

Improving Youth Mental Health and Well-Being During the COVID-19 Recovery Phase in BC



TABLE OF CONTENTS

AUTHORS
ACKNOWLEDGEMENTS
EXECUTIVE SUMMARY
INTRODUCTION
The importance of youth mental health11
Status of youth MH pre-pandemic11
COVID-19 impact on youth MH12
The COVID and Kids project components
PROJECT FINDINGS
Current state of youth MH in BC17
Barriers to addressing youth MH17
Current youth MH interventions in BC22
Strategies to support youth MH in BC26
RECOMMENDATIONS
Process for developing recommendations
Priority recommendations
CONCLUSION
REFERENCES
APPENDIX



AUTHORS



Hasina Samji, PhD BC Centre for Disease Control and Simon Fraser University



Jacqueline Maloney, PhD Simon Fraser University



Julia G. Kaufmann, BSc (Hons.), MSc Candidate Simon Fraser University



Jillian Herring, BSc (Hons.), MPH Candidate, The University of British Columbia



Mari del Casal, BA, MPH Candidate Simon Fraser University



Rachel Correia, BPH (Hons.), MPH Candidate McMaster University



David Long, MD The University of British Columbia



S. Evelyn Stewart, MD, FRCPC BC Children's Hospital, BC Mental Health and Substance Use Services, and the University of British Columbia



John Best, PhD BC Children's Hospital and the University of British Columbia

Suggested Citation: Samji, H., Kaufmann, J. G., del Casal, J-M., Long, D., Best, J., Maloney, J., Herring, J., Correia, R., Stewart, S. E. (2022). Improving Youth Mental Health and Well-Being During the COVID-19 Recovery Phase in BC. BC Children's Hospital Research Institute.

ACKNOWLEDGEMENTS

We gratefully acknowledge that we live and work on the unceded traditional and ancestral territories of the Səlílwətał (Tsleil-Waututh), Skwxwú7mesh (Squamish), Stó:lo and x^wməθkwəỷəm (Musqueam) Nations.

This project is primarily supported by funding from the generous donors at BC Children's Hospital Foundation. Additionally, this work was supported by Mitacs through the Mitacs Accelerate program. We also thank the BC Children's Hospital Research Institute, Wyeth Wasserman and Bonnie Barrett for their support of this project.

We would like to extend our gratitude to our youth advisors, collaborators and community partners for their contributions to this project — including those who attended our deliberative dialogue sessions as participants and note-takers. We also gratefully acknowledge the many youth and their families who participated in the Youth Development Instrument and Personal Impacts of COVID-19 projects.

Research undertaken as part of this project was approved through a harmonized ethical review by Simon Fraser University and the Behavioural Research Ethics Board, University of British Columbia ID#: H22-01508.

EXECUTIVE SUMMARY



The purpose of this report is to identify strategies to support youth mental health (MH) and well-being during the pandemic recovery period. We undertook this objective by examining the MH impacts of the COVID-19 pandemic on youth, identifying which groups of youth have been disproportionately impacted, and what modifiable factors and coping strategies have helped to buffer the effects of the pandemic. Drawing from provincial data sources, the literature, and knowledge from intersectoral partners,¹ we present recommendations and key action steps to guide youth MH partners as we move to a focus on recovering from the societal impacts of the pandemic.

Since 2020, the COVID-19 pandemic has negatively impacted the health and wellbeing of the global population. Acquiring COVID-19 has its own health impacts, yet the associated burdens of the pandemic have had a deleterious effect on youth development and MH. Youth MH had been worsening in the years prior to the onset of the pandemic, and widespread social disruption caused by the pandemic has likely fuelled even greater challenges.

As part of a larger British Columbia (BC) Children's Hospital project, this COVID and Kids project and report seek to understand how the pandemic has impacted BC youth. We draw from two provincial studies: the Personal Impacts of COVID Survey (PICS) and the Youth Development Instrument (YDI). Our findings highlight that, on average, youth broadly reported poorer MH during the pandemic compared to before the pandemic. Moreover, specific groups of youth – girls, sexual and gender minority youth, and those with poorer pre-COVID MH - reported worse MH during the pandemic compared to their peers.

We also share strategies youth used to cope during the pandemic that are associated with better MH outcomes. We anticipate that our findings will be relevant to other jurisdictions in Canada and beyond.

We held two deliberative dialogues with provincial youth MH partners and collaborators to brainstorm best practices and strategies to promote youth MH and well-being during the pandemic and through the recovery phase. Attendees included youth and parents, as well as partners from the education, health, community and non-profit sectors. At the first deliberative dialogue, attendees shared current effective strategies that they were aware of for addressing youth MH and barriers to implementing them. The authors systematically distilled this information to propose a list of 13 total recommendations. The second deliberative dialogue focused on solidifying priority recommendations and conceptualizing action steps needed to catalyze said recommendations. Using the dialogue as part of a systematic

¹ Based on conversations with MH partners, we have decided not to use the word "stakeholder" in this report due to its colonial roots.

development and selection process, attendees rank-ordered recommendations resulting in a list of the top three priority recommendations alongside action steps necessary to implement them. The top three priority recommendations are as follows:

Recommendation 1:

Prioritize actions to address MH disparities among underserved populations.

Recommendation 2:

Improve youth MH partner integration and collaboration in BC.

Recommendation 3:

Enhance social and emotional learning (SEL) strategies within school curricula and community programming to increase resilience and positive MH.

While the COVID-19 pandemic has precipitated unique challenges to youth MH, it has also catalyzed an unprecedented opportunity for collaboration and collective action to change practice and policy. Our intention is that the recommendations contained in this report, which have been guided by the scientific literature, data and practical knowledge, will motivate changes for the betterment of youth and their MH across BC and Canada.

Improving Youth Mental Health and Well-Being During the COVID-19 Recovery Phase in BC 9

00

.2

INTRODUCTION



The importance of youth mental health

Adolescence is a critical developmental stage, marked by profound physical, emotional and social changes (Samji, Wu, et al., 2022). Behaviours established in adolescence, often defined to be a period between the ages of 11 and 19 years, set the foundation for longterm health outcomes (Dahl et al., 2018; Sawyer et al., 2012). Many physical and mental health (MH) conditions have their onset in adolescence (Sawyer et al., 2012). Indeed, 59% of mental disorders appear by age 18 (Caspi et al., 2020). Further, mental disorders are the greatest contributor to the nonfatal burden of disease in adolescence, which rises sharply in people aged 10 to 24 years (Sawyer et al., 2012). Having an MH condition in adolescence is associated with reduced quality of life, affecting physical health, psychological well-being, social relationships, role function and environmental context (H. Chen et al., 2006). In contrast, well-being during adolescence is associated with a healthier adulthood (Hoyt et al., 2012). As a result, early-life MH and well-being interventions are critical in promoting lifelong health and positive quality of life.

Status of youth MH pre-pandemic

In the years leading up to the COVID-19 pandemic, the prevalence of mental illness among youth was already rising at a concerning pace. In Canada, the prevalence of individuals aged 12-24 years reporting poor/fair perceived MH increased from 4.2% to 9.9% between 2011 to 2018 (Wiens et al., 2020). Further, from 2011 to 2016, the prevalence of diagnosed mood disorders increased from 4.3% to 7.8%. According to the 2012 Canadian Community Health Survey, 18.5% of youth aged 15 to 24 reported having an MH or substance use disorder within the prior 12 months (Boyce et al., 2015).

In BC, the 2018 BC Adolescent Health Survey highlighted that among a sample of 38,000 youth aged 12-19 approximately 27% reported their MH status as poor or fair, compared to only 19% in 2013 (McCreary Centre Society, 2019). Additionally, 15% of youth who completed the 2018 survey reported having an MH condition. The data demonstrates that MH conditions increased for both genders, from 5% in 2013 to 8% in 2018 among boys, and from 15% in 2013 to 23% in 2018 among girls. These data provide evidence of worsening youth MH pre-pandemic, which elevates concerns for increased risk of poor mental health outcomes, especially among youth with pre-existing mental health conditions (See Cost et al., 2022).

In light of increasing concerns about MH for youth and the population at large, BC ministries have released frameworks and policies to address MH concerns at all levels of the population. For instance, in 2019, the BC Ministry of Mental Health and Addictions introduced <u>A Pathway</u> to Hope, a strategic plan for improving MH and substance use concerns for the BC population. This plan highlights a number of preventative strategies including promoting social and emotional development in early childhood within the school context, expanding Foundry Centres (a BC-based integrated health service hub for youth) to communities across the province, establishing integrated child and youth teams, and promoting MH in schools. The BC Ministry of Education's Mental Health in Schools Strategy is an another

policy initiative that embeds MH promotion in the education system by supporting educators, providing schools the tools needed to support student MH, and incorporating key lessons in the classroom.

COVID-19 impact on youth MH

On March 17, 2020, the Province of BC declared a provincial state of emergency in response to rising cases of COVID-19 (Canadian Institute for Health Information [CIHI], 2021). Schools were temporarily closed following spring break to modify education plans. The province gradually reopened schools to students, starting with children of essential service workers on April 8 gradually shifting to voluntary in-person learning for all other students by June 1 (Nair, 2020). While there was some initial disruption, schools moved to blended forms of teaching using online platforms. Schools continued to move towards to in-person learning by September 2020 with updated public health and safety protocols. Outside of educational settings, there were widespread changes to personal services, non-essential health services, sports and recreation, physical distancing, and social gatherings (CIHI, 2021). We are still learning how these large-scale disruptions in society's social fabric, in combination with the typical developmental stressors of adolescence, have impacted youth MH.

Evidence from systematic reviews indicate a higher prevalence of depressive and anxiety symptoms in children and adolescents during the pandemic compared to prepandemic estimates (Kauhanen et al., 2022; Mansfield et al., n.d.; Panchal et al., 2021; Samji, Wu, et al., 2022). In fact, findings from a meta-analysis show that, globally, youth are experiencing clinically elevated levels of anxiety and depression symptoms, at 20% and 25% respectively, during the COVID-19 pandemic (Racine et al., 2021). Compared to pre-pandemic estimates, the prevalence of depression and anxiety have increased by 12.3% and 8.9% respectively.

An increased prevalence of fear, concern, worry and psychological distress has also been reported throughout the pandemic, with fear of infection of either themselves or a vulnerable loved one being the most reported COVID-19-related fear (Kauhanen et al., 2022; Samji, Wu, et al., 2022). Additional fears reported included the inability to cope with the academic workload, the impact of COVID-19 on the school year, and uncertainty about the future (Samji, Wu, et al., 2022). Loneliness and social isolation also appear to have an important impact on the MH outcomes of youth, with evidence showing moderate to large correlations between depressive symptoms and loneliness and/or social isolation (Loades et al., 2020). Emerging evidence from several longitudinal studies suggests that frequent and problematic substance use may have increased in higher-risk youth throughout the COVID-19 pandemic, such as those with concurrent (i.e., multiple or overlapping) MH conditions (Chadi et al., 2022).

Certain sub-groups of youth appear to have experienced disproportionately poorer MH during the COVID-19 pandemic, such as those with pre-existing MH challenges (Panchal et al., 2021). Our group's systematic review undertaken prior to this project found that girls, older adolescents, and children and adolescents living with neurodiversities and/or chronic physical conditions were more likely to experience negative mental

health outcomes. Physical exercise, access to entertainment, positive familial relationships, and social support were associated with better mental health outcomes (Samji et al, 2022). Rates of mental illness varied by age, gender and orientation, with evidence showing girls and older children are at greater risk for internalizing disorders (e.g., depression) (Racine et al., 2021) and that overall risk for poor psychiatric outcomes increases with age between 8 and 18 years, among female youth and among youth reporting LGBTQ orientation (Stewart et al., 2022b). Studies have also found that mental illness severity was greater in urban areas and regions with greater disease burden (Racine et al., 2021) and among youth living in poverty (Stewart et al., 2022a). Data from a systematic review found that, throughout lockdowns, children with Autism Spectrum Disorders (ASD) experienced more anxiety than children without ASD (Panchal et al., 2021). Adolescents with eating disorder symptoms appeared to be uniquely affected by lockdowns, with 41% of youth experiencing a reactivation of eating disorder symptoms post-lockdown (Panchal et al., 2021). Moreover, a study conducted in Montreal found a 62% increase from pre-pandemic levels in emergency department visits related to eating disorders/symptoms (Chadi et al., 2021).

The COVID and Kids project

BC Children's Hospital (BCCH) has led research on strategies for supporting youth health and well-being provincially and globally, particularly throughout the pandemic. A significant part of their effort was the launch of the *COVID and Kids*: *Understanding the impact of COVID-19 on* *mental health* project. This project sought to expand the connection to children and families across BC, with an emphasis on disproportionately impacted populations. In addition, data collected from other complementary research studies will inform efforts to promote physical activity and increase resilience to support youth MH and well-being. The *COVID and Kids* project is led by Dr. Wyeth Wasserman at the BC Children's Hospital Research Institute (BCCHR).

