. During the times when program implementation was largely on hold, many project teams focused their efforts on developmental, ‘behind-the-scenes’ work that ultimately strengthened their program design, implementation, and evaluation plans (Quote 7).

3.1.3. Adapting to the changing context

After taking time to re-assess and re-think, project teams began implementing their revised plans. Adaptations included amendments to ethics applications, budget changes (e.g., reassigning travel funds), developing new program resources, supporting program accessibility,
Adaptations as an Evolving Process

Quote 1: "This was a huge adjustment, just making sure [my staff] could work remotely. What were the challenges they were having, how do we deal with the fact that one of them had a toddler...one of them had four kids who were home now. So people were maybe not going to do like a typical nine to five day...so the first month, we kind of left our sites alone and I was just really focused on ‘okay, let me make sure everybody on my team is okay."" 

Quote 2: "As a leader of any organization at these times, it's kind of on you to make sure that everybody knows how to [shift to online], and that everybody is adapting as they should. It brings a larger, more strict responsibility because you have to try to meet your targets, but then you also have to worry about your stuff or your team learning new skills at the same time. And everybody has certain anxieties about their lack of ability to work with technology, so it’s finding that balance." 

Quote 3: "I was lucky that I was able to pivot and continue to do a lot of work with the young people that might have been outside of the scope of the actual project. So there was a lot of trying to find shelter spaces, a lot of trying to move people into safer spaces. I got some funding locally to do some housing initiatives...when you're talking about mental health, it's hard to talk about it without talking about all the other issues, right? Housing addiction, PTSD, you know. So I was really lucky that I was able to still pivot and work on these projects." 

Quote 4: "When the pandemic hit, many schools had finished implementing the first component [of the intervention]. For many of them, we were able to compile all the data for the assessment. However, other schools had started the program later, so they didn't have time to get through all the workshops and...died...have the time to complete the post-intervention assessment either. So we lost out on some data." 

Quote 5: "They first announced a 2 week closure and we told ourselves that we could easily deal with that. But at the end of those two weeks, they announced the lockdown...would be extended. It was really then that we understood that this situation was going to continue for several more weeks and that we'd have to be proactive and propose something in this context."

Quote 6: "With the move to a virtual environment, we had to kind of step back and look at each [curriculum] module a little differently, or each session that we'd be bringing people together and redevelop the content so that it could be done and [ensure] there were activities that could be delivered in that online setting. And I would say that we’ve maintained those, but they’ve evolved and he adapted as we moved through." 

Quote 7: "(The pandemic) has forced us to, despite all of the adaptations and changes, we’ve actually had to work through the development of this program in a slower or more thoughtful way...It's sort of like when you don’t know what to expect, you inevitably end up considering all these different possibilities and so for us, that has led to more intentional work.

Quote 8: "[We] became more familiar with different modes of connecting with young people. We pivoted to be able to embrace and understand that 'this person likes to text' 'this person’s on [social media]' 'this is an Instagram person' right? and being able to individualize the approach to maintaining relationship and not putting all our eggs in one basket. That’s something that's definitely going to carry forward."

Quote 9: "Initially we thought that we could just take our program, workshops, and training and just do them online, not realizing that we did have to shift and redevelop those workshops and trainings for an online setting. You can’t just pick up the guide and read it and go through it online the same as you would in person. There’s more requirements to it, right? You need to have something that’s kind of splashy...Even the duration - instead of two hours at a time, we found we needed to maybe even go down to like half an hour snippets because so many participants were online at school...and were done with the computer screen.

Quote 10: "We put together these full kitchen kits and each week ingredients would be delivered to the youth so they had to think about how to make sure that food is being delivered and other considerations around food safety, [such as] what if someone’s not home when the food is dropped off?"

Quote 11: "The project is land based. You have to be able to feel what you’re doing and part of that feeling is that the tactile aspect but also the knowledge that you gain from Elders and residential school survivors and knowledge keepers in the community. A lot of them are not comfortable doing a video. So it’s hard to get that information to [the youth] in a way that we would if we were in person."

Quote 12: "I think with the interventions we have so far, with every peer leader retreat, we do modify and tweak to accommodate each participant group, each cohort we have; however, we still firmly believe that person is very important for these interventions, because we are talking about trauma. Because this is trauma processing, this is mitigating health concerns and that is something, especially with youth, that we need to do in-person.

Quote 13: "[Virtual programming] hasn’t been a deterrent, right? We were thinking it was going to be too much but people are always asking for more. And I think that’s a good sign that it can work virtually. And the nice gift about all of this is I think we will never stop running a virtual group now. Like we hope to go back to in person, because it does give something special, but now we’ve realized we can do this [online]."

