Two-eyed perspectives on mental health interventions for climate change distress: An integrative scoping review

Fox Mori, Julia Lukacs, Shona Adams, Arden Henley, Kiffer Card

### INTRODUCTION

- > Climate change poses significant challenges to life. These challenges include the psychological and emotional responses to environmental change.
- > Two-eyed seeing allows us to examine the mental health effects of climate change from an Indigenous perspective while recognizing the value and strengths of both Western and Indigenous knowledge systems.
- > To date there has not been a literature review synthesizing Indigenous and Western perspectives on climate distress.

#### METHODS

- > Positionality: Indigenous and non-Indigenous authors recognizing climate change threats and inequities.
- > Framework: Integration of Indigenous perspectives and Western methodologies using Whittemore and Knafl's (2005) five-stage approach.
- > Literature Search: Scopus® and APA PsychInfo® databases, inclusion criteria for Indigenous perspectives on climate change and mental health.
- > Data Evaluation. All papers in this review had undergone a Western peer-review process. Recognizing the differences between Western knowledge processes and Indigenous ways of knowing, it was deemed inappropriate and disrespectful to suppress or erase Indigenous voices.
- > Data Extraction, Analysis, and Synthesis: Positionality statements, locations, and dates of papers were recorded. Thematic analysis of emerging themes were identified and synthesized using a two-eyed seeing approach.

#### RESULTS

- > A total of 61 relevant studies were identified. Only 16% included positionality statements, with 50% of these from North America.
- > Location: North America (27/61 articles; 44%), Australia and Aotearoa New Zealand (24/61 articles; 39%), and Asia (9/61 articles; 14%).
- > Publication trends: Publications identified were from 2008, with 2021 (11/61 articles; 18%), and 2022 (15/61 articles; 24.5%) having the highest number.
- > From these studies, four key themes were characterized (see Table 1). These themes were synthesized into a Medicine Wheel model of climate change distress (see Figure 1).
- > Indigenous voices supported some of the new wave of Western interventions for climate change distress as identified in a recent scoping review (Baudon & Jachens, 2021): climate action, climate courage, radical hope, managing distress, time in nature, social connection, fostering resilience, and trans-therapeutic principles.

## DISCUSSION AND CONCLUSIONS

- > Indigenous communities have a reciprocal and multi-layered relationship with the lands they rely on, emphasizing the critical role of connection to land and cultural identity in Indigenous well-being, which includes the recognition of the spiritual interconnectedness of all things.
- > Indigenous knowledge and stewardship are significant for climate change resilience and sustainable development. Collaborative models empower Indigenous communities, integrating their ecological and cultural knowledge with Western science for effective climate adaptation and mitigation.
- > Indigenous strategies for managing climate distress encompass community participation, intergenerational learning, and reconnection with nature, addressing systemic disorder, strength-based approaches, promoting healthy relationships and communities.
- > The Medicine Wheel Model provides an adapted framework integrating Indigenous perspectives on climate distress, with the interconnectedness of physical, emotional, mental, and spiritual aspects of well-being.
- > Acknowledging study limitations, future research should include larger and diverse Indigenous communities, promote cross-cultural collaborations, and examine long-term effects of climate change on Indigenous mental health. Exploring digital citizen science, integrating Indigenous knowledge through Two-eyed seeing approaches, and investigating the impacts of adaptation strategies and mindfulness are crucial areas for further investigation.



- All things are interconnected, interdependent, and inter-related.
- Empowered by spiritual connection to the land and community connections.
- Consider generations before and after (e.g., Seven Generations Teaching).
  - Climate mitigation and adaptation requires radical hope and courage.

Spiritual 「wo-eyed seeing approaches` are needed.

- Indigenous and local knowledge is needed for otimal climate mitigation and Mental adaptation policy.
  - Cross-curriculum priorities, Indigenous engagement in ransformative learning and decolonizing nethodologies ar needed.

Indigenous people

are stewards of the

land.

We

**NORTH (Spiritual)** 

- Land and place are important determinants of health.

- Cultural traditions (e.g., food, hunting, medicines, language, storytelling, dance) are tied to land and place.
- People are dependent on the lands and environments where they live.
- Lands are protected by their inhabitants.
  - Time in nature is good for physical health.
- Supporting cultural practices and tradition, Indigenous self governance, connection to land, social connection, and emotion regulation are key to addressing climate distress. Regulation is key to fostering resilience and addressing climate distress
  - Transtheraputic approaches are needed.

Climates and environments

impact mental health and

# South

Identity and Cultural **EAST (Physical)** Preservation **SOUTH (Emotional)** Adaptation and Resilience Knowledge Sharing and WEST (Mental) Climate Advocacy

Cultural Places/Being on the Land, Traditional Food, Spiritual Connections (to land and culture), Interconnectedness (between land, people, animals, traditional languages, culture, and the environment), Storytelling

Time in Nature, Health and Well-being, Fostering Resilience, Managing Distress, Trans-therapeutic [Principles]

Stewardship, Two-Eyed Seeing / Traditional Knowledge, Policies (Cross-curriculum Priorities, Indigenous engagement in transformative learning and decolonising methodologies)

Climate Action, Climate Hope / Radical Hope / Active Hope, Climate **Community Connection** Courage, Social Connection, Eco-anxiety / Eco-stress

SFU GTE Green
Technology
Education
Centre
Technology
MENTAL HEALTH AND CLIMATE CHANGE ALLIANCE