A sub-component of the larger COVID and Kids project was the Improving Child and Youth Well-Being During the COVID-19 Recovery Phase in BC project, led by Drs. Hasina Samji and Evelyn Stewart. This project, which is the subject of this report, focuses on identifying subpopulations of youth and families who have been at increased risk of poor MH and wellbeing during the pandemic, as well as identifying strategies to promote youth MH and well-being in BC. The project consists of three components: a literature review, two deliberative dialogue sessions, and analysis of two BC-based data sources (the Personal Impact of COVID-19 Study [PICS] and the Youth Development Instrument [YDI], described below). Through a synthesis of data obtained from the components, we developed 13 recommendations to support youth MH and well-being in BC in the recovery phase of the COVID-19 pandemic. In this report, findings from each component will be presented, and the three finalized priority recommendations are described. Moreover, each recommendation is accompanied by actionable strategies for implementation.

Project components

1. Deliberative dialogues

Through two deliberative dialogue sessions, youth MH partners/collaborators came together to discuss strategies for supporting youth MH and well-being in the COVID-19 recovery phase in BC. The deliberative dialogues were held in person on May 2, 2022 and September 2, 2022 at the SFU Harbour Centre in Vancouver, BC. During the first deliberative dialogue, attendees discussed the following: (1) strategies that have already been implemented in BC to support youth MH and well-being; (2) "blue-sky" strategies to support youth MH during the COVID-19 pandemic and recovery phases; (3) barriers to implementation and access; and (4) strategies for improving youth MH and well-being in the BC context. During the second deliberative dialogue, attendees discussed three recommendations derived from discussions at the first dialogue, and data analysis findings from the YDI and the PICS. The specific recommendations were selected based on a priorityranking process outlined later in this report. Attendees discussed refinements to the proposed recommendations and brainstormed action steps for implementing them. This resulted in the finalized priority recommendations for addressing youth MH in BC during the COVID-19 pandemic and recovery phases.

2. Data analysis

Two BC-based data sources were analyzed to assess the impact of the COVID-19 pandemic on youth MH and well-being, as well as to identify subpopulations of youth who experienced disproportionate MH impacts. These data sources include the PICS and the YDI. The PICS is an online survey for young people and parents to share the short and longterm impacts of the COVID-19 pandemic on their health and well-being. Three versions of the survey were developed: a child/youth self-report, a parent selfreport, and a version where parents could report on their children (parent-proxy). Since November 2020, 3,000 children and adults have participated in the PICS. In this project, we are exploring a PICS sub-set of 59 youth and 88 adults (parents/guardians) from BC, based on the children's age (13-18 years) and the completeness of youth, parent and parent-report on their child surveys. The YDI is a comprehensive annual youth well-being self-report survey that is administered to students in Grade 11 across school districts in BC. The current analysis uses data from 2,350 Grade 11 students from the YDI spring 2021 cycle.



PROJECT FINDINGS



The current state of youth MH in BC

Using the YDI and PICS data, we assessed youths' recent MH while accounting for their pre-pandemic MH. We also collected information about protective factors that may have supported positive youth MH during the pandemic, including their social identity and experiences, extracurricular activities, coping strategies and other protective factors, such as youths' social and emotional competencies and positive experiences at home and at school. The key findings are outlined here, as they provide insights into the MH of BC youth and help contextualize the recommendations presented later in this report.

Broadly, these data suggest that the MH of youth in BC declined during the pandemic, which aligns with existing literature about youth MH during this period (Cost et al., 2022; Panchal et al., 2021; Racine et al., 2021; Samji et al., 2022). Disparities in MH outcomes by youth subgroups were also identified. According to data from the YDI, girls, sexual and gender minority youth, and those with poorer pre-COVID MH reported worse MH during the pandemic compared to their peers. Analysis of the PICS data did not indicate significant differences based on the demographics of the youth participants (likely due to the small sample size), except that poorer pre-COVID MH was associated with poorer MH during the pandemic in both youth self-report and parent reports of their child's well-being.

Beyond specific subpopulations, the YDI also showed that some modifiable factors were associated with youth MH during the pandemic. Specifically, loneliness and school pressure were associated with poorer MH while good sleep; support from adults at home and family communication; support from peers and friendship intimacy; optimism, selfesteem, and emotional self-regulation; and school safety, belonging and climate were associated with better MH. Moreover, youth self-reports from the PICS indicated that resilience was associated with higher reported recent MH, and parentreports on their child suggested that family relationships were associated with better recent MH for their child. In contrast, parent-reports indicated that sleep troubles (i.e., sleeping too much, sleep disturbances) were associated with reports of poorer youth MH.

Additionally, both surveys asked about extracurricular activities and coping strategies. From the YDI, team sports with a coach or instructor, exercising for fun/physical activity, spending time outdoors, hanging out with friends in person/on a device (i.e., phone, tablet or computer), connecting with family in person/virtually, volunteering, church/ religious activities, continuing to do usual extracurricular activities, and learning new subjects or practicing new skills were all associated with better MH during the pandemic. The PICS parent reporting on their child data also indicated that physical activity/exercise and learning new subjects or practicing new skills were associated with better youth MH. However, no extracurricular activities or coping strategies were significant in the youth self-report data, likely, again, due to the small sample size.

Barriers to addressing youth MH

During the first deliberative dialogue session, attendees were asked to identify two types of barriers: 1) those that were present before the pandemic and may have been exacerbated by the pandemic and 2) barriers and new areas of concern that arose during the pandemic.

Barriers present before, or exacerbated by, the COVID-19 pandemic



Lack of coordination and integration of MH partners/collaborators and resources across BC

Increasing integration of youth MH services has been widely recognized as an important step in promoting youth well-being and care (Halsall et al., 2019). This is congruent with reported barriers to accessing mental healthcare services in Canada, including not knowing where to access help, long wait times, and lack of MH service integration and government oversight (Moroz et al., 2020). Deliberative dialogue attendees also noted that MH could be considered the most siloed component within the health system, given there are limited opportunities for coordination and integration across school districts, ministries, and community partners. This is consistent with a recent study of implementation barriers to youth mental healthcare, in which school counsellors and social workers highlighted the isolation of MH services from other health services (Goodcase et al., 2021). Staff who participated in Goodcase et al.'s study also identified a need to bridge communication between MH providers, schools and families.



Lack of youth MH data and funding

Attendees discussed multiple pre-COVID-19 pandemic barriers to MH access, particularly those related to a lack of youth MH data and funding. In particular, they highlighted a need for more data to represent youth who are less inclined to complete convenience/school-based surveys, as well as youth who are neurodivergent, no longer in school or have experienced mental illness. In a 2016 report by the Mental Health Commission of Canada, in order to measure progress of MH outcomes, one of the calls-to-action was for more data measuring quality of life, service satisfaction, and involvement of people with lived experience in decision-making positions. Additionally, attendees identified a need for continuity in longitudinal data and for data-sharing with youth, as well as increased funding to support the data collection and knowledge translation processes. Similar calls for more longitudinal MH research for youth, especially during the COVID-19 pandemic, have been expressed by MH experts (Wade et al., 2020).

3.

Lack of access to appropriate MH services for youth

Attendees commonly identified limited access to MH services as a pre-COVID-19-pandemic barrier to addressing youth MH in BC. This is consistent with existing research. For example, in a study conducted by the McCreary Centre Society in 2013, 35% of youth who sought MH services reported that they did not access the MH services they needed as a result of long wait lists (Cox, 2017). Further, attendees noted that the COVID-19 pandemic amplified issues regarding access to MH specialists and services as a result of longer wait times. The CIHR-funded qualitative sequel to the PICS study (Stewart and Samji, co-PIs) gathered further insight by way of interviews with youth and parents who highlighted limited availability of services and opaqueness about services that are available. This was further exacerbated by long wait times and prohibitive costs (if accessing private care). They also reported the difficulty for parents and youth to navigate or know how to get help for youth. Although the pandemic did generally provide youth with more opportunities to access virtual MH services, there are concerns around privacy issues, as well as inequities regarding access to technology.



Societal views of MH in the community/MH-related stigma

Lastly, perspectives of MH in the community — including MH stigma, vague and inconsistent language to describe MH, and predominantly Western colonial perspectives of MH — were identified as pre-COVID-19 pandemic barriers. More specifically, MH stigma among parents and caregivers may prevent youth from accessing the MH resources they need. For example, a study conducted in 2015 found that parental stigma of MH is a significant barrier to seeking MH care, especially among adolescents (Gronholm et al., 2015). Further, a lack of consistency in MH language, including multiple definitions for the terms "mental health" and "mental illness" across sectors, may contribute to MH stigma and act as a barrier to addressing youth MH in BC. It is critical to develop common language at all levels and for youth to have an opportunity to strengthen MH literacy, as this is associated with greater help-seeking and behavioural health care utilization (Tambling et al., 2021).

Barriers/Areas of concern that arose during the pandemic



Loss of in-person social connection

Deliberative dialogue attendees noted that throughout the pandemic youth experienced a significant loss of in-person social connection due to virtual learning, closures and physical distancing mandates. Evidence highlights that decreased social interaction can result in chronic loneliness, which has severe psychological impacts, even into adulthood (Nearchou et al., 2020). Students reported that the switch to virtual learning caused widespread disruption in their lives, a sentiment that is supported by literature indicating that when children are out of school they exercise less, are on their phones more, have disrupted sleep and eat poorer quality foods (Nearchou et al., 2020). It is also important to note that some students benefitted from virtual learning and there is a need to better understand how these students can be better supported in the school setting (Soneson et al., 2022). A theme emerging from PICS 2 findings is that the pandemic has had lasting impacts on youth social skills, such that lack of socialization has decreased confidence in their social skills. Youth are feeling more introverted, even those who would previously be considered extroverted. Additionally, there has been a rise in behavioural problems in schools due to isolation and boredom.



Missed milestones

Attendees also noted that social distancing and other public health measures have resulted in youth missing significant milestones, including in-person graduation celebrations. Additionally, many youth have experienced a lack of support during transition periods, such as the transition to post-secondary school. Throughout the pandemic, these experiences have corresponded with increased rates of depression and anxiety among youth (Racine et al., 2021).



Increased social media use

Another barrier to addressing youth MH due to the COVID-19 pandemic that attendees consistently highlighted was increased social media use with a concomitant increase in cyberbullying. This is supported by literature highlighting that the COVID-19 pandemic increased adolescents' screen time, which in turn can lead to increased cyberbullying (Wiguna et al., 2021). Cyberbullying may be linked to non-suicidal self-injury, which may predict poor psychosocial health in adolescents and increase the risk for suicidal ideation or attempt (Wiguna et al., 2021).



MH staffing challenges

Finally, staffing challenges were consistently identified as a new COVID-19 pandemic barrier to addressing youth MH. Throughout the pandemic, there have been significant difficulties recruiting and retaining MH-specific staff and staff generally, including teachers, social workers and counsellors. This indicates a need to address staff MH and burnout, which, in turn, is important for supporting youth MH. To continue offering the MH resources and services that youth need, it is necessary to ensure good health and well-being of those who provide these supports (Johnson et al., 2021).

Current youth MH interventions in BC

Although barriers to supporting youth MH in BC exist, there are also ongoing strategies and interventions that have been shown to be effective at promoting youth MH and well-being across the province. In advance of the first deliberative dialogue, attendees were asked to identify both evidence-based strategies and unevaluated yet promising strategies that have been working well to promote youth MH during the pandemic (Figure 1). Based on the scope of the intervention and the parties involved, we categorized these interventions into one of three levels: structural, community or individual. This overview of current youth MH interventions in BC, drawn from the perspectives of community partners, provides context for the recommendations <u>outlined later in this report</u>.



Figure 1: Current interventions known by MH partners/collaborators

Structural

Structural interventions involve changes to systems, organizations and policy to support health and well-being. Leading up to the first deliberative dialogue, youth MH partners/collaborators identified several structural interventions that they believed to be evidence-based, including increasing access to nature or green spaces, increasing access to virtual services, and maintaining school routines. These MH partners also identified promising approaches such as incorporating Indigenous approaches to health and clinical practice.

Example:

The Expect Respect & A Safe Education (ERASE) program focuses on fostering safe and respectful school environments that minimize discrimination, bullying and violence (Ministry of Education and Child Care, 2020). Not only does ERASE build school connectedness and support, it also has aimed to address MH and wellness, substance use, sexual orientation and gender identity, and violence prevention.



Community

Community interventions provide an opportunity to promote MH, with a particular emphasis on inter-organizational and collaborative partnerships. In this category, youth MH partners identified the use of integrated child and youth teams. These teams were designed to move MH and substance-use service delivery to community-based settings to enhance accessibility to youth (e.g., Foundry). Other promising practices that were identified as requiring further evaluation include virtual integrated services provided by Foundry, MH promotion through COVID-19 rapid response teams, and the involvement of cultural and Indigenous well-being practices. MH partners also emphasized strengthening social connection and relationships among youth. Practices that improve social connectedness with peers and trusted adults, developing peer support groups, and using technology to promote connection were some of the promising strategies shared by partners/ collaborators.

