

Multi-Systems Adaptation for Child and Youth Mental Health in the climate crisis: Rapid Scoping Review and Partner Engagement Session in Nova Scotia

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Background

- Threats from climate change will continue to worsen with increased frequency and intensity of extreme weather events.
- Children are particularly vulnerable to climate change and are disproportionately impacted by adverse conditions due to their developmental stage, dependency, and lack of legal status.
- Direct and indirect impacts from climate-related disruptions to the places and spaces they live, learn, grow, and play have detrimental outcomes for child and youth mental health.
- Conditions and environments around children and youth can be adapted to reduce risk and promote protective factors to support positive mental health and well-being.
- The rapid scoping review highlighted opportunities for a child's rights focus for climate readiness and adaptations.
- We call for action from decision-makers and community leaders to integrate a child rights approach to climate adaptation across government and public sector systems.

INTRODUCTION

Climate change impacts extend beyond environmental degradation, touching every aspect of our health and day-to-day lives. While some climate hazards, like severe storms, are directly linked to physical injury or death, the mental health impacts of climate change are not often considered. Mental health impacts of climate change on youth include post-traumatic stress (PTS), depression, anxiety and learning difficulties. Heat-related mental health impacts have been linked to behavioural changes including sleep disturbances, irritability and increased substance use. Mental health impacts are experienced differently across communities, with some individuals more vulnerable to experiencing worse mental health outcomes due to socio-economic status or geographic location.¹ Risks for poor mental health and well-being are likely to become more severe as climate threats multiply and re-occur.

Children are disproportionately impacted by climate-related threats due to their developmental stage, dependency, and lack of legal status. They may also have overlapping vulnerabilities related to gender, disability, ethnicity, and other factors.² Understanding the conditions that lead to vulnerability helps identify points for effective action and intervention.³ Improving climate resilience is essential for systems to enhance their capacity to protect and promote health in an unstable and changing climate. Action is necessitated to invest in climate-resilient public sector systems that anticipate and respond to climate-related shocks and stressors, maintaining capacity to provide essential functions. Oswald and Langmaid (2021) have suggested the ecological determinants of youth mental health as a health promotion model (Figure 1).⁴

OBJECTIVES

- To deepen the understanding of mental health impacts of climate change on youth mental health
- To explore current research gaps and opportunities
- To establish policy recommendations for integrating a child and youth lens to climate adaptation across systems

To achieve these objectives, we conducted rapid scoping review and a partner engagement session.

RAPID SCOPING REVIEW

- Academic articles published in Embase (Ovid) and MEDLINE (Pubmed)
- Grey literature retrieved using targeted Google search
- Published from 1999 to 2024, English language
- Search terms included combination of "climate change", "mental health" and "youth and children"

PARTNER ENGAGEMENT SESSION

- Virtual 90-minute partner engagement session
- Disseminated rapid scoping review findings
- Use of virtual Google Jam boards to discuss current context, barriers to adaptations, and policy recommendations to support child and youth mental health within climate change strategy development in Nova Scotia

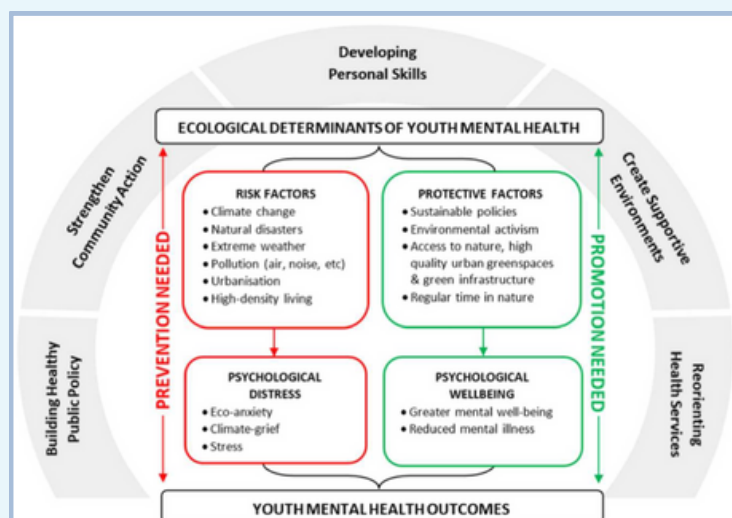


Figure 1: Ecological Determinants of Youth Mental Health (Oswald and Langmaid 2021)

RAPID SCOPING REVIEW

Scoping review results were deductively analyzed, grouping key concepts, categorizing emergent themes, and mapping results onto 5 domains of Oswald and Langmaid's (2021) framework (Figure 2).

