

SSC2025 Category/Theme: Environment — Shaping a Resilient Planet

Upholding Psychological Resilience within the Scientific Community after Natural Disasters

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OVERVIEW

This abstract seeks to summarize employable approaches to enhancing psychological resilience and ensuring that it remains adaptable to scientific communities in the long term – promoting sustainability in psychological resilience. Various psychological resilience upheld by different communities and their impacts on long-term psychological resilience and wellness were categorized and connected using a systems thinking approach.

OBJECTIVES AND METHODOLOGY

A Systems Thinking Approach

The SOCKit tool, developed as part of the IUPAC Project, was used to create a systems thinking-inspired overview of promoting sustainability in upholding psychological resilience within scientific communities [1].

United Nations Sustainable Development Goals (UN SDG)

Discussion was represented using UNSDGs that align with research outcomes to provide a clear framework of how different forms of psychological resilience are maintained in various forms of sustainability.

RESULTS AND DISCUSSION

Safe and Resilient Disaster Risk Reduction

An effective disaster reduction plan involves developing a culture of disaster preparedness within the scientific community. System-based resilience cultivates a strong disaster resilience education, building a strong network of resilient scientists. Strategies are also assessed for their effectiveness in academic resource reconstruction and restoring research capabilities after post disasters.

Disaster resilience education complements disaster reduction strategies through independent development of psychological resilience in scientists. Through mentorship and continuous revision plans of school curriculum, students can become seeds for lifelong learning and contribute to wellness and resilience of research institutions and scientific communities.

Inclusive Societies For Sustainable Development

Community-based resilience supports local needs of the scientific community by incorporating participatory action research into research capabilities. Representative

decision-making allows psychological resilience within scientific communities to be upheld sustainably through inclusiveness and diversity. Community-based disaster management programs support collaborative joint solutions at the community-institution level and institution-government level. By integrating groups of communities into learning, partnerships are solidified. The exploration of new research directions is facilitated through science diplomacy, forging multilateral ties that create tight support systems within local, regional and international scientific communities.

University Social Responsibility (USR)

By placing students as the driving forces of change, USR becomes a key tool that can be utilised to impact scientific communities and allowing local talent to fulfill representative decision-making across communities and institutions[2]. Disaster prevention courses and community projects leave student equipped mentally and informatively, building on local experience and resourcing strategical partnerships.

CONCLUSION

Adopting a comprehensive approach to address both psychological resilience and sustainability ensures scientific communities can empower scientists to overcome challenges and emerge resilient. Scientists should no longer remain as passive recipients of external assistance but be involved with the long-term psychological resilience goals, paving the way for future sustainable and adaptable community models that support scientific challenges, climate wellness and resilience.

REFERENCES

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