Example:

Everyday Anxiety Strategies for Educators (EASE) operates on a community level by empowering teachers to support students in coping with anxiety and to foster social and emotional learning (Ministry of Child and Family Development, n.d.). Through doing this, EASE is also building the MH literacy of educators across BC. This program has also been expanded for use outside of schools through materials for parents and caregivers (i.e., EASE at Home).

Individual

Individual-level interventions aim to support youth on a one-to-one basis and focus on their individual needs. Attendees of the first deliberative dialogue identified the use of several strategies that they believed to be evidence-based and effective at the individual level, including MH literacy initiatives; emotion-focused school supports (EFSS) and emotionfocused family therapy (EFFT); cognitive behavioural therapy (CBT) and dialectical behaviour therapy (DBT); mindfulness activities (e.g., mindfulness-based stress reduction); exercise/physical activity; and trauma-informed approaches (identified as both evidence-based and unevaluated but promising). It is important to note that evaluation of new and ongoing initiatives is critical, as programs can unintentionally create harm for certain populations (e.g., those with pre-existing mental illness) (Montero-Marin et al., 2022).

Example:

A specific evidence-based program identified by attendees was Text4Hope. This Alberta-based, Canada-wide program aims to support MH and well-being through daily text messages (Agyapong et al., 2021). The messages target stress, anxiety and depression reduction through a cognitivebehaviour therapy (CBT) approach. In BC, Text4Hope is provided by Health Emergency Management BC (HEMBC) and is available to youth and adults. Broader text crisis services were also identified as a promising strategy.

Although this section highlights that there are a variety of MH interventions currently implemented in BC, deliberative dialogue attendees also proposed both "blue-sky" strategies (i.e., strategies that could be implemented with no barriers or limitations) and strategies urgent to the BC context that could be implemented to improve youth MH in BC.





Strategies to support youth MH in BC

"Blue-sky strategies"

As part of the first deliberative dialogue session, attendees were asked to identify and describe strategies that could be implemented if there were no barriers or limitations (blue-sky strategies) for promoting youth MH in BC during the COVID-19 pandemic recovery period. Below are the six key themes that emerged.



Increased integration of youth MH supports across BC

Increasing integration of youth MH supports across sectors in BC was identified as a blue-sky strategy to support youth MH. This involves mapping the current state of youth MH in BC, including determining key partners, developing a comprehensive understanding of roles and responsibilities, and identifying current resources and programs that support youth MH across the province. Additionally, attendees recommended evaluating the effectiveness of current resources and programs to determine which to maximize to support youth MH. Once key MH partners/collaborators have been identified, this strategy includes coordinating discussions to determine clear goals and objectives to support youth MH. Lastly, it was recommended that a shared information system be developed to allow for seamless MH communication between partners/collaborators, service providers, families and youth.



Schools as a potential MH resource

A common theme of the dialogue was identifying schools as a universal access point to support youth MH. Attendees envisioned this to include integration of child and youth MH teams within every school, connecting students for peer-topeer support, increasing access to school counsellors and MH teams outside of school hours, and building capacity for teachers to adequately support youth MH alongside their own MH and well-being. Further, allowing for a more flexible school format, improving integration of social and emotional learning and MH literacy into the curriculum, and increasing access to nature were suggested as blue-sky strategies to support youth MH within schools.



Role of the broader community

Blue-sky strategies relating to the broader community emerged as a common theme among attendees. They highlighted strategies such as increasing accessibility to extra-curricular activities outside of school through free passes to community centres, increasing MH knowledge and capacity of individuals who work with youth in the community (i.e., coaches and youth leaders), and identifying the role of public health in addressing the social determinants of health that contribute to youth MH.

Role of parents/guardians

Attendees commonly identified blue-sky strategies involving parents/guardians and caregivers as opportunities to support youth MH. They discussed strategies for parental skill building to support their children throughout the life course including empowering parents/guardians to promote play-based learning during the early years and educating them about healthy adolescent development.



Indigenous perspectives

A common and important theme included incorporating Indigenous perspectives of health and ways of knowing when addressing youth MH. This includes integrating child and elder health, holistic approaches to health, self-determination, and land-based activities, which generally involve an Indigenous community member immersing students in their local environments and teaching them how knowledge is gleaned from the natural world.



Research, evaluation and funding

Lastly, blue-sky strategies regarding research, evaluation, and funding of youth MH were consistently identified. This included data-driven approaches and evaluation of youth MH programs and policies, provincial funding of the *Middle Years Development Instrument* (MDI) and the *Youth Development Instrument* (YDI), and increased funding to support MH resources and staff in schools.

Urgent strategies in the BC context

During the deliberative dialogue, attendees were also invited to propose MH strategies most urgent in the BC context. Of note, many of the six key themes that emerged align with the themes identified as blue-sky strategies for addressing youth MH in BC.



Improving the mapping and coordination of different MH partners/collaborators and organizations engaged in supporting youth MH in BC

Attendees consistently identified mapping the current state of youth MH in BC as a strategy that is urgently needed to support youth MH in BC. This multi-component strategy would include identifying key partners who promote youth MH, as well as current youth MH resources, programs and services. Further, once these people, resources and programs are identified, it is recommended to encourage collaboration and integration across sectors and ministries to allow for a more coordinated approach for addressing youth MH in BC.



Increasing youth MH research and funding

Increased youth MH research and funding was a commonly identified strategy among attendees. This includes increased funding for MH services in schools and increased collection of qualitative youth MH data to understand youth perspectives and include them in decision-making.



Incorporating Indigenous perspectives and intersectionality

Attendees emphasized the importance of incorporating Indigenous perspectives and intersectionality into all work, while also avoiding pan-Indigeneity (i.e, not acknowledging the cultural, linguistic and historical differences between Indigenous communities). Also, attendees stressed the need to ensure youth MH strategies in BC include trauma-informed and decolonial approaches focused on healing.



Developing exemplars for universal and targeted approaches for addressing youth MH

Attendees articulated the urgent need to consider the development of both universal and targeted youth MH strategies for specific subpopulations. When developing these strategies, it is important to consider transitioning from more reactive "downstream" approaches to addressing mental illness to include proactive "upstream" approaches for promoting youth MH and preventing mental illness in BC.



Supporting youth MH in schools

A significant theme throughout the entire deliberative dialogue involved supporting youth MH in schools. Attendees proposed many opportunities for supporting youth MH in schools, including increasing access to MH services in schools, incorporating more evidence-based social and emotional learning and mindfulness programs into school curricula, and using consistent MH terminology. Creating healthier school environments through supporting MH capacity building for teachers and cultivating a sense of belonging for students was another strategy discussed to address youth MH in BC.



Developing effective engagement and knowledge translation strategies

Lastly, engagement and knowledge translation strategies were identified as urgently needed to address youth MH in the BC context. A variety of strategies were recommended, including scaling up programs such as <u>Family Smart</u>, where parents support parents in navigating MH resources for their children. Additionally, attendees recommended creating a repository or toolkit of successful youth MH interventions that can be disseminated across the province, as well as developing a strategy for clearly communicating youth MH as a priority issue in BC.

Project Findings

Promising interventions beyond BC

Along with the deliberative dialogue, we also conducted a literature search through Ovid MEDLINE, ClincalTrials.gov and Health Canada Clinical Trials databases for universal public interventions, programs and strategies focused on improving adolescent (13-18 years old) MH and psychological well-being outcomes in the context of the COVID-19 pandemic, using select key terms (e.g., adolescent, mental health, intervention, universal). This provided insight into some of the promising interventions from outside BC during the pandemic. We limited the scope to the pandemic to see how interventions can be designed to address the unique context and challenges of the pandemic period.



Mentorship/Support programs

A community-level intervention in South Korea found evidence that satisfaction with a non-profit-led mentorship program targeting low-income youth was associated with decreased depression (Lee et al., 2021). Mentors in the program included social workers, teachers and psychology-trained professionals matched with students from low-income families to provide guidance on skill development and career planning. Although our scan of the literature yielded mostly individual-level interventions, this mentorship program highlights the potential benefit of community and interpersonal supports.

Interdisciplinary programs

In an MH and well-being intervention with mostly Black and Latinx youth, a social worker, school counsellor and music educator facilitated a short summer program that focused on Hip Hop and the creation of mixtapes (Travis et al., 2022). The intervention used an intentionally integrated approach that emphasized awareness, person-centred work, relationships and building a safe space. Youth were divided into three intervention groups with varying levels of facilitation. The first group was deliberatively structured to create a shared project. In the second group, youth were allowed to take on leadership roles to tailor their experience in the program. The final group was allowed to create any project that they could agree upon. Across the three intervention groups that varied mainly by leadership style, participants reported qualitative benefits to their well-being and development/growth.





Counselling/Psychological interventions

Two interventions from the literature incorporated group psychological interventions to address anxiety and/or depressive symptoms (Li & Liu, 2021; Shao, 2021). In one of these interventions, Li and Liu (2021) used a solution-focused brief therapy approach, in conjunction with video-based health education, to address anxiety symptoms in adolescents. The intervention was administered every other day through text messages to groups of youth. This is an example of a unique intervention that used evidencebased, time- and resource-efficient MH support (i.e., solution-focused brief therapy) (Gingerich & Eisengart, 2000; Gingerich & Peterson, 2013). A third promising intervention in this category used self-guided singlesession interventions (SSIs) to target adolescents with depressive symptoms (Schleider et al., 2022). SSIs generally fall within two groups: growth mindset SSIs, which focus on personal traits, or behavioural activation SSIs, which focus on activity engagement. In addition to a reduction in depressive symptoms at follow-up, the intervention was found to have other positive effects, including reducing hopelessness and restrictive eating.

Physical activity

An intervention in China that consisted of a combination of aerobic exercise, mindfulness meditation and health education support successfully decreased anxiety and improved well-being in 13-16-year-olds during the pandemic (J. Chen et al., 2021). Although the specific mechanism by which each component contributed to the reported outcomes remains unclear, the outlined intervention provides an interesting example of integrating multiple approaches to improve youth MH. Moreover, there are a number of other youth MH interventions that incorporate movement/physical activity (Shao, 2021; Zheng et al., 2021). This aligns with the identification of exercise/ physical activity as an evidence-based approach to MH promotion by deliberative dialogue attendees.



As identified by deliberative dialogue attendees and evidenced in the literature, there are several interventions that are helping to improve youth MH during the COVID pandemic.

RECOMMENDATIONS



An important aim of this report is to develop specific actionable recommendations for youth MH collaborators and government entities. To do so, we integrated data from our quantitative data analyses of PICS and YDI data, conducted a literature scan of effective MH programs implemented with pandemic-era youth, hosted deliberative dialogue sessions with youth MH partners, and collected feedback from subject matter experts in the fields of public health, epidemiology, developmental psychology, psychiatry and education. Presented below are details of our recommendation development and selection process, and the resulting three priority recommendations.

Process for developing recommendations

A key objective of this project was to develop recommendations to support youth MH and well-being in BC during the recovery phase of the COVID-19 pandemic. We developed recommendations in a multi-stage systematic process informed by the project's two main components and literature search. We also undertook a systematic development and selection process to rank and prioritize recommendations for action, which is described below and visualized in Figure 2.



Figure 2: Recommendation development process

Note. Each deliberative dialogue brought together 30–40 youth MH partners in BC. MH partners were identified through various channels, including research collaborations and partnerships, involvement with other MH working groups, and purposeful outreach to key partners. The first (May 2022) dialogue focused on barriers to and strategies for supporting youth MH in BC. The second (September 2022) focused on identifying action items for implementing the priority recommendations.

The process began by using findings from the first deliberative dialogue session, the PICS and YDI 2020/2021 datasets, and our literature scan to inform the development of 13 recommendations (see <u>Additional Recommendations</u> for full list). Recommendations were organized by the level at which they intervene: structural, community and individual. This ensured that the recommendations are comprehensive and represent the different levels of society in which youth MH influences, and is influenced by, diverse settings and sectors.

The initial 13 recommendations were revised several times by subject matter experts (members of the research team) before being finalized and sent to the larger project team, partners/ collaborators who registered to attend for the second deliberative dialogue session, and members of the YDI Youth Advisory Council.² They were instructed to read the description of each recommendation and then independently rank them (quantitatively); we also sought qualitative feedback and general comments on the recommendations. After aggregating rankings (Appendix), we identified the top two recommendations (highest overall and across most sectors). We were unable to reach consensus on a third recommendation for consideration during the second deliberative dialogue, which led us to a "wild card" process of selecting the third recommendation through a live vote during the second deliberative dialogue session.

