

Empowering Future Healthcare Leaders to Address Climate-Mental Health Threats: A Narrative Review of Global Post-Secondary Programs

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Argonauts, L. (2022, January 5). Landscape scenery of Green Mountains - Free Stock photo. Pexels.

Introduction

- Anthropogenic climate change is a significant stressor on mental health through numerous pathways resulting in acute psychological trauma, ecological grief, and solastagia.¹
- Recent studies identified a lack of climate-mental health education in global post-secondary curricula. For example, a recent international survey of students from 2817 medical schools located in 112 countries found that only **15%** of schools included climate-related health topics in their current education system.²
- Integrating climate-mental health education into current global post-secondary programs could help improve students' understanding, raise awareness, and build support for action on climate-mental health risks.

Research Goal

This research project aimed to systematically identify and examine climate change and mental health education programs for post-secondary students in order to update and expand the Climate Change and Global Health Research Group's (CCGH) current lessons.

Methods

Study Design: Narrative Review

Title and Abstract → Full Text → Data Extraction

1. Search:

- Our search strategy used four databases: OVID MEDLINE®, OVID EMBASE®, ERIC®, and WEB OF SCIENCE®.
- We used one search string that covered key concepts such as climate change, mental health, and education.

2. Screening:

- We conducted a screening process using DistillerSR, a systematic review software. Two reviewers developed and applied eligibility criteria to identified articles through two levels of screening: title and abstract and full text screening.

3. Data Extraction and Analysis

- Using DistillerSR, we manually extracted the data from articles that focused on post-secondary climate-mental health education (n=20). Then, we exported the data to Excel, which we used to analyze the evidence.

Results

After eliminating duplicates, our search string generated 776 articles published in English between the years 2000 and 2023. Following screening, 20 relevant articles were identified for this review.

Relevance and Content Analysis

- The level of relevance varied among the included articles (**Fig. 1**).
- Most of the articles focused on education for healthcare professionals, including strategies for responding to climate-related disasters and community-based intervention resources.
- **60%** of articles comprised prominent, relevant content (n=12). **55%** extensively discussed a current climate-mental health education program (n=11).