Quote 14: "It helped us to reach people in more rural areas and people would just join in via Zoom. That really essentially helped us, because initially there was concern that participation would be low, but that didn’t happen which is amazing. We were really happy about folks attending regularly from smaller regions who might not have been able to if we had it in-person."

Amplifying Inequities

Quote 15: "I think our biggest concern around vulnerable populations is the population that may be accessing counseling services in person and needs someone to talk to and can’t. And then, you know, not everybody has a home phone, definitely not everybody has a cell phone. Definitely, definitely not everybody has internet, right? So just progressively, anybody in those categories gets further removed potentially from the help that they need.

Quote 16: "I’m just thinking about the re-traumatising piece for many children and families that are coming from places of war or trauma and how the pandemic might impact them...maybe even on a daily basis. Can we really provide that warp-around support and immediate support on a day-to-day basis? Probably not...Are we going to see red flags overtime that would be a cue for us to provide more support and refer out? Sure we can do that, but I think that...it may be really hard to reach those clients.

Quote 17: "Some folks experiencing domestic violence or unsafety have [become] hugely difficult time because they have to do the program in their own homes and that has been a point of real concern a couple of times for us where it seems like maybe someone was hiding in a closet or on a balcony to do the group, but they’re not being the most forthcoming with us either about what the safety situation was. And this is a fairly common issue.

Quote 18: "It’s a small population that can’t participate virtually – it’s a pretty big population. Because where we’re located, like even in our office building where we have a really good internet connection, but it kicks out at least three or four times a week when we can’t be connected to anything...and that’s us and we have the reliable service. We’re not equivalent to some of the families that have spotty service because of where they live. It’s not provided.

Quote 19: "(Our team was) thinking about ways in which a conversation can end automatically. So having youth have a different tab open on their computer so if they wanted to close out Zoom real quick, they could do that and seem as if they’re working on something on YouTube. And we have protocol like if someone leaves, one of the facilitators is going to contact them by text. So I guess we did have to adapt to have these different safety measures in place just in case for some folks.

Mental Health Coming Further Out of the Shadows

Quote 20: "What I’ve noticed, even just anecdotally, is that the conversations that youth are having about their own mental health are really honest and really raw and I haven’t seen that typically in the past.

Quote 21: "I think this (pandemic) is putting mental health in the spotlight and that we’re going to keep talking about it which is good. It is becoming less taboo. It’s a topic we can no longer avoid and it’s at the top of everyone’s agenda. So it opened a lot of doors for us since we were already talking about it well before the pandemic. Then when the pandemic hit, we realized we had the tools, the training, and everything we needed to talk about it. Apart from having to work remotely, the pandemic has at least helped people talk about it, and our project supports people in that regard, so we couldn’t have asked for a better situation to help promote mental health."

Quote 22: "There has been a collective realisation that mental health issues affect us all and that we can be part of the solution for those around us. In this sense, it’s been very positive. Now we’ve have political stakeholders’ full attention...At the beginning of the pandemic, there was a lot of talk about physical health and how it was important to protect yourself from the virus, etc. But more and more we’re seeing the media talk about mental health issues and raise awareness on this reality. Mental health promotion has sort of been put front and center, which is quite positive in this context."

and finding new opportunities for data collection and evaluation. Although not all projects shifted to complete or partial online implementation, the adaptation of creating or expanding online programming was by far the most common. Projects with pre-existing online services made nimble adjustments such as scaling to meet greater demands and shifting to virtual ways of training staff. In contrast, projects that had limited to no pre-existing online programming rapidly undertook a significant amount of developmental work.
One of the first steps in the shift to online delivery was obtaining permission to offer virtual programming and to collect digital data from respective research ethics boards. This step also included significant background work for choosing appropriate online communication platforms (e.g., Zoom, Slack, Google Meet, FaceTime, Microsoft Teams) and determining provincial/territorial and institutional requirements for their use (such as privacy, security, data storage).

Adapting materials and protocols for online use and delivery required careful consideration and came with some of the biggest challenges. In general, projects found it more difficult to develop and maintain a sense of connection with audiences with virtual compared to face-to-face formats. To address these challenges, projects sought advice from partners or organizations with experience in developing online content and consulted the literature for effective virtual methods for youth. Solutions included tailored outreach, greater use of dynamic and interactive content or methods (e.g., apps, videos, breakout rooms, storytelling), and more reliance on social media (e.g., Facebook, TikTok, Instagram, WhatsApp) (Quote 8). Project teams also needed to address mental exhaustion associated with videoconferences and accommodate participants’ schedules. Some solutions included offering shorter sessions, reducing the group size, offering sessions in the primary language of the audience, and adjusting the time and frequency of meetings (Quote 9).