At the second deliberative dialogue, each of the first two recommendations were discussed in smaller groups, after which a representative from each group summarized their discussion for the larger participant group. Each small group had five to seven attendees intentionally grouped to provide a wide range of sectoral representation, and a team member to facilitate discussions and take notes. After these discussions, we highlighted the next four most highly ranked recommendations (based on overall score and by sector ranking), and attendees anonymously voted on which of these recommendation to choose as a third recommendation, using Slido (an online voting platform) on their devices. Results from the online voting revealed a tie between two of the four recommendations considered in the voting exercise. To break the tie, a second non-anonymous vote was conducted. This led us to decide on the third recommendation, which was also discussed in the smaller groups. Considerations about each recommendation, including actions for implementing each recommendation, were noted by group note-takers and incorporated into the finalized recommendations outlined in this report.

² Forty-two youth MH partners participated in the ranking process. Of these, 23.8% were from the health sector, 19.0% from education, 31.0% from research, 14.3% from policy, 4.8% from non-profit, and 7.1% were youth.

Improving Youth Mental Health and Well-Being During the COVID-19 Recovery Phase in BC 35

ALL THINKING STATES

Priority recommendations

Outlined below are three recommendations for promoting youth wellbeing during the COVID-19 recovery phase in BC. Although these have been identified as priority recommendations by partners/collaborators, they are intended to provide guidance for next steps, rather than a comprehensive MH promotion strategy.

Note, each recommendation is accompanied by action items brainstormed by attendees of the second deliberative dialogue and provides ideas for implementing the recommendations. Comments made by deliberative dialogue attendees that do not constitute actionable steps have been incorporated into the recommendations.


Recommendation 1:

Prioritize actions to address MH disparities among underserved populations

Attendees at the first deliberative dialogue suggested a need to identify groups of youth who experienced greater MH disparities prior to the pandemic and continue to be disproportionately impacted by the pandemic. The analyses included in this report highlight that specific demographic groups, such as girls, sexual and gender minority youth, and youth with poorer pre-COVID MH, have had their MH deteriorate disproportionately during the pandemic. Other work has highlighted disparities among youth from lowincome households (Adegboye et al., 2021), youth living in poverty (Stewart et al., 2022a), racially/ethnically minoritized youth (Hillis et al., 2021) and Indigenous youth (Ineese-Nash, 2020).

Addressing these disparities is a complex task involving minimizing barriers to MH services, broadening the implementation and availability of <u>low-cost</u> <u>community-based services</u>, and implementing strategic initiatives to improve uptake of MH help-seeking behaviours (Aguirre Velasco et al., 2020). To do this, deliberative dialogue attendees also highlighted the importance of building on existing models which may have been paused during the pandemic, sharing learnings from promising pilots as well as other programs designed to support sub-groups (e.g., the <u>SOGI initiative</u> through the Ministry of Education), and not losing sight of wellness promotion in the larger MH service landscape.

Additionally, of key importance, we recommend that any focus on Indigenous youth MH involve (1) ceding space and prioritizing Indigenous world-views and perspectives and (2) using a Braided Approach (Ineese-Nash et al., 2022) to develop decolonized clinical and community initiatives for MH.

Actions for recommendation 1

1. Use data and research to:

- Identify specific sub-groups. In particular, look at groups already known to be negatively impacted by the COVID-19 pandemic (e.g., sexual and gender minorities, low socioeconomic status youth, rural youth) through an intersectional lens.
- Identify unique risk and protective factors for sub-groups. Use existing surveys and data to understand unique and shared risk and protective factors for these groups.
- Ensure continuous monitoring for youth needing support. Ensure continuous monitoring for early identification of MH concerns through provincial monitoring systems and data collection tools (e.g., YDI).
- Survey/qualitatively review best practices for sub-groups. In doing so, also consider differences in geography and context. Practices should be implemented with an intentional focus on serving the local community in which they are embedded.

2. Engage with underserved populations

Deliberative dialogue attendees emphasized that engagement does not simply mean providing a list of actions for these populations. Rather, engagement involves shared ownership and meaningful dialogue with these populations and the organizations that support them. Depending on the context, engagement may take several forms. For example, increasing diversity of staff representation, with support and opportunities for staff that represent target populations; advisory groups made up of target populations and a diversity of perspectives; and including community organization representation in collaboration and dialogue. Additionally, deliberative dialogue attendees suggested that youth MH partners:

Get program feedback from youth.

Feedback from youth who have received services can be used in the evaluation and replication of programs that produce positive experiences. Moreover, getting feedback on schoolbased programs from youth can help support schools and districts to better support youth.

Engage in consultation with underserved populations. Intentional consultation does not necessarily mean bringing these communities to existing decision-making tables, but rather bringing the decision-making power to underserved communities.

Hire people from underserved communities to do MH promotion work. Individuals and organizations within these communities will better understand the unique needs of these groups and are thus uniquely positioned to offer support in MH promotion. This could be achieved by empowering and supporting local community members to take on MH promotion work within their roles (e.g., VSB's SACY program, RICHER, Agenda Gap) or to involve peer-to-peer wellness initiatives (e.g., Here for Peers).

3. Address upstream factors and root causes of social determinants of MH

With support from municipalities and the provincial government, it is important to address root causes or social determinants of MH by embedding strategic initiatives that (1) reduce poverty and income-based inequities, (2) prevent and tackle discrimination, and (3) create more inclusive spaces and environments in schools and communities (e.g., <u>ERASE</u>, <u>SOGI initiatives</u>, GSAs).

4. Develop an equity framework in schools that target social determinants of MH

This framework would prioritize underserved populations by addressing known barriers to accessing MH services and meeting youth where they are (e.g., hiring clinician counsellors within the school districts). This framework should be accompanied by the thoughtful inclusion of youth to ensure that strategies adequately address the challenges they face.

5. Meet youth where they are and where they go

Not all youth are in school frequently, and some are not in school at all. Moreover, those in school may not feel comfortable accessing MH support there. As such, it is important to outline specific strategies for reaching vulnerable youth who are not in school or do not attend school often. For example, a participant at the deliberative dialogue suggested that emergency departments and first responders are a first point of contact.

Get referral information to people with whom youth frequently engage.

Part of meeting youth where they are is connecting with the people they interact with beyond the medical setting (e.g., coaches, religious leaders). It is important for these people to have relevant MH literacy and information, and that the responsibility of knowledge translation is on service providers not service seekers.

Expand scope of practice for those who are already connected to youth

populations. Adopt an "every door is the right door" approach to the provision of MH support for youth populations (i.e., instead of saying you are at the wrong place, we ask what we can do to assist you) by redirecting people (e.g., paramedics, teachers) to address youth MH. For example, an attendee suggested having vaccination nurses offer resources and check-ins to students in vulnerable populations (in grades 6 and 9). Note, this would require careful consideration of appropriate training.

Change service hours. For those who already work to support youth MH, it is important to offer services beyond school hours so they are more easily accessible.

6. Provide youth in underserved communities spaces to meet to engage in positive MH activities

Purpose and meaning are important factors in youth well-being and resilience (Masten et al., 2021). As such, youth need places to engage in their communities, along with positive MH activities. For some youth, schools perform this function. However, as noted above, having schools as MH hubs may be a barrier for those who do not feel comfortable or present at school.

View community centres as places of learning. Reframing the role of community centres is one way to provide additional space for meaningful youth engagement. However, close attention needs to paid to possible inequities in infrastructure across BC communities so that we do not increase existing service gaps.

Locate MH programming in parks and recreation facilities. MH programming, including promotion and support, can also be linked to other publicly funded spaces, such as parks and recreation facilities. This may provide an avenue for increased access and is also congruent with research indicating that outdoor time is important for youth well-being (Chawla et al., 2014).

7. Engage in MH literacy campaigns for promoting mental *wellness*, particularly for newcomer youth

Families in newcomer communities may have different levels of comfort discussing MH issues (e.g., MH supports and resources are treated differently in Canada than in other countries). Moving away from MH/mental illness language to mental wellness language may reduce stigma around MH and encourage people to learn more about what can be done to support mental wellness among youth. Additionally, efforts should be undertaken to catalogue available resources in Canada and ensure that parents and caregivers in these communities have access to that information and culturally sensitive resources.

8. Partner with various organizations to mobilize MH work

Bringing in and supporting existing community partners is critical for undertaking MH work. This also includes collaborative connections among partners across sectors, including government, education and health. For example, deliberative dialogue attendees suggested convening a table of partners and decision makers, either by region or role, to further the youth MH support agenda. Partner collaboration will be further outlined in recommendation 2.



Recommendation 2:

Improve youth MH partner integration and collaboration in BC

Although there are many important youth MH partners that span diverse sectors and backgrounds, attendees at the first deliberative dialogue identified that there are insufficient opportunities for sustained integration and collaboration for youth MH decision-making across the province. Specifically, attendees discussed the need to identify key youth MH partners, ensure a comprehensive understanding of their roles and responsibilities, and develop concrete strategies for clear communication of ideas and goals for supporting youth MH (i.e., ensure clear pathways for supporting youth MH and well-being in BC). Intersectoral collaboration is critical for improving youth MH because it provides partners with opportunities to identify gaps and ensure strategies are aligned across promotion, prevention, early intervention and treatment efforts (Weist et al., 2001). The need for ministries across the health, child welfare and education sectors to collaborate and align on youth MH strategies was highlighted by attendees of the first deliberative dialogue as an important strategy for supporting youth MH.

When discussing this recommendation, attendees at the second deliberative dialogue indicated that the limitations regarding inadequate integration and collaboration need to be clearly defined and understood. For example, do siloed roles and mandates limit collaboration? What does "integration" mean, and what is it intended to achieve? In the vein of specificity, attendees also suggested breaking down the topic of youth MH into downstream (e.g., treatment) and upstream (e.g., promotion and prevention) components. This came from a recognition that when attending to the whole continuum, mental illness and downstream factors tend to be addressed first. Separating the conversation may facilitate more comprehensive discussion of youth MH and well-being. However, this would require clear, shared language, agreed upon definitions of these components, and bridges between the areas of conversation.

Youth representation

While increasing youth representation was identified as a distinct recommendation (see <u>Additional Recommendations</u>), attendees highlighted that youth *are* partners in youth MH. Youth need to be included to inform projects and the investment of resources (see Articles 12 and 13 of the <u>UN Convention on the Rights of the Child</u>) (UN General Assembly, 1989). In particular, deliberative dialogue attendees emphasized the importance of including underrepresented youth voices. To achieve increased youth representation, an attendee at the second deliberative dialogue specifically suggested employing students part-time to be active participants to inform projects and where to invest resources. For youth to participate fully, they need to be educated about the projects and be fairly compensated (e.g., IMPACT grants). Further details of the standalone youth representation are outlined in the <u>Additional Recommendations</u>.



Actions for recommendation 2

1. Identify/map key youth MH partners

During the first deliberative dialogue session, attendees recommended completing a mapping exercise of all youth MH partners in BC, which attendees further supported at the second dialogue. The goal of this would be to clearly identify the youth MH partners and teams, and develop a shared understanding of the landscape, before working on increasing integration and collaboration.

Conduct a scan of existing directories.

Some communities already have updated directories. Attendees recommended using these and looking to the work of organizations like Foundry that have successfully engaged in comparable work.

Create and maintain a centralized

directory. This exercise could be used to develop an open-access directory of current youth MH partners across the province, outlining the roles and responsibilities of each role and group listed within the directory. This would require funding and a formal role within the province to maintain it and ensure its ongoing relevancy.

2. Establish/designate a central organization with sustainable funding to create actionable projects and deliverables

Deliberative dialogue attendees highlighted the central challenge of disjointed response to youth MH concerns. As such, it was suggested that there be a central organization to ground partner collaboration. The following two key roles for this group were outlined: (1) provide continuous funding to groups that need it and (2) ensure sustainable long-term collaborations and communication among MH partners, including youth and families. This would include hosting a recurring meeting (e.g., annually) that would allow for the development of transparent and collectively developed goals to address gaps in youth MH and well-being in BC. Of note, the James Lind Alliance Priority Setting Partnerships process could serve as a model to achieve a priority setting exercise (James Lind Alliance, n.d.).

3. Have a clear MH focused mission statement/mandate within different organizations

Along with the establishment of a central organization suggested above, there are many other teams and organizations working to support youth MH in BC. Clear guiding principles for these teams may help them better align with funders and support continued progress when there is employee turnover. Moreover, this can support *multi-sectoral sequencing*: clear operational understanding of who can do what in location-specific contexts.

4. Address perceived barriers to collaboration: confidentiality and consent concerns

Attendees at the second deliberative dialogue highlighted that many folks rely on risk-averse approaches to confidentiality and consent concerns, resulting in a plethora of forms and paperwork. They recommended the importance of continuing to centre informed consent — including obtaining consent/assent from youth themselves while clarifying the role of confidentiality and informed consent (i.e., teaching folks the right times to share information in an integrated setting).

5. Adapt existing frameworks of collaboration

Attendees proposed using existing tools for collaborative public health work, for example, taking advantage of the pandemic task forces and the <u>community action teams</u> assembled for the opioid crisis to address community MH challenges.