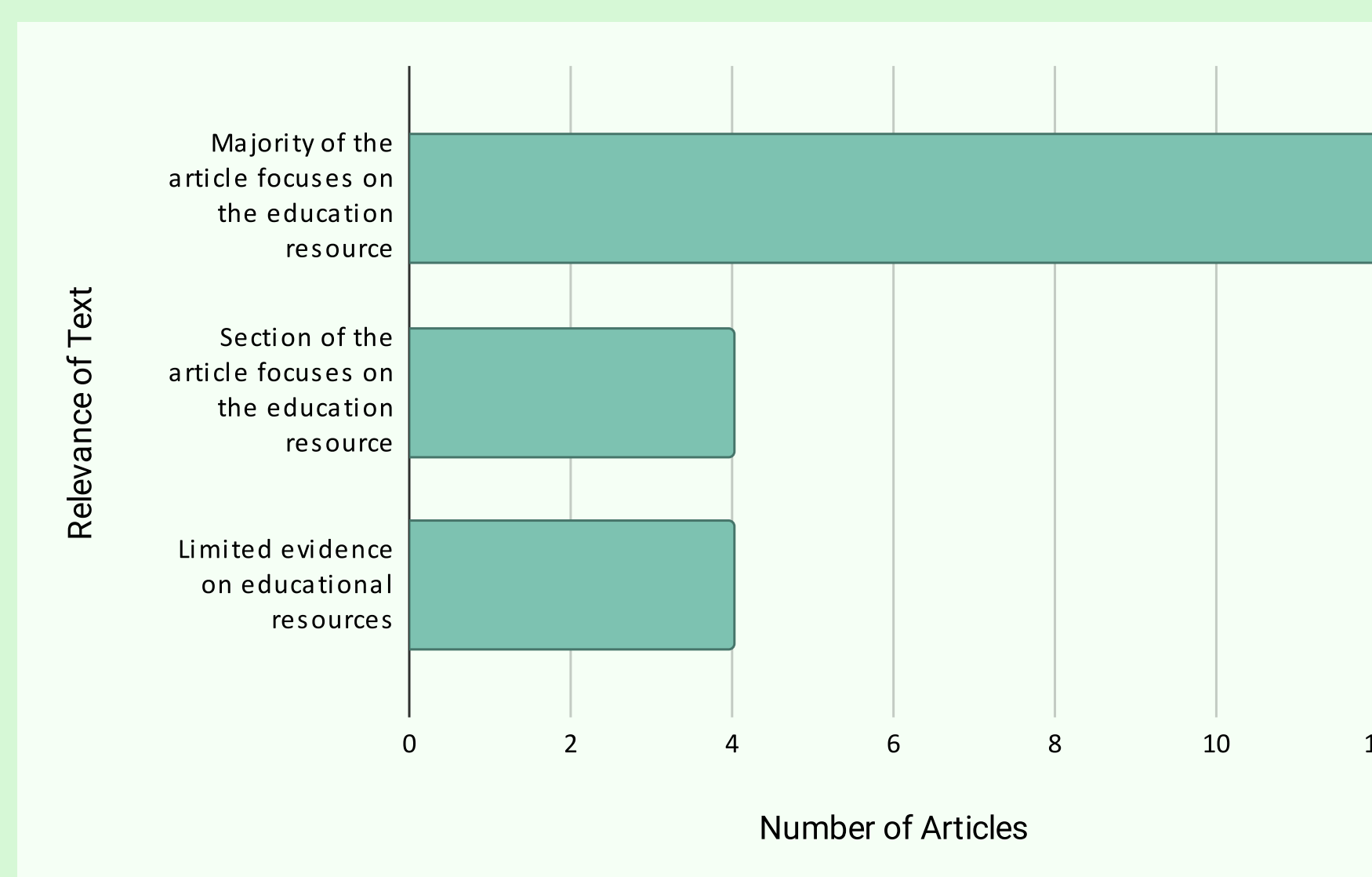


Fig. 1: Number of articles that covered climate-mental health education programs for university students by relevance

Trends by Geographic Location

- Included articles were from 8 different countries (**Fig. 2**).
- Most articles focused on educational programs in the United States of America (**n=11, 55%**).
- The remaining 7 countries published one to two articles over the study period, accounting for **40%** of the articles (n=7).