Program accessibility was a challenge for some project teams. Access was improved in some cases by equipping participants with devices (computers, tablets) or other supplies (e.g., art kits, kitchen supplies, food, workbooks) (Quote 10). For projects that were highly experiential or land-based, shifting to virtual implementation was particularly challenging or not feasible (Quote 11).

3.1.4. Settling or re-adjusting

This stage involved project teams reflecting on their pandemic adaptations and deciding whether there was a need to re-adjust, settle into their ‘new normal’, or evolve beyond their original adaptations. Many teams became more comfortable with the online delivery of their program and could envision longer-term benefits in continuing or expanding their online presence (e.g., blending in-person and online delivery). Some continued to make minor tweaks as they experimented with new methods and techniques. Others had more uncertainty and unknowns. Projects discussed the need to both re-assess their existing situation and at the same time consider how their current adaptations might look in the future. For some highly experiential programs or programs working with specific populations, in-person was still preferred for the future, even with any temporary shifts to virtual programming (Quote 12).

It was mostly during this settling stage that many project teams began to experience and acknowledge unexpected benefits from their pandemic adaptations. Project teams discussed how the pandemic allowed for the creation of new successful program elements (e.g., program websites, mobile apps, virtual training, new program materials), many of which they anticipated would become permanent (Quote 13). Many of these adaptations were conceived as future options, and teams found themselves acting on those plans sooner than expected. Perhaps the most significant unexpected benefit was the increased reach and accessibility of MHP-IF programs that made a shift to online delivery. Projects were able to reach additional populations, including those in rural or geographically distanced regions, and extended family members (Quote 14).

3.2. Amplifying inequities

The pandemic’s influence on amplifying health inequities was pervasive and strong. Project teams expressed concern for vulnerable populations that may be excluded and those more susceptible to mental health challenges (Quote 15). One such concern was about the possibility of the pandemic potentially re-traumatizing newcomer and refugee populations (Quote 16). Another concern was the possibility of language barriers hindering virtual engagement for these and other groups with English as a second language. Lack of safe or private spaces to attend virtual sessions was also a challenge for some youth, particularly those from newcomer and LGBTQ2Si+ communities (Quote 17). Limited to no access to technology was a further challenge, especially for newcomer, Indigenous, rural, and remote populations (Quote 18).

To address potential inequities, project teams found ways to increase accessibility for participants. Some examples were delivering equipment to participants’ homes (e.g., computers, iPad, licenced Zoom accounts, resource kits), using outreach techniques that were sensitive to specific populations, setting up referral paths for youth in need, and providing additional supports, as needed, to ensure a safe environment for all. Additional supports for safe participation involved having protocols for youth who may ‘drop off’ from sessions or for counsellors to reach out personally to youth who may be experiencing specific challenges (Quote 19).

3.3. Mental health coming further out of the shadows

Another widespread theme across project stories was a ‘silver lining’ of the pandemic that mental health gained greater attention at individual, community, and system levels. Project teams observed a marked change in the way program participants more openly shared their mental health challenges and struggles, potentially signaling decreased stigma associated with mental health (Quote 20). Project teams acknowledged that accumulating reports of significant negative impacts of the pandemic on children and their families (including increased depression, isolation, and family stress) created an even greater need for child and youth mental health programming. These heightened needs strengthened a felt sense among project teams about the importance, relevance, and timeliness of their efforts. They also increased the demand for their type of programming (Quote 21). Consequently, project teams thought mental health promotion might receive increased political attention and action (Quote 22).

4. Discussion

Study findings reported in this paper contribute in three ways: (1) They reinforce and build on trends related to pandemic impacts on children, youth, and their support systems as well as the inequitable distribution of those impacts. (2) Findings provide experiential evidence about mental health promotion interventions under evolving pandemic conditions in the Canadian context. (3) The study informs promising research directions.

4.1. Pandemic impacts on children, youth, and their support systems

Study findings reinforced that mostly negative impacts from the pandemic were experienced by children, youth, parents, caregivers, and other systems influencing young people. These impacts were not measured directly, however were a central part of MHP-IF project stories. Most prominent in the project experiences shared in this study were pandemic impacts on project staff and partners working together to design and implement MHP interventions. Attention was needed to maintain the mental health and wellness of these groups, especially as they adapted to virtual working conditions. MHP-IF project experiences provide practical examples of useful supports, such as shifting schedules, allowing adjustments related to childcare, and providing technical support so staff could connect in effective ways.