Recommendation 3:

Enhance or strengthen Social and Emotional Learning (SEL) strategies within school curricula and community programming to increase resilience and positive MH

Attendees at the first deliberative dialogue suggested increasing the incorporation of SEL (and MH literacy) into curricula for students as both a blue-sky and urgent strategy for supporting youth MH. Although SEL has been embedded into curricula and schools implement SEL resources and opportunities to enhance MH literacy, the level of uptake may differ widely across districts and among schools. For example, SEL programs and strategies appear to be less frequently integrated into secondary schools than in elementary and middle schools. Based on discussions from the first deliberative dialogue, we propose that actions be taken to standardize and enhance SEL in schools and to improve learning experiences for all students across BC. Moreover, attendees at the second deliberative dialogue suggested expanding this recommendation to include the implementation of SEL strategies into other community organizations that work with youth.

Attendees also indicated the importance of expanding SEL initiatives beyond a focus on individual skills. This would require taking systems-level approaches, including positive community and school experiences, and support for parents/guardians and other adults. For example, the <u>BCCH Health</u> <u>Literacy and Health Promotion</u> team takes a holistic approach with a social determinants of health lens. Additionally, attendees emphasized bringing intersectional, antiracist and trauma-informed lenses to SEL. There were also discussions at the deliberative dialogue about SEL during different periods/ grades. Although many of the proposed actions are broadly applicable across all youth age groups, the actions outlined in this report are oriented towards high-school-aged youth.

Actions for recommendation 3

Ensure multi-year, dedicated funding from the Ministry of Education and Childcare for SEL in schools

Multi-year funding confirmed in advance ensures that schools and school districts have adequate time to plan, embed and sustain SEL programs.

2. Formalize SEL positions/champions in schools

Formalizing SEL champions in schools could include training and developing folks for formal SEL positions, as well as supporting those who are already promoting SEL in these settings (i.e., teachers, school staff, youth champions, etc.). This may involve bringing programs into schools instead of them being part of the teaching curriculum, which would have the added benefit of building another point of contact for youth and of providing ongoing connections. The new MH leads structure led by the Ministry of Education and Childcare holds promise for this work.

Equip educators with the training and skills necessary to embed SEL and MH promotion in schools.

If SEL is intended to be a part of school, educators and school staff need to be provided appropriate training and support, both as providers of this education to youth as well as people with their own MH needs. Professional development resources on this topic exist, for example, <u>Teach Mental</u> <u>Health Literacy</u> and <u>Learn Mental</u> <u>Health Literacy</u>. Provide opportunities for sharing, learning and networking. Many educators and school staff are under tremendous time and workload pressure. As such, attendees recommended that those who are doing this work (including non-educator staff) have space to connect and share, both as an educational opportunity and an adult relational opportunity.

Support the creation of peer-led SEL and MH education. Training senior students to be peer educators and supporters is another way of building a base of SEL champions in schools. As always, youth participating in these activities need to be appropriately compensated for their work.

3. Collect SEL data for program evaluation, inter-district sharing of best practices, and monitoring

Attendees made several recommendations regarding the role of research in SEL.

Evaluate the effectiveness of SEL programs in schools. Attendees noted the importance of evaluating the effectiveness of SEL programs in a BC context. In particular, attendees recommended focusing on programs that emphasize promoting a sense of belonging, prosocial skills and positive MH. However, this requires that SEL initiatives be evidence-generating to demonstrate their effectiveness for BC settings (including monitoring implementation quality). Right now, research initiatives are ad hoc and conducted through individual program evaluations in schools. More systemic tools need to be put in place for comprehensive evaluation.

Expand opportunities for interdistrict sharing. Along with gathering this information, there needs to be expanded opportunities for interdistrict sharing and learning of best practices regarding SEL programs. For example, more well-resourced districts can help smaller districts by sharing resources and programming.

4. Use SEL-based assessment to monitor MH and school climate

Outside of program evaluation, SEL-based assessments (e.g., MDI, YDI) can be used to monitor youth and their educational settings. For example, they could be used to identify students who may need additional supports for MH (Furlong et al., 2021). Currently, each school district may use different measures to track these outcomes — providing funding and a provincial directive could encourage the use of a universal index for indicators of coping and resilience. Moreover, tracking of childhood indicators could help prepare for the post-COVID-19 pandemic recovery phase.

5. Explore existing SEL programs

Attendees at the dialogues highlighted a few existing SEL programs to enhance resilience and positive MH. The Collaborative for Academic, Social, and Emotional Learning (<u>CASEL</u>) provides a helpful guide for navigating these programs.

6. Incorporate SEL beyond schools (e.g., extracurriculars, family)

While this recommendation began as school focused, attendees at the second deliberative dialogue recommended expanding it to include SEL initiatives in community. Proposed actions included getting school leaders to conduct SEL outreach in communities and implementing developed SEL curricula in community centres (e.g., pre-school, after school groups, etc.). Attendees also emphasized the importance of including families in SEL curricula. For example, developing a tool for regular screening/ well-being checks and/or using digital health technology (e.g., an app) could be pursued. This could act as a launchpad for accessing resources and to build MH literacy throughout families. These calls are supported by the literature on best practices for systemic SEL (Mahoney et al., 2021).



Additional recommendations

1. Improve youth's knowledge of and connection to MH resources

There are currently multiple comprehensive and personalized youth MH and well-being resource inventories available to partners, youth and families in BC, including the Ministry of Mental Health and Addictions support inventory and the Foundry Pathfinder. However, a common theme throughout the deliberative dialogue discussions included a need to develop a repository of youth MH resources in BC, including programs, organizations and community supports. This could be seen as the first step in connecting youth to MH resources, which deliberative dialogue attendees identified as an important strategy for promoting youth MH in BC. Additionally, the 2021-2022 YDI found that in the six months prior to the survey, among the 38% of youth who felt they might need professional MH care, 9% did not seek help because they didn't know where to get it (Samji, Maloney, et al., 2022). These findings highlight a gap in youth's knowledge of available MH resources, pathfinders and inventories. As such, there is an urgent need to increase awareness of these resources among youth and families. Increased awareness of these resources would help youth find MH supports in their community and may encourage help-seeking.

Consequently, we recommend implementing strategies to improve youths' knowledge of and connection to MH resources in schools and the community. Specifically, we recommend:

 Scaling up existing youth MH inventories and resource directories, such as Foundry Pathfinder, and ensuring that they include resources that meet the diverse MH needs of youth across the province.

- Developing intentional strategies for increasing youth's awareness of and connection to MH resources that are available to them in spaces they frequent, such as schools and recreational facilities. For example, at the beginning of the school year, representatives of multiple evidencebased youth MH programs could present at a school-wide assembly. Additionally, it was suggested in deliberative dialogues that increasing the number of school counsellors could help construct pathways to other supports and programs.
- Periodic evaluation of whether or not school staff and students are aware of MH supports available to youth, and if there are specific sub-groups who may be less aware of these resources. Further, it would be important to evaluate if these dedicated efforts and strategies are associated with improvements in staff and student MH resource awareness, to determine if specific efforts should be continued.

2. Expand existing MH programs and interventions proven to be effective at improving youth MH

Many MH interventions and programs have strong evidence showing their effectiveness at improving youth MH, yet evidence-based preventive interventions are not systematically implemented across the province of BC (Cost et al., 2022). This necessitates the immediate scale-up of existing evidence-based measures for youth MH care.

A specific action step recommended

Improving Youth Mental Health and Well-Being During the COVID-19 Recovery Phase in BC 49

is the creation of an online repository of strategies and interventions that have been evaluated in BC. Currently, information on evidence-based programs for youth MH is highly decentralized. This repository should be free and publicly accessible to promote use among health and education partners. The importance of sharing exemplars of effective youth MH interventions was identified in the first deliberative dialogue, as attendees noted that there are currently evidencebased practices; however, many have not been scaled up province-wide. Doing so would also promote collaboration among intersectoral partners across BC, as well as expanding effective MH interventions, which were other key themes of the deliberative dialogue. Note, however, that expansion of existing work should be accompanied by implementation research to understand the efficacy of programs as they scale out to new populations (see Hagermoser Sanetti & Collier-Meek, 2019).

BounceBack is an example of a free, evidence-based cognitive behavioural therapy (CBT) program. Since it was launched across BC in 2008, it has been shown to improve mental health outcomes across a number of measures, including depression, anxiety and quality of life (Lau et al., 2019). Increasing service providers' knowledge of and access to evidencebased programs like *BounceBack* through an online repository could improve youth MH across the province.

3. Help youth by supporting parents and improving the parent-child relationship

Findings from the YDI show the parentchild relationship has profound effects on youth MH and well-being. This corroborates long-standing research showing that parent-child attachment styles set the foundation for development that extends past infancy and into adolescence and adulthood (Spruit et al., 2020). Indeed, strong attachment between adolescents and their parents is associated with several interpersonal and psychological outcomes, such as relationality, agreeableness, conscientiousness and lower depression scores (Ruhl et al., 2015). Findings from the 2021–2022 YDI also showed that increased home adult support is associated with reduced depression.

Given the importance of the parent-child relationship, we recommend expanding programs that seek to improve these relationships. For example, Staying Connected with Your Teen is a program to promote the social development process among parents and children and reduce risk factors in families with children aged 12 to 17 (Haggerty et al., 2013). It has undergone rigorous evaluation processes and was proven effective at reducing initiation of risky behaviours and teen attitudes about substance use and delinguent behaviour. Further, we recommend more widespread evaluation of parent-child programs in BC to provide the evidentiary support needed to support their implementation and scale-up across the province.

Inspired by one of the blue-sky strategies from the first deliberative dialogue, parents need to be provided with more accessible skill-building opportunities to better enable them to support their children throughout adolescence. For example, parents can be educated about the importance of healthy child and youth development. Caring for adults who care for children was also a

Improving Youth Mental Health and Well-Being During the COVID-19 Recovery Phase in BC 51

1

key finding of a recent British Columbia Council of Administrations of Inclusive Support in Education (BC CAISE) report, Supporting students during the pandemic and beyond: Lessons learned from British Columbia administrators of inclusive education (Goossen & Samji, 2022).

Overall, fostering relationship-building with youth requires that we support all people who are important to shaping youth MH.

4. Increase youth representation and inclusion in youth MH research, program development and evaluation

Paramount to every initiative is the inclusion of youth voices and participation in all stages of efforts aimed at promoting youth MH and well-being. As has been the case in initiatives across North America (see Gardner et al., 2019; Schoenfeld et al., 2019), meaningful involvement of youth is not simply just listening to their voices on committees, but rather involving them in action — as outlined in the UN Convention on the Rights of the Child (Articles 12 and 13; UN General Assembly, 1989).

Involving youth has been demonstrated to be mutually beneficial for both organizations and for youth themselves. Youth participation in this work can bring meaningful change in MH organizations and communities especially when focused on youth development and well-being (Sprague Martinez et al., 2018). Youth also gain benefits by engaging in positive relationships with adults and thus perceive more voice in these programs and that they engender positive identity development (Serido et al., 2011). We recommend that groups considering youth-related initiatives develop clear strategies to involve youth throughout the development of said initiatives by considering the following principles:

- Active engagement. Plan early to meaningfully approach programs, schools and youth-based organizations for youth recruitment.
- Vouth are not a monolith. Ensure that diversity, equity and inclusion are brought to the forefront of recruitment initiatives to ensure that underrepresented voices (e.g., youth with lived experiences and minorities) are heard and valued.
- Avoid tokenism. Do not simply have youth participate in these initiatives in the background. Rather provide opportunities and give appropriate space for youth to share ideas and feedback.
- Compensate accordingly. Youth come to the table with valuable insight based on lived-experiences. They also shoulder numerous responsibilities including school, extra-curricular activities, work, and at-home commitments, among other things. As such, their time, energy and effort **must** be compensated accordingly. Therefore, remuneration for their time should be budgeted and planned for.
- Flexibility. Organizations should ensure that opportunities to engage in work are accessible for youth. This might include having youth engagement sessions after school and work hours.

5. Reframe extracurriculars as central to youth, family, and community well-being

Evidence supports extracurricular activities as beneficial to youth MH and development (Berger et al., 2020; Oberle et al., 2019). More specifically, reports from BC parents/guardians who completed the PICS indicated that participation in extracurriculars was associated with better youth MH during the pandemic. However, extracurriculars are often considered supplementary, and access is not equitable. On an individual and family level, some youth experience barriers to participation (e.g., time, transportation, money). On a community level, there may not be the resources to provide these activities (e.g., qualified staff, space, money). According to the 2020-2021 YDI data, family affluence was associated with participation in a number of extracurricular activities (e.g., individual and team sports, volunteering); living in urban settings also facilitated extracurricular participation. There were also significant gender differences in extracurricular participation, with boys engaging in significantly more sportsrelated and interpersonal activities. Given this, we recommend reframing extracurriculars as a key resource to promote MH and well-being for youth, families and communities, and, as such, work on prioritizing increased access, decreased barriers to uptake (with a consideration for gender), and support for evidence-based activities that promote MH.