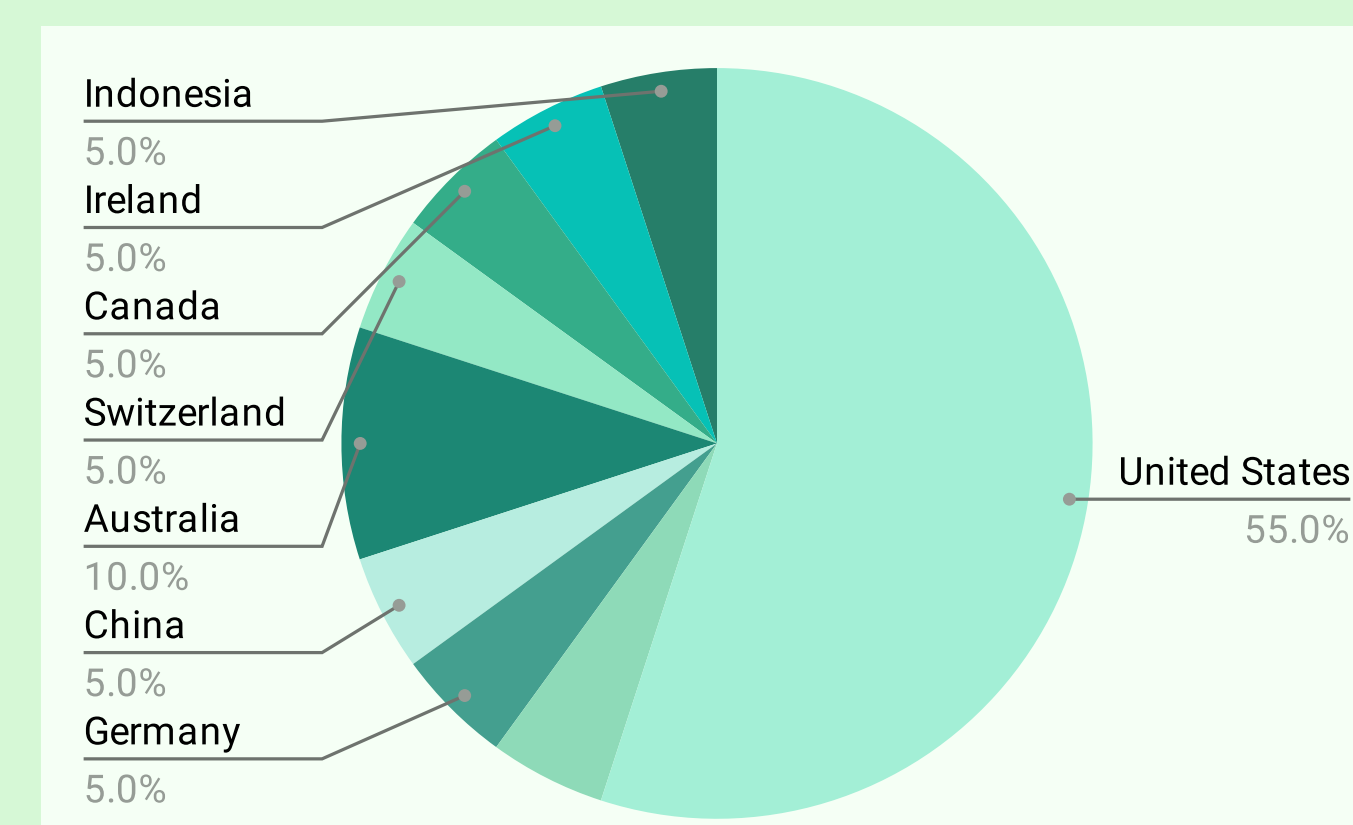


Fig. 2: Percentage of articles that covered post-secondary climate-mental health education programs by country

Trends Over Time

- Throughout the study period, the number of published articles fluctuated, peaking in 2022 (**Fig. 3**).
- Further, **85%** of articles were published since 2020 (n=17).