Project experiences provided benefits from the pandemic that complement examples of positive impacts on some families. Most notable were systemic benefits related to mental health coming further out of the shadows. The pandemic is helping to reduce the stigma associated with mental health since it is now considered an everyday topic and seen as relevant to everyone rather than only those affected by mental illness.
Mental health is also receiving more public and political attention, which will likely yield additional benefits over time, such as increased investment. An early benefit of this heightened attention for the MHP-IF projects was public recognition and reinforcement for the importance of their work.

Study findings strongly reinforced that the pandemic is exposing and amplifying inequities. Among the MHP-IF projects, the largest concerns were a lack of access to technology, internet, and other resources in home environments. A related and central concern was for youth who live in unsafe home environments, who lack space and privacy to attend virtual sessions and who have language barriers. These concerns mirror those reported in other recent studies of digital interventions for mental health (Strudwick et al., 2021; Boden et al., 2021). Alongside these commonly reported concerns were experiences of unexpected benefits, not commonly reported by others. The most common benefit was increased reach and accessibility of programming with online formats, especially with remote and rural populations and expanding to other regions.

4.2. Innovations with mental health promotion interventions

MHP-IF project experiences provided some new insights about virtual engagement with vulnerable populations. In particular, the projects offered practical ways to optimize online engagement. Study results included expected online engagement strategies such as using videos and whiteboards. The phenomenon of ‘Zoom fatigue’ was real and mostly addressed by offering shorter sessions, reducing online group size, and allowing for flexible participation. A greater variety of media was also used to engage with youth, such as Facebook, WhatsApp, TikTok and Instagram.

Some project activities were more challenging to shift from in-person to online and adaptations varied by the type of programing. For some experiential programs (e.g., cooking classes), solutions were often found to keep the content of programming generally the same, such as sending workbooks, art, or kitchen supplies to participant homes. For other programs that were highly experiential, unique challenges needed to be addressed, such as finding ways to teach land-based programming in a virtual environment.

This study also provided experiential evidence that supports a growing body of work about adaptation processes for population health interventions. MHP-IF project experiences echo phases and main adaptation activities described by others, including environmental assessments, stakeholder engagement, identifying core intervention components, and iterations of modifying and testing the fit between context and intervention content and delivery (Movsisyan et al. 2021; Moore et al., 2021). While most project teams experienced similar adaptation trajectories, differences across projects were also apparent, especially projects that involve experiential and land-based approaches, multi-language audiences, remote locations, and sites in multiple provinces.

4.3. Strengths and limitations

The research reported in this paper was possible because of an existing national platform for developing and testing mental health promotion interventions. The platform includes multiple projects and a Knowledge Development and Exchange Hub, a collaboration that represents one of the innovations within the MHP-IF. This study of pandemic adaptation stories of MHP-IF projects is the first illustration of implementing this new model. The stories are specific to diverse Canadian contexts and represent adaptations as they unfold. They were told by project team members working on the frontlines of mental health promotion interventions and provide a promising illustration of leveraging experiential evidence (Agency for Clinical Innovation, 2022). The storytelling methodology worked well with project teams, facilitated in part by trusting relationships that were built between the KDE Hub and the projects over the year prior to study implementation and the opportunity for projects to participate in study design. As pandemic conditions and adaptations continue to evolve, so too must learning about what interventions are most promising for different populations and environments. As in-person delivery becomes possible, how does that influence engagement with online delivery formats? The adaptation process also needs more attention. How might adaptations change over time? What pandemic adaptations remain permanent? Do projects oscillate between adaptation stages and in what order? What patterns are apparent and under what conditions?

5. Conclusions

This study reinforced how the pandemic amplified inequities, introduced many challenges, and had some unexpected benefits, such as more openness about mental health and reaching new populations. Findings provide new experiential evidence from diverse settings and populations about project adaptations that include common stages and processes. Adaptations undertaken by projects during pandemic times in Canada may be relevant under less volatile conditions and in other countries. Online engagement that is safe and flexible shows promise for diverse and vulnerable children and youth. Learning across diverse projects is a unique benefit of multi-project investments. Studies that explore ways to address inequities and promote cultural safety are especially needed.

Author contributions

BLR provided scientific leadership for the study and for the development of the model for new knowledge development across funded projects. All authors contributed to the study design, methods, and interpretation of results. RFV had a lead role in data collection and analysis with support from AA and ED. BLR and RFV wrote the first draft of the manuscript. All authors read and approved the final manuscript.

Declaration of competing interest

None. Other declarations are included on the title page.

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Ethics approval

This study received full ethics approval from the University of Waterloo Research Ethics Board (ORE#42729).

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