One strategy suggested at the first deliberative dialogue was to make extracurriculars more accessible by giving youth free, municipal-provided community centre annual passes. There are also multiple sources to draw from for the development and support of evidence-based extracurricular activities. Our analyses indicate that outdoor time and physical activity (general and team sports) have been beneficial to youth MH during the pandemic. Physical activity has also been part of several promising interventions outside of BC for promoting youth MH during the pandemic (J. Chen et al., 2021; Shao, 2021; Zheng et al., 2021). Attendees at the first deliberative dialogue also highlighted the importance of promoting land-based activities. Lastly, results from the YDI indicate that social relationships and support are important for the MH of youth (e.g., hanging out with friends, connecting with family); extracurricular activities are one important mechanism for spending time socially.

In summary, evidence from the YDI, the PICS and relevant literature indicates that extracurricular activities are beneficial, and that current access and uptake are not equal. Based on these evidence sources and suggestions from the first deliberative dialogue, areas of focus should be (1) physical activity, (2) time outside, (3) land-based activities, and (4) in-person social interaction.

6. Promote holistic approaches for supporting youth MH concerns through increased connection to non-clinical community supports

Aligning with the Government of BC's <u>Pathway to Hope road map</u>, we recommend promoting holistic, community-based approaches for supporting youth MH and well-being concerns. The province has committed to taking actionable steps to promote integrated care and support, including the development of Integrated Child and Youth teams, which are communitybased multidisciplinary teams that provide holistic MH and substance use services for youth aged 0 to 19. While the implementation of Integrated Child and Youth teams can be seen as an important step in promoting holistic approaches for supporting youth MH, there are more opportunities to improve resource integration, reduce wait times, and provide additional community basedsupports and resources to youth and families across BC.

The implementation of a social prescribing model developed by the National Health Service of England may serve as a template for promoting holistic, community-based care for youth in BC. The social prescribing model focuses on connecting people to non-clinical community supports, including peer support programs, skills development programs, and community activities to address the social determinants of health (University College London, 2022). This model would include a "navigator" or "link-worker" who produces a "social prescription" and refers youth and their families to community-based resources that can support and promote their MH and well-being. Further, social prescribing mobilizes existing community MH knowledge and resources to promote health and well-being (Buck & Ewbank, 2020).

7. Consider and mitigate against the potential consequences of centralizing youth MH support in schools

A blue-sky strategy suggested in the first deliberative dialogue was to make schools a universal access point to support youth MH and re-conceptualize them as centres for human development,

not just education, a suggestion that echoes general momentum in this direction (see SBMHSA, 2013). If schools are to be transformed into central hubs for MH support, it is important to do so thoughtfully and intentionally. How do we make this a feasible and sustainable plan that avoids creating or exacerbating potential problems, such as overburdening of educators, staff and educator burnout, and temporary implementation, without long-term changes? Consider this example: A school works to change the culture and increase openness about MH, but the teachers feel unprepared to appropriately respond to potential influxes of disclosures and support seeking. This may indirectly lead to harm for both for the students and adults involved. In this example, it is clear that professional development and educator support must come in conjunction with cultural shifts. This connects to the suggestion made in the deliberative dialogue to build the capacity of teachers to act as MH supports and resources for students. More broadly, it highlights the importance of thoughtful planning when it comes to youth MH. This recommendation is not meant as a caution against making schools a hub for youth MH support, but rather a call to be intentional before and throughout the process by asking: (1) What are the potential consequences of making schools an MH support hub? and (2) How can they be mitigated?

Moreover, adding resources to school settings is only one part of the puzzle. Factors within the school structure and environment can also pose challenges to youth MH. For example, school climate (Aldridge & McChesney, 2018) and early start times (Wahlstrom et al., 2017)

contribute to poor MH and well-being among youth. Making schools central to youth MH requires a broad perspective on what impacts MH and a commitment to comprehensive changes as part of a whole school approach (Healthy Schools BC, n.d.). For example, attendees at the first deliberative dialogue suggested allowing for a more flexible school format (including start and end times) and increasing access to nature as bluesky strategies for supporting youth MH. It is also important to consider potential limitations to student uptake of MH resources in schools. There may be confidentiality concerns or worries about social perception due to stigma (Radez et al., 2021). For example, in 2021-2022, among those who did not seek help for an MH concern in the past six months even though they needed it, 12% of youth did not seek help because they were afraid of being judged by others (Samji, Maloney, et al., 2022). As such, providing MH resources in schools cannot replace non-school support. More broadly, recent studies found that universal schoolbased MH supports were not effective at reducing anxiety or depression symptoms (Andrews et al., 2022; Sælid et al., 2022). Although schools seem like a logical hub for youth MH supports, there are potential challenges and complexities that need to be thoroughly considered and planned for.

One highly developed model that is compatible with making schools a hub for youth MH is *community schools*. Community schools focus on "(1) integrated student supports, (2) expanded learning time and opportunities, (3) family and community engagement, [and] (4) collaborative leadership and practice" (Maier et al., 2017, p. v). By connecting schools to their communities and taking a comprehensive approach to what schools provide, this approach can build a broader foundation of support, including for MH. This approach has been implemented in parts of BC (e.g., <u>Burnaby</u>) and is a promising model for supporting youth MH through schools.



8. Support and increase MH knowledge and knowledge holders

In 2021-22, 38% of youth who completed the YDI reported not seeking MH help even though they needed it (Samji, Maloney, et al., 2022). These unmet MH needs illustrate the demand for more MH knowledge holders in the community, both to increase service accessibility and fill the support gap when help-seeking behaviour is low. Outlined below are three strategies for bolstering community MH knowledge and support:

Recognize, value and support existing community MH knowledge and knowledge holders, whether or not they use public health language or titles. Specifically, deliberative dialogue attendees suggested increasing the incorporation of Indigenous perspectives of health, including holism, self-determination and integration of child and elder health. By recognizing these as important health practices, we can work to fund and support them as community MH supports.

Increase the amount of nonprofessional MH knowledge holders in the community. A blue-sky strategy suggested at the first deliberative dialogue was to train and certify 10,000 individuals (e.g., coaches, religious leaders, youth leaders, etc.). Youth interact with community members frequently, and so increasing MH knowledge throughout communities can increase overall support. This strategy could be accomplished through the provision of established and evaluated training programs, such as Mental Health First Aid (MHFA; Hadlaczky et al., 2014). Although this does not erase the need for MH professionals, a broad community

network can be a deep source of support that fills gaps between service access.

Support MH professionals working with youth. There is a need for professional youth MH support, and as such, it is important to invest in the providers of that care. This includes investing in training programs, professional development and support, and retainment strategies, and supporting rural and isolated professionals. The work of these professionals is important to youth MH and well-being, and, as such, their role in communities should be recognized and supported.

While these recommendations are focused on youth MH and well-being, increasing the number of MH knowledge and knowledge holders can have a community-wide impact, which in turn can further help youth. Youth are not an isolated group; supporting the communities in which they live is important for their well-being.

9. Incorporate more time outdoors into school curricula

Outdoor learning can improve youth health through improved socialemotional functioning, behavioural health, physical activity levels, academic learning, cognitive functioning and motivation for learning (Becker et al., 2017; Cooper, 2015; Oberle et al., 2019). Spending time outdoors has important benefits for MH; for example, one study found that engagement with nature helped students reduce stress and promote protective factors for resilience (Chawla et al., 2014). The YDI data from the current analysis highlighted that spending time outdoors was associated with better MH among youth during the pandemic. Throughout the COVID-19 pandemic, many parents and educators have <u>called</u> for increased outdoor learning opportunities in BC and across Canada in an attempt to curb the spread of the virus. This was reiterated by deliberative dialogue attendees who identified the need to make nature spaces more accessible to youth as a blue-sky strategy for improving youth MH and well-being in BC.

A specific strategy for incorporating more time outdoors into school curricula that was mentioned at the first deliberative dialogue is expanding existing land-based activities. Land-based activities which are broad but generally involve an Indigenous community member immersing students in their local environments and teaching them how knowledge is gleaned from the natural world.

Attendees also recommended mobilizing and supporting existing groups that are already doing work in this area. For example, Take a Hike is an adventurebased learning program in BC that provides students with opportunities for experiential learning and outdoor recreation. Take a Hike has partnered with public school districts to provide high-quality education and empower youth with the skills and resilience needed by modifying curricula to incorporate more time outdoors. Take a Hike was evaluated to assess various outcomes related to psychological well-being, deviant behaviours and life skills within a group of "at-risk" teenagers (Thomson & Burr, 2015). The program was found to significantly improve teens' scores for self-esteem, well-being and emotional control. Expansion of existing evidencebased initiatives to specific sub-groups



of youth who may be at risk of poorer MH outcomes was echoed by deliberative dialogue attendees as a way to address inequities in access.

Overall, we recommend focusing on providing students with more opportunities to learn outdoors by scaling up existing evidence-based programs such as the strategies shared above, while also addressing disparities in access to green spaces (Nesbitt et al., 2019).

10. Implementing single-session interventions (SSIs) for youth with elevated depression symptoms

Although many youth experienced MH difficulties pre-pandemic, the COVID-19 pandemic resulted in significant changes to daily life, including virtual schooling and physical distancing, that exacerbated youth MH concerns (Markoulakis et al., 2022; Samji, Wu, et al., 2022). In 2021, 21% of youth who completed the YDI reported that their mental/emotional health went from good/excellent before the pandemic to poor/fair during the pandemic (Samji et al., 2021). Moreover, 38% of youth who completed the YDI reported not seeking MH help even though they needed it (Samji, Maloney, et al., 2022). Clearly, youth in BC are struggling with their MH, with a significant proportion having unmet MH support needs.

Deliberative dialogue discussions highlighted the importance of developing targeted interventions for subpopulations that may be at higher risk of poor MH outcomes. Attendees also identified the development of universal youth MH interventions as a strategy that is urgently needed for supporting youth MH in BC. A rapid review of interventions to support youth MH and well-being during the COVID-19 pandemic highlighted

SSIs as an effective and scalable MH strategy for adolescents with elevated depression symptoms (Schleider et al., 2022). The purpose of this 2021 U.S. study on SSIs was to determine the effectiveness of accessible and brief interventions in addressing the unmet MH support needs amongst adolescents with elevated depressive symptoms during the COVID-19 pandemic (Schleider et al., 2022). This randomized control trial examined two types of virtual, self-guided SSIs offered at no cost: one focused on withdrawing behaviours and agency and the other on hopelessness. Both versions of SSIs were found to decrease depressive symptoms, hopelessness and restrictive eating, and increase feelings of agency at a three-month follow-up. Those who were randomized to the hopelessness-focused SSI also showed decreases in the severity of their generalized anxiety symptoms.

This is a promising accessible, brief and targeted intervention that was delivered during the COVID-19 pandemic to address both the increasingly prevalent MH concerns amongst youth and the challenges associated with providing in-person MH support. Moreover, the use of SSIs is supported by additional research showing promising results in youth samples, particularly for depressive symptoms (Schleider & Weisz, 2018). As such, we recommend implementing evidence-based SSIs, such as the two outlined in Schleider et al.'s (2022) study, to support youth with MH concerns across BC.

CONCLUSION



Evidence suggests that youth MH was declining before the COVID-19 pandemic and has continued to worsen over the last several years. While these impacts are broad, our analyses indicate that some youth have been disproportionately impacted — particularly girls, sexual and gender minority youth, and youth with poorer pre-COVID MH. Other research has also highlighted MH disparities among youth from low-income households (Adegboye et al., 2021), youth living in poverty (Stewart et al., 2022a), racially/ethnically minoritized youth (Hillis et al., 2021), and Indigenous youth (Ineese-Nash, 2020).

While there are barriers to supporting youth MH that existed before the COVID-19 pandemic and others that are new to these challenging times, there are also modifiable factors associated with better youth MH, and existing efforts, interventions and programs that provide hope and a foundation upon which to build. The findings from this project provide ideas for moving forward and highlight what can be achieved through collaborative engagement with MH partners, especially youth and families. Together, we came up with ideas for supporting youth MH in BC and have prioritized three recommendations that we can move forward with.

We have a unique opportunity to implement these priority recommendations, as well as the others collectively developed. We also need to measure and evaluate the impact of our efforts for youth broadly and by identified sub-groups. Our collective work has potential to move the needle to improve youth MH and well-being now and in the future. The time to act is now.



REFERENCES



Adegboye, D., Williams, F., Collishaw, S., Shelton, K., Langley, K., Hobson, C., Burley, D., & van Goozen, S. (2021). Understanding why the COVID-19 pandemic-related lockdown increases mental health difficulties in vulnerable young children. *JCPP Advances*, 1(1), e12005. <u>https://doi.org/10.1111/jcv2.12005</u>.