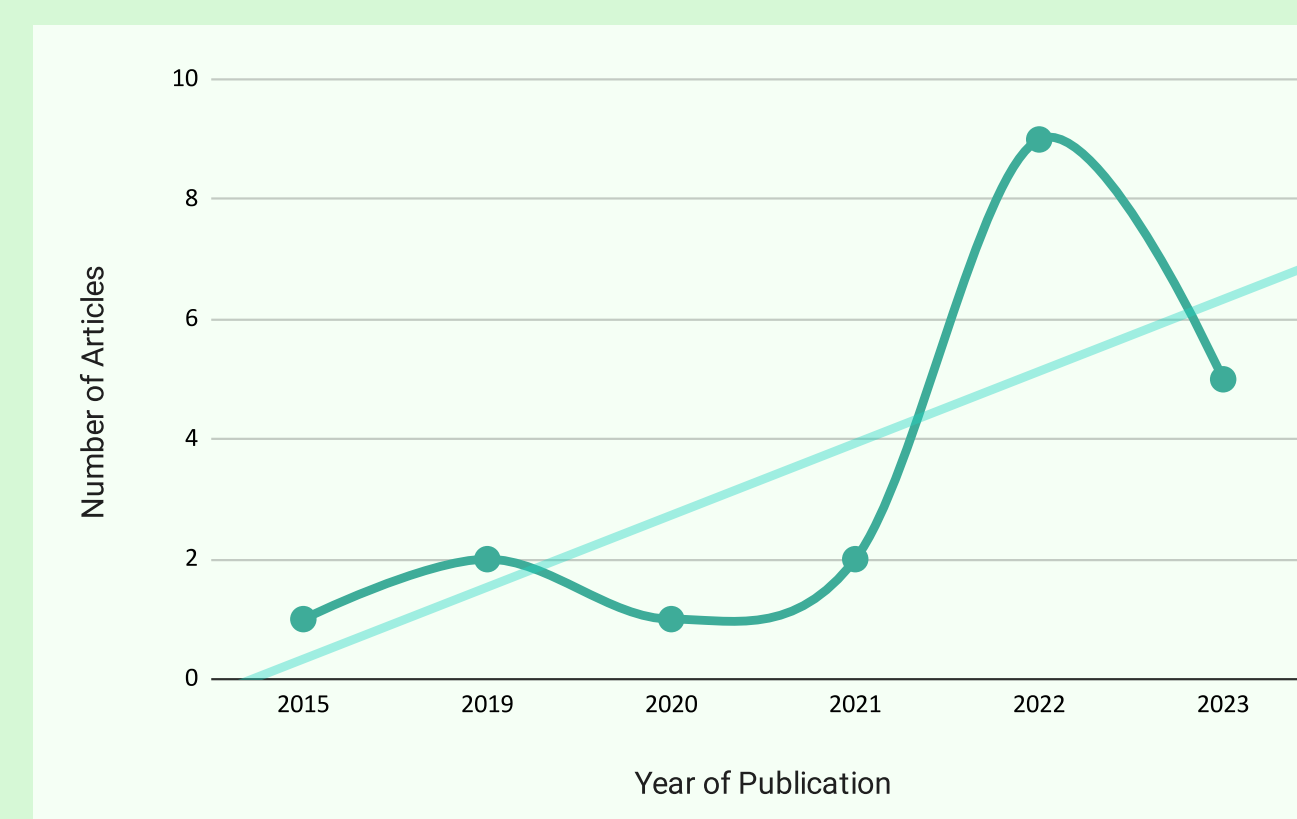


Fig. 3: Number of articles that covered post-secondary climate-mental health education programs by year

Discussion

- Our review found an increase in published articles that focused on post-secondary climate-mental health education in recent years.
- Despite this increase, very few articles were published on the topic. This is problematic given the current and anticipated future threat that climate change poses for mental health.
- Climate-mental health education programs could play a crucial role in equipping future healthcare practitioners to effectively tackle mental health challenges arising from climate change.³

Recommendations for Global Post-Secondary Climate-Mental Health Education

We recommend developing climate-mental health courses for post-secondary students in healthcare professions (e.g., potential programs designed for nursing and medical students).

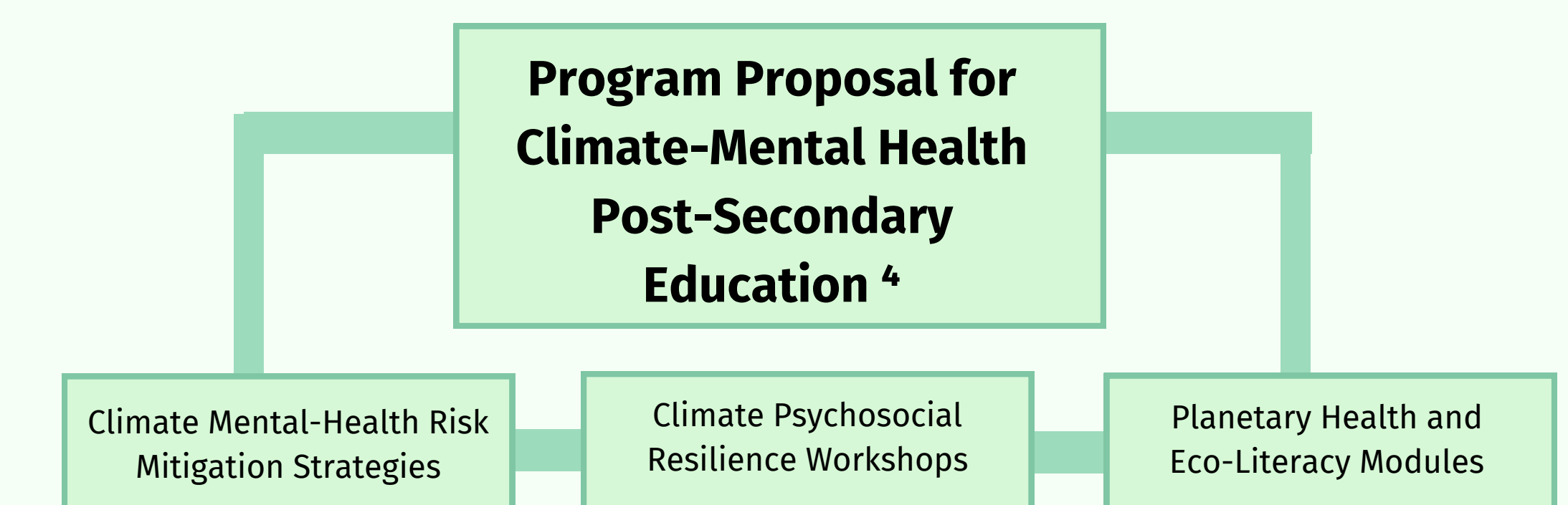


Fig. 4: Potential design for a global climate-mental health course for post-secondary students

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