

Addressing Societal Challenges through STEM

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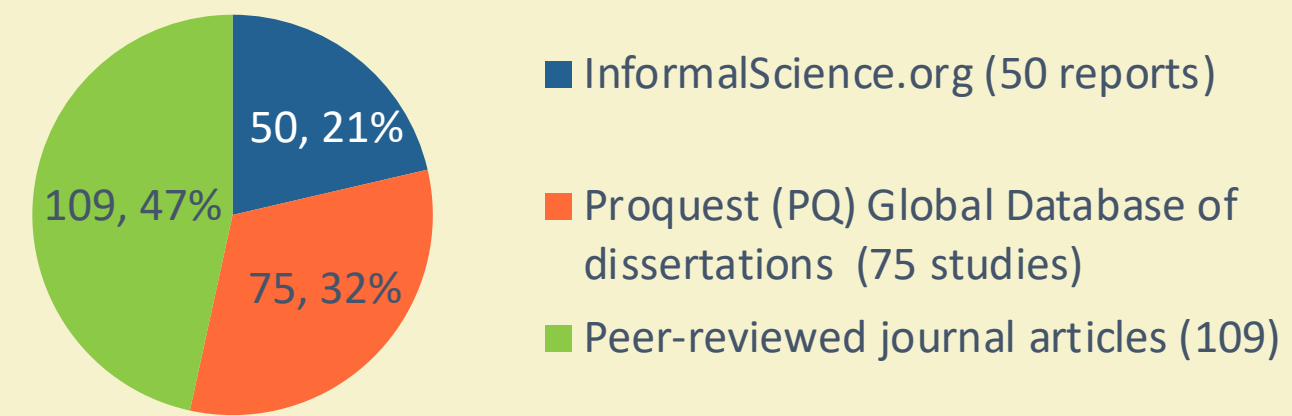


Research Question

How are informal learning institutions advancing the use of STEM knowledge and scientific reasoning in the ways that individuals and communities address the societal challenges of our time?

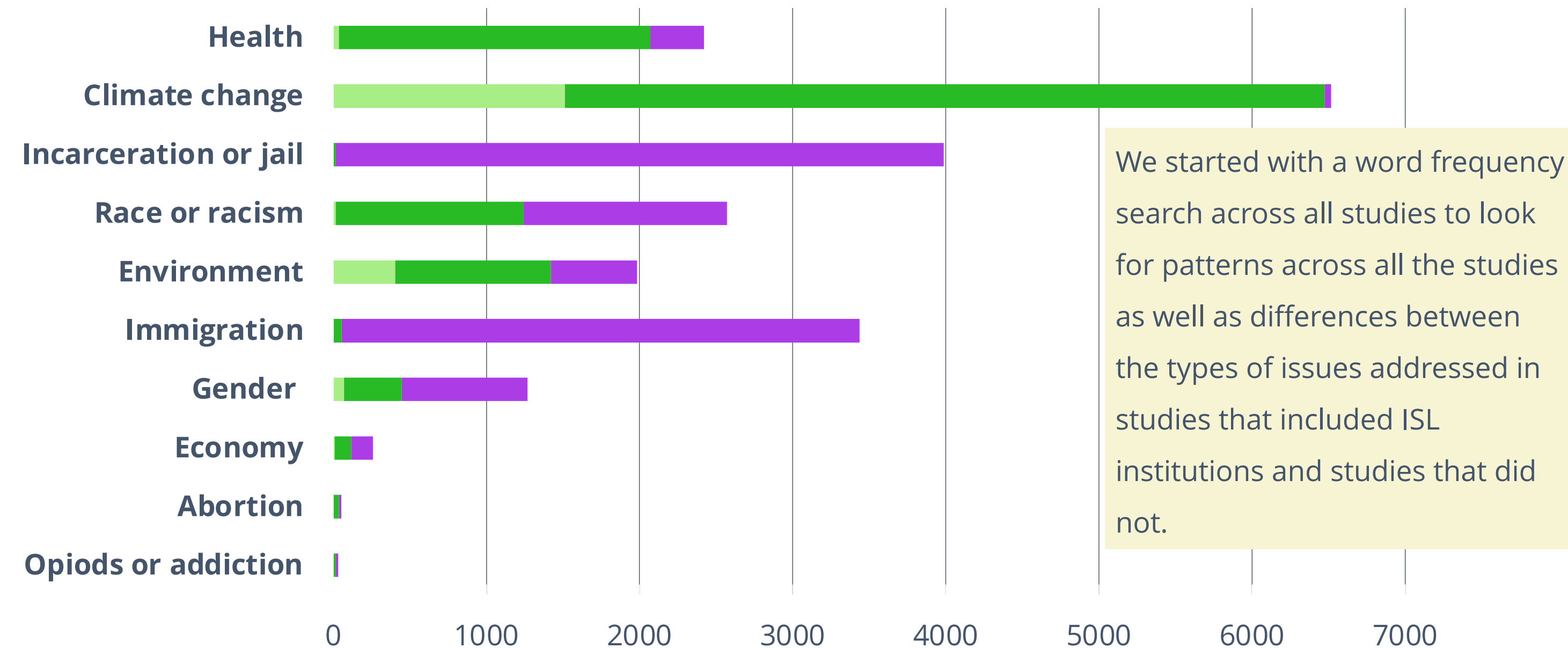
Protocol

We are conducting a configurative systematic analysis of existing literature using a question-based, iterative process of mapping, and analyzing the studies, and synthesizing results.



Frequency of topics mentioned across settings

Zoos & Aquaria Other ISL NON ISL



We started with a word frequency search across all studies to look for patterns across all the studies as well as differences between the types of issues addressed in studies that included ISL institutions and studies that did not.

Initial Observations

- **Theory of Change focused on individuals not on systems:** When we looked at types of impacts intended and achieved, most projects focused on changing knowledge and behavior of individuals. Very little evidence of ISL institutions focusing on understanding the systemic nature of problems.
- **Science dominates STEM disciplines: Science content was deeply embedded in many projects and scientific reasoning often cited as goal but rarely measured or reported as achieved.** Other STEM disciplines less evident.
- **Collaborations across sectors were rare:** Many examples of significant impacts when efforts include multiple partners. Very little evidence of efforts across sectors or disciplines such as history and science museums.

Learn more about this project at:

<https://knology.org/person/kris-morrissey>

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