Aguirre Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BMC Psychiatry*, 20(1), 293. <u>https://doi.org/10.1186/s12888-020-02659-0</u>

Agyapong, V. I. O., Hrabok, M., Shalaby, R., Vuong, W., Noble, J. M., Gusnowski, A., Mrklas, K., Li, D., Urichuck, L., Snaterse, M., Surood, S., Cao, B., Li, X.-M., Greiner, R., & Greenshaw, A. J. (2021). Text4Hope: Receiving daily supportive text messages for 3 months during the COVID-19 pandemic reduces stress, anxiety, and depression. *Disaster Medicine and Public Health Preparedness*, 1–5. <u>https://doi.org/10.1017/</u> <u>dmp.2021.27</u>

Aldridge, J. M., & McChesney, K. (2018). The relationships between school climate and adolescent mental health and wellbeing: A systematic literature review. *International Journal of Educational Research*, 88, 121–145. <u>https://doi.org/10.1016/j.ijer.2018.01.012</u>

Andrews, J. L., Birrell, L., Chapman, C., Teesson, M., Newton, N., Allsop, S., McBride, N., Hides, L., Andrews, G., Olsen, N., Mewton, L., & Slade, T. (2022). Evaluating the effectiveness of a universal eHealth schoolbased prevention programme for depression and anxiety, and the moderating role of friendship network characteristics. *Psychological Medicine*, 1–10. <u>https://doi.org/10.1017/S0033291722002033</u>

Becker, C., Lauterbach, G., Spengler, S., Dettweiler, U., & Mess, F. (2017). Effects of Regular Classes in Outdoor Education Settings: A Systematic Review on Students' Learning, Social and Health Dimensions. *International Journal of Environmental Research and Public Health*, 14(5), Article 5. <u>https://doi.org/10.3390/ijerph14050485</u>

Berger, C., Deutsch, N., Cuadros, O., Franco, E., Rojas, M., Roux, G., & Sánchez, F. (2020). Adolescent peer processes in extracurricular activities: Identifying developmental opportunities. *Children and Youth Services Review*, 118, 105457. <u>https://doi.org/10.1016/j.childyouth.2020.105457</u>

Boyce, J., Rotenberg, C., & Karam, M. (2015). Mental health and contact with police in Canada, 2012. *Statistics Canad*a, 85, 25.

Buck, D., & Ewbank, L. (2020, November 4). What is social prescribing? *The King's Fund.* <u>https://www.kingsfund.org.uk/publications/social-prescribing</u>

Canadian Institute for Health Information. (2021). COVID-19 Intervention Timeline in Canada–Data Tables. CIHI.

Caspi, A., Houts, R. M., Ambler, A., Danese, A., Elliott, M. L., Hariri, A., Harrington, H., Hogan, S., Poulton, R., Ramrakha, S., Rasmussen, L. J. H., Reuben, A., Richmond-Rakerd, L., Sugden, K., Wertz, J., Williams, B. S., & Moffitt, T. E. (2020). Longitudinal assessment of mental health disorders and comorbidities across 4 decades among participants in the Dunedin Birth Cohort Study. *JAMA Network Open*, 3(4), e203221. <u>https://doi.org/10.1001/jamanetworkopen.2020.3221</u>

Chadi, N., Ryan, N. C., & Geoffroy, M.-C. (2022). COVID-19 and the impacts on youth mental health: Emerging evidence from longitudinal studies. *Canadian Journal of Public Health*, 113(1), 44–52. <u>https://doi.org/10.17269/s41997-021-00567-8</u>

Chadi, N., Spinoso-Di Piano, C., Osmanlliu, E., Gravel, J., & Drouin, O. (2021). Mental Health–Related Emergency Department Visits in Adolescents Before and During the COVID-19 Pandemic: A Multicentric Retrospective Study. *Journal of Adolescent Health*, 69(5), 847–850. <u>https://doi.org/10.1016/j.</u> jadohealth.2021.07.036 Chawla, L., Keena, K., Pevec, I., & Stanley, E. (2014). Green schoolyards as havens from stress and resources for resilience in childhood and adolescence. *Health & Place*, 28, 1–13. <u>https://doi.org/10.1016/j.healthplace.2014.03.001</u>

Chen, H., Cohen, P., Kasen, S., Johnson, J. G., Berenson, K., & Gordon, K. (2006). Impact of Adolescent Mental Disorders and Physical Illnesses on Quality of Life 17 Years Later. *Archives of Pediatrics & Adolescent Medicine*, 160(1), 93. <u>https://doi.org/10.1001/archpedi.160.1.93</u>

Chen, J., Sang, G., Zhang, Y., & Jiang, A. (2021). *Intervention effect of the integration model on negative emotions of adolescents during the outbreak of Corona virus disease 2019*. 33(1), 86–94. <u>https://doi.org/10.24869/psyd.2021.86</u>

Cooper, G. (2015). Outdoor education, environment and sustainability. In B. Humberstone, H. Prince, & K. A. Henderson (Eds.), *Routledge International Handbook of Outdoor Studies* (1st ed., pp. 398–408). Routledge. <u>https://doi.org/10.4324/9781315768465-45</u>

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 & Adolescent Psychiatry*, 31(4), 671–684. <u>https://doi.org/10.1007/s00787-021-01744-3</u>

Cox, J. (2017). Access to Child and Youth Mental Health services in BC. 53.

Dahl, R. E., Allen, N. B., Wilbrecht, L., & Suleiman, A. B. (2018). Importance of investing in adolescence from a developmental science perspective. *Nature*, 554(7693), 441–450. <u>https://doi.org/10.1038/nature25770</u>

Furlong, M. J., Dowdy, E., Nylund-Gibson, K., Wagle, R., Carter, D., & Hinton, T. (2020). Enhancement and Standardization of a Universal Social-Emotional Health Measure for Students' Psychological Strengths. *Journal of Well-Being Assessment*, 4(3), 245–267. <u>https://doi.org/10.1007/s41543-020-00032-2</u>

Gardner, R., Snyder, W. M., & Zugay, A. (2019). Amplifying youth voice and cultivating leadership through participatory action research. *Education Policy Analysis Archives*, 27, 54–54. <u>https://doi.org/10.14507/epaa.27.2621</u>

Gingerich, W. J., & Eisengart, S. (2000). Solution-focused brief therapy: A review of the outcome research. *Family Process*, 39(4), 477–498. <u>https://doi.org/10.1111/j.1545-5300.2000.39408.x</u>

Gingerich, W. J., & Peterson, L. T. (2013). Effectiveness of solution-focused brief therapy: A systematic qualitative review of controlled outcome studies. *Research on Social Work Practice*, 23(3), 266–283. <u>https://doi.org/10.1177/1049731512470859</u>

Goossen, R., & Samji, H. (2022). Supporting students during the pandemic and beyond: Lessons learned from British Columbia administrators of inclusive education. Simon Fraser University.

Gronholm, P. C., Ford, T., Roberts, R. E., Thornicroft, G., Laurens, K. R., & Evans-Lacko, S. (2015). Mental health service use by young people: The role of caregiver characteristics. *PLOS ONE*, 10(3), e0120004. <u>https://doi.org/10.1371/journal.pone.0120004</u>

Hadlaczky, G., Hökby, S., Mkrtchian, A., Carli, V., & Wasserman, D. (2014). Mental Health First Aid is an effective public health intervention for improving knowledge, attitudes, and behaviour: A meta-analysis. *International Review of Psychiatry*, 26(4), 467–475. <u>https://doi.org/10.3109/09540261.2014.924910</u>

Hagermoser Sanetti, L. M., & Collier-Meek, M. A. (2019). Supporting successful interventions in schools: Tools to plan, evaluate, and sustain effective implementation (pp. xiii, 274). The Guilford Press.

Haggerty, K. P., McGlynn-Wright, A., & Klima, T. (2013). Promising Parenting Programs for Reducing Adolescent Problem Behaviors. *Journal of Children's Services*, 8(4), 10.1108/JCS-04-2013-0016. https://doi.org/10.1108/JCS-04-2013-0016 Halsall, T., Manion, I., Iyer, S. N., Mathias, S., Purcell, R., & Henderson, J. (2019). Trends in mental health system transformation: Integrating youth services within the Canadian context. *Healthcare Management Forum*, 32(2), 51–55. <u>https://doi.org/10.1177/0840470418808815</u>

Healthy Schools BC. (n.d.). *Comprehensive school health*. HealthySchools BC. Retrieved July 21, 2022, from <u>https://healthyschoolsbc.ca/about/comprehensive-school-health/</u>

Hillis, S. D., Blenkinsop, A., Villaveces, A., Annor, F. B., Liburd, L., Massetti, G. M., Demissie, Z., Mercy, J. A., Nelson III, C. A., Cluver, L., Flaxman, S., Sherr, L., Donnelly, C. A., Ratmann, O., & Unwin, H. J. T. (2021). COVID-19–Associated Orphanhood and Caregiver Death in the United States. *Pediatrics*, 148(6), e2021053760. <u>https://doi.org/10.1542/peds.2021-053760</u>

Hoyt, L. T., Chase-Lansdale, P. L., McDade, T. W., & Adam, E. K. (2012). Positive youth, healthy adults: Does positive well-being in adolescence predict better perceived health and fewer risky health behaviors in young adulthood? *Journal of Adolescent Health*, 50(1), 66–73. <u>https://doi.org/10.1016/j.jadohealth.2011.05.002</u>

Ineese-Nash, N. (2020). Finding Our Power Together: Working with Indigenous Youth and Children during COVID-19. *Child & Youth Services*, 41(3), 274–276. <u>https://doi.org/10.1080/0145935X.2020.1835161</u>

Ineese-Nash, N., Stein, M., & Patel, K. (2022). Wiingushk Okaadenige (Sweetgrass Braid): A Braided Approach to Indigenous Youth Mental Health Support during COVID-19. *International Journal of Indigenous Health*, 17(1), Article 1. <u>https://doi.org/10.32799/ijih.v17i1.36721</u>

James Lind Alliance. (n.d.). JLA Guidebook / James Lind Alliance. <u>Https://Www.Jla.Nihr.Ac.Uk/Jla-Guidebook/</u>. Retrieved October 24, 2022, from <u>https://www.jla.nihr.ac.uk/jla-guidebook/</u>

Johnson, S., Dalton-Locke, C., Vera San Juan, N., Foye, U., Oram, S., Papamichail, A., Landau, S., Rowan Olive, R., Jeynes, T., Shah, P., Sheridan Rains, L., Lloyd-Evans, B., Carr, S., Killaspy, H., Gillard, S., Simpson, A., Bell, A., Bentivegna, F., Botham, J., ... The COVID-19 Mental Health Policy Research Unit Group. (2021). Impact on mental health care and on mental health service users of the COVID-19 pandemic: A mixed methods survey of UK mental health care staff. *Social Psychiatry and Psychiatric Epidemiology*, 56(1), 25–37. https://doi.org/10.1007/s00127-020-01927-4

Kauhanen, L., Wan Mohd Yunus, W. M. A., Lempinen, L., Peltonen, K., Gyllenberg, D., Mishina, K., Gilbert, S., Bastola, K., Brown, J. S. L., & Sourander, A. (2022). A systematic review of the mental health changes of children and young people before and during the COVID-19 pandemic. *European Child & Adolescent Psychiatry*. https://doi.org/10.1007/s00787-022-02060-0

Lau, M. A., Psych, R., & Davis, S. (2019). Evaluation of a cognitive behavior therapy program for BC primary care patients with mild to moderate depression with or without anxiety: Bounce Back, 2008–2014. *BC Medical Journal*, 61(1), 25–32.

Lee, J., Allen, J., Lim, H., Choi, G., & Jung, J. (2021). The role of a mentorship program on the relationship between neglect and depression among adolescents in low-income families. *International Journal of Environmental Research and Public Health*, 18(13), Article 13. <u>https://doi.org/10.3390/ijerph18137010</u>

Li, J., & Liu, Y. (2021). Intervention effect of the video health education model based on solutionfocused theory on adolescents' mental health during the COVID-19 pandemic. *Iranian Journal of Public Health*. <u>https://doi.org/10.18502/ijph.v50i11.7574</u>

Loades, M. E., Chatburn, E., Higson-Sweeney, N., Reynolds, S., Shafran, R., Brigden, A., Linney, C., McManus, M. N., Borwick, C., & Crawley, E. (2020). Rapid Systematic Review: The Impact of Social Isolation and Loneliness on the Mental Health of Children and Adolescents in the Context of COVID-19. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(11), 1218–1239.e3. <u>https://doi.org/10.1016/j.jaac.2020.05.009</u>

Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., Schlinger, M., Schlund, J., Shriver, T. P., VanAusdal, K., & Yoder, N. (2021). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. *American Psychologist*, 76(7), 1128–1142. <u>https://doi.org/10.1037/amp0000701</u>

Mansfield, R., Santos, J., Deighton, J., Hayes, D., Velikonja, T., Boehnke, J. R., & Patalay, P. (n.d.). The impact of the COVID-19 pandemic on adolescent mental health: A natural experiment. *Royal Society Open Science*, 9(4), 211114. <u>https://doi.org/10.1098/rsos.211114</u>

Markoulakis, R., Da Silva, A., Kodeeswaran, S., & Levitt, A. (2022). Youth mental health and/or addiction concerns and service needs during the COVID-19 pandemic: A qualitative exploration of caregiver experiences and perspectives. *Child and Adolescent Psychiatry and Mental Health*, 16(1), 35. <u>https://doi.org/10.1186/s13034-022-00471-0</u>

Masten, A. S., Lucke, C. M., Nelson, K. M., & Stallworthy, I. C. (2021). Resilience in development and psychopathology: Multisystem perspectives. *Annual Review of Clinical Psychology*, 17(1), 521–549. <u>https://doi.org/10.1146/annurev-clinpsy-081219-120307</u>

McCreary Centre Society. (2019). Balance and connection in BC: The health and well-being of our youth. McCreary Centre Society.

