



Abstract

# The Role of Education, Self—Reported Knowledge and Environmental Risk Perception in Disaster Preparedness †

Aistė Balžekienė

Civil Society and Sustainability Research Group, Kaunas University of Technology, 44249 Kaunas, Lithuania; aiste.balzekiene@ktu.lt

† Presented at the 2nd International Conference of International Researchers of the Education for Environmental Citizenship 2022, 10–11 March 2022. Available online: <https://enec-cost.eu/ireec22/>.

**Abstract:** One of the dimensions of environmental citizenship is related to the understanding of the structural causes of environmental degradation and it also emphasizes the empowerment of citizens. With increasing threats from climate change impacts, the United Nations emphasizes the importance of local capacities for environmental emergency preparedness. Research shows that education plays an important role in the level of disaster preparedness (for example, refs. [1,2]); moreover, environmental knowledge is an important factor for shaping public-sphere environmental behaviors (for example, ref. [3]). The aim of this presentation is to explore to what degree the level of education, environmental knowledge and risk perception influences the level of preparedness for environmental emergencies in Lithuania. Lithuania is one of the countries where climate change impacts have drastically increased during recent years; thus, it is important to research the role and preparedness of citizens to cope with related threats and to indicate knowledge gaps in the understanding of causal relations. This presentation uses data from two datasets, which are collected during the Risk-Space project in Lithuania: (1) the representative survey of Lithuanian population, conducted in 2020, with 2007 respondents in Lithuania; and (2) experts from municipalities in Lithuania, responsible for civil contingency. Conducted in 2021. Experts number 58 (out of 60) participated in the study. The items that are analysed in this presentation include the following: Independent variables include the perception of specific environmental risks (floods, forest fires, air pollution and water pollution), self-reported knowledge about environmental threats, and the level of education of the respondent; dependent variables include the level of preparedness of individual and municipality to cope with environmental emergencies. Results reveal that the self-reported level of disaster preparedness is critically low both evaluating the preparedness of the municipality where the respondent lives and the individual preparedness. The level of education and self-reported environmental knowledge is significantly positively correlated with the individual's disaster preparedness level; however, they are not correlated with the evaluation of municipality preparedness.

**Keywords:** environmental emergencies; environmental knowledge; environmental attitudes; disaster preparedness

**Funding:** Presentation is based on research project “Mapping of Risk Perception in Lithuania: Spatial and Socio-psychological Dimensions” (Risk-Space), funded by Research Council of Lithuania (S-MIP-19-28).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are openly available in the Dataverse repository of the Lithuanian Data Archive for HSS: <https://hdl.handle.net/21.12137/Q0YILI>, (accessed on 22 February 2022).

**Conflicts of Interest:** The author declares no conflict of interest.



**Citation:** Balžekienė, A. The Role of Education, Self—Reported Knowledge and Environmental Risk Perception in Disaster Preparedness. *Environ. Sci. Proc.* **2022**, *14*, 5. <https://doi.org/10.3390/environsciproc2022014005>

Academic Editors: Andreas Ch. Hadjichambis, Pedro Reis, Marie-Christine Knippels, Audronė Telesiene, Daphne Goldman, Demetra Paraskeva-Hadjichambi, Jan Cincera and Kateřina Jančaříková

Published: 1 March 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## References

1. Xu, D.; Peng, L.; Liu, S.; Wang, X. Influences of Risk Perception and Sense of Place on Landslide Disaster Preparedness in Southwestern China. *Int. J. Disaster Risk Sci.* **2018**, *9*, 167–180. [[CrossRef](#)]
2. Domingues, R.B.; Santos, M.C.; de Jesus, S.N.; Ferreira, Ó. How a coastal community looks at coastal hazards and risks in a vulnerable barrier island system (Faro Beach, southern Portugal). *Ocean Coast. Manag.* **2018**, *157*, 248–256. [[CrossRef](#)]
3. Hansmann, R.; Binder, C.R. Determinants of different types of positive environmental behaviors: An analysis of public and private sphere actions. *Sustainability* **2020**, *12*, 8547. [[CrossRef](#)]