1. Building Healthy Public Policy

Integrating policies promoting climate change adaptation and mental health across all public health sectors (e.g urban planning; health systems, education).

2. Strengthen Community Action

Reinforcing community cohesion and encouraging collective action.

3. Developing Personal Skills

Enhancing individual-level adaption, such as nature-based resilience skill building and self-management strategies.

4. Create Supportive Environments

Strengthening supportive networks including places, spaces and social relationships children and youth depend on.

5. Reorienting Health Services

Creating opportunities within public health systems where action can be taken to support child and youth mental health within plans for climate change adaptation.

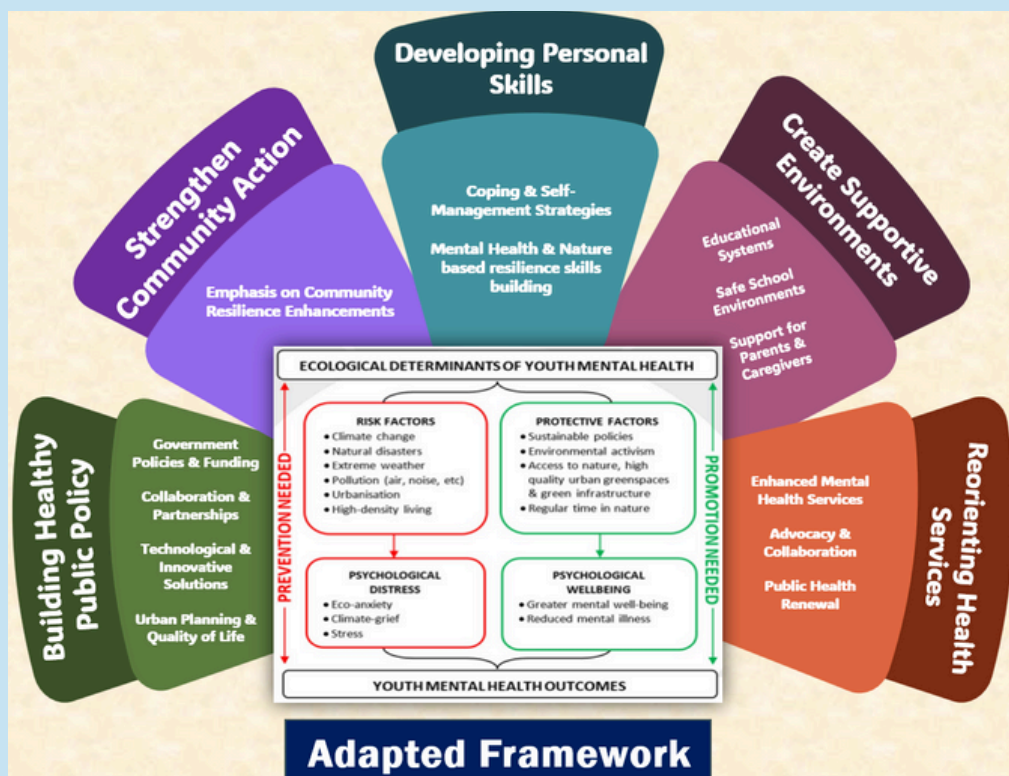


Figure 2: Results of Adaptations for child and youth mental health using Ecological determinants of youth mental health model

PARTNER ENGAGEMENT FINDINGS

CURRENT CONTEXT Participants discussed early stages of engaging youth within plans for climate-change mitigation, with adaptation strategies still nascent across many departments.

BARRIERS Participants identified 4 key barriers for advocacy and action around child and youth mental health in policy.

- **Child and Youth Priority:** a paucity of prioritizing child and youth health in plans for climate change adaptation
- **Intergovernmental Collaboration:** collaboration and engagement across public health sectors is needed
- **Data and Surveillance:** dedicated data on climate change impacts on child mental health is needed
- **Investment and Infrastructure:** opportunities for dedicated resources for climate-resilient infrastructure in child and youth-facing systems

POLICY RECOMMENDATIONS

1. Integrate a Child Rights Impact Assessment (CRIA) tool into policy and adaptation strategy planning.
2. Increase strategic and intentional intergovernmental and community collaboration around intersections of children and youth, mental health, and climate change.
3. Invest in the climate policy and infrastructure adaptations for child and youth-facing systems.
4. Engage and empower children and youth in disaster and emergency response planning.

CONCLUSION

Climate change will continue to worsen, including increased frequency and intensity of extreme weather events. As a result, we can anticipate direct and indirect impacts on child and youth mental health. Conditions and environments around children and youth can be adapted to reduce risk and promote protective factors towards mental health and well-being. Emphasizing a child's rights lens within the development of climate adaptation strategies is a critical step towards protecting where children live, learn, grow and play.

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