Mental Health Commission of Canada. (2016). *The mental health strategy for Canada*: A youth perspective. <u>https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/2016-07/Youth_</u> <u>Strategy_Eng_2016.pdf</u>

Ministry of Child and Family Development. (n.d.). *Everyday Anxiety Strategies for Educators* (EASE)— *Province of British Columbia*. Province of British Columbia. Retrieved July 5, 2022, from <u>https://www2.gov.bc.ca/gov/content/health/managing-your-health/mental-health-substance-use/child-teen-mental-health/ease</u>

Ministry of Education and Child Care. (2020, November 21). *Erase| Building Safe School Communities.* Province of British Columbia. <u>https://www2.gov.bc.ca/gov/content/erase/about-old</u>

Montero-Marin, J., Allwood, M., Ball, S., Crane, C., De Wilde, K., Hinze, V., Jones, B., Lord, L., Nuthall, E., Raja, A., Taylor, L., Tudor, K., MYRIAD Team, Blakemore, S.-J., Byford, S., Dalgleish, T., Ford, T., Greenberg, M. T., Ukoumunne, O. C., ... Kuyken, W. (2022). School-based mindfulness training in early adolescence: What works, for whom and how in the MYRIAD trial? *Evidence Based Mental Health*, 25(3), 117–124. https://doi.org/10.1136/ebmental-2022-300439

Nair, R. (2020, August 30). *How B.C.'s schools adapted to a pandemic | CBC News*. CBC. <u>https://www.cbc.ca/news/canada/british-columbia/school-timeline-british-columbia-1.5699655</u>

Nearchou, F., Flinn, C., Niland, R., Subramaniam, S. S., & Hennessy, E. (2020). Exploring the Impact of COVID-19 on Mental Health Outcomes in Children and Adolescents: A Systematic Review. *International Journal of Environmental Research and Public Health*, 17(22), 8479. <u>https://doi.org/10.3390/</u> ijerph17228479

Nesbitt, L., Meitner, M. J., Girling, C., Sheppard, S. R. J., & Lu, Y. (2019). Who has access to urban vegetation? A spatial analysis of distributional green equity in 10 US cities. *Landscape and Urban Planning*, 181, 51–79. <u>https://doi.org/10.1016/j.landurbplan.2018.08.007</u>

Oberle, E., Ji, X. R., Guhn, M., Schonert-Reichl, K. A., & Gadermann, A. M. (2019). Benefits of extracurricular participation in early adolescence: Associations with peer belonging and mental health. *Journal of Youth and Adolescence*, 48(11), 2255–2270. <u>https://doi.org/10.1007/s10964-019-01110-2</u>

Panchal, U., Salazar de Pablo, G., Franco, M., Moreno, C., Parellada, M., Arango, C., & Fusar-Poli, P. (2021). The impact of COVID-19 lockdown on child and adolescent mental health: Systematic review.

European Child & Adolescent Psychiatry. <u>https://doi.org/10.1007/s00787-021-01856-w</u>

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. <u>https://doi.org/10.1001/jamapediatrics.2021.2482</u>

Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2021). Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*, 30(2), 183–211. <u>https://doi.org/10.1007/s00787-019-01469-4</u>

Ruhl, H., Dolan, E. A., & Buhrmester, D. (2015). Adolescent attachment trajectories with mothers and fathers: The importance of parent–child relationship experiences and gender. *Journal of Research on Adolescence*, 25(3), 427–442. <u>https://doi.org/10.1111/jora.12144</u>

Sælid, G. A., Czajkowski, N. O., Aarø, L. E., Andersen, J. R., Idsøe, T., Helleseter, M. D., & Holte, A. (2022). Effects of a school-based intervention on levels of anxiety and depression: A cluster-randomized controlled trial of the MindPower program in ten high schools in Norway. *BMC Psychology*, 10(1), 14. https://doi.org/10.1186/s40359-022-00721-y

Samji, H., Maloney, J., Badar, S., Lee, J., Low, B., Kaufmann, J., Wu, J., del Casal, J. M., & Long, D. (2022). Youth Development Instrument Provincial Report 2021-2022. Simon Fraser University.

Samji, H., Snell, G., del Casal, J.-M., Low, B., Wu, J., Badar, S., & Long, D. (2021). *Youth Development Instrument Global Report, 2020-2021*. Simon Fraser University. <u>https://chartlab.ca/wp-content/uploads/2022/02/YDI-Phase-2-Pilot-Global-Report-2020-2021-2.pdf</u>

Samji, H., Wu, J., Ladak, A., Vossen, C., Stewart, E., Dove, N., Long, D., & Snell, G. (2022). Review: Mental health impacts of the COVID-19 pandemic on children and youth – a systematic review. *Child and Adolescent Mental Health*, 27(2), 173–189. <u>https://doi.org/10.1111/camh.12501</u>

Sawyer, S. M., Afifi, R. A., Bearinger, L. H., Blakemore, S.-J., Dick, B., Ezeh, A. C., & Patton, G. C. (2012). Adolescence: A foundation for future health. *The Lancet*, 379(9826), 1630–1640. <u>https://doi.org/10.1016/</u> <u>S0140-6736(12)60072-5</u>

SBMHSA. (2013). School-based mental health in Canada: A final report. <u>https://www.</u> mentalhealthcommission.ca/wp-content/uploads/drupal/ChildYouth_School_Based_Mental_ <u>Health_Canada_Final_Report_ENG_0.pdf</u>

Schleider, J. L., Mullarkey, M. C., Fox, K. R., Dobias, M. L., Shroff, A., Hart, E. A., & Roulston, C. A. (2022). A randomized trial of online single-session interventions for adolescent depression during COVID-19. *Nature Human Behaviour*, 6(2), 258–268. <u>https://doi.org/10.1038/s41562-021-01235-0</u>

Schleider, J., & Weisz, J. (2018). A single-session growth mindset intervention for adolescent anxiety and depression: 9-month outcomes of a randomized trial. *Journal of Child Psychology and Psychiatry*, 59(2), 160–170. <u>https://doi.org/10.1111/jcpp.12811</u>

Schoenfeld, E. A., Bennett, K., Manganella, K., & Kemp, G. (2019). More than just a seat at the table: The power of youth voice in ending youth homelessness in the United States. *Child Care in Practice*, 25(1), 112–125. <u>https://doi.org/10.1080/13575279.2018.1521376</u>

Serido, J., Borden, L. M., & Perkins, D. F. (2011). Moving Beyond Youth Voice. *Youth & Society*, 43(1), 44–63. <u>https://doi.org/10.1177/0044118X09351280</u>

Shao, S. (2021). Intervention Effect of Dance Therapy Based on the Satir model on the mental

health adolescents during the covid-19 epidemic. *Psychiatria Danubina*, 33(3), 411–417. <u>https://doi.org/10.24869/psyd.2021.411</u>

Soneson, E., Puntis, S., Chapman, N., Mansfield, K. L., Jones, P. B., & Fazel, M. (2022). Happier during lockdown: A descriptive analysis of self-reported wellbeing in 17,000 UK school students during Covid-19 lockdown. *European Child & Adolescent Psychiatry*. <u>https://doi.org/10.1007/s00787-021-01934-z</u>

Sprague Martinez, L., Richards-Schuster, K., Teixeira, S., & Augsberger, A. (2018). The Power of Prevention and Youth Voice: A Strategy for Social Work to Ensure Youths' Healthy Development. *Social Work*, 63(2), 135–143. <u>https://doi.org/10.1093/sw/swx059</u>

Spruit, A., Goos, L., Weenink, N., Rodenburg, R., Niemeyer, H., Stams, G. J., & Colonnesi, C. (2020). The Relation Between Attachment and Depression in Children and Adolescents: A Multilevel Meta-Analysis. *Clinical Child and Family Psychology Review*, 23(1), 54–69. <u>https://doi.org/10.1007/s10567-019-00299-9</u>

Stewart, S. E., Best, J. R., Selles, R., Naqqash, Z., Lin, B., Lu, C., Au, A., Snell, G., Westwell-Roper, C., Vallani, T., Ewing, E., Dogra, K., Doan, Q., & Samji, H. (2022a). *Post-acute mental health outcomes and their determinants among Canadian children, youth and adults during COVID-19: Baseline results from the Personal Impacts of COVID-19 cohort study* [Manuscript in revisions] Department of Psychiatry, University of British Columbia.

Stewart, S. E., Best, J. R., Selles, R., Naqqash, Z., Lin, B., Westwell-Roper, C., Vallani, T., Ewing, E., & Samji, H. (2022b). 2.69 Age group-specific determinants of mental illness and unmet support needs among Canadians after the first COVID-19 wave. *Journal of the American Academy of Child & Adolescent Psychiatry*, 61(10), S205. https://doi.org/10.1016/j.jaac.2022.09.213

Tambling, R. R., D'Aniello, C., & Russell, B. S. (2021). Mental health literacy: A critical target for narrowing racial disparities in behavioral health. *International Journal of Mental Health and Addiction*. <u>https://doi.org/10.1007/s11469-021-00694-w</u>

Thomson, C., & Burr, J. (2015). Take A Hike! The Impact of Adventure-based Learning on Psychological Wellbeing in Troubled Youth.

Travis, R., Levy, I. P., & Morphew, A. C. (2022). "Now We're All Family": Exploring social and emotional development in a summer Hip Hop mixtape camp. *Child and Adolescent Social Work Journal*. <u>https://doi.org/10.1007/s10560-022-00821-z</u>

UN General Assembly. (1989). Convention on the Rights of the Child. UN Commission on Human Rights.

University College London. (2022, May 3). *INSPYRE*. Institute of Epidemiology & Health Care. <u>https://www.ucl.ac.uk/epidemiology-health-care/research/behavioural-science-and-health/research/social-biobehavioural-research-group/inspyre</u>

Wade, M., Prime, H., & Browne, D. T. (2020). Why we need longitudinal mental health research with children and youth during (and after) the COVID-19 pandemic. *Psychiatry Research*, 290, 113143. <u>https://doi.org/10.1016/j.psychres.2020.113143</u>

Wahlstrom, K. L., Berger, A. T., & Widome, R. (2017). Relationships between school start time, sleep duration, and adolescent behaviors. *Sleep Health*, 3(3), 216–221. <u>https://doi.org/10.1016/j.sleh.2017.03.002</u>

Weist, M. D., Lowie, J. A., Flaherty, L. T., & Pruitt, D. (2001). Collaboration Among the Education, Mental Health, and Public Health Systems to Promote Youth Mental Health. *Psychiatric Services*, 52(10), 1348–1351. <u>https://doi.org/10.1176/appi.ps.52.10.1348</u>

Wiens, K., Bhattarai, A., Pedram, P., Dores, A., Williams, J., Bulloch, A., & Patten, S. (2020). A growing need for youth mental health services in Canada: Examining trends in youth mental health from 2011 to 2018. *Epidemiology and Psychiatric Sciences*, 29, e115. <u>https://doi.org/10.1017/S2045796020000281</u>

Wiguna, T., Minayati, K., Kaligis, F., Ismail, R. I., Wijaya, E., Murtani, B. J., & Pradana, K. (2021). The Effect of Cyberbullying, Abuse, and Screen Time on Non-suicidal Self-Injury Among Adolescents During the Pandemic: A Perspective From the Mediating Role of Stress. *Frontiers in Psychiatry*, 12. <u>https://www.frontiersin.org/article/10.3389/fpsyt.2021.743329</u>

Zheng, Y., Wang, W., Zhong, Y., Wu, F., Zhu, Z., Tham, Y.-C., Lamoureux, E., Xiao, L., Zhu, E., Liu, H., Jin, L., Liang, L., Luo, L., He, M., Morgan, I., Congdon, N., & Liu, Y. (2021). A Peer-to-Peer Live-Streaming Intervention for Children During COVID-19 Homeschooling to Promote Physical Activity and Reduce Anxiety and Eye Strain: Cluster Randomized Controlled Trial. *Journal of Medical Internet Research*, 23(4), e24316. https://doi.org/10.2196/24316





Recommendation rankings

Figure 3: Overall recommendation rankings



Note. Scores represent the sum of the reverse-coded rankings (1-13). Higher scores reflect higher rankings, with a possible range from 42 to 546.

Figure 4: Recommendation ranking by sector

