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21st Century Landscape Sustainability, Development and Transformations: Geographical Perceptions

Giovanni Messina, Bresena Kopliku (Eds)

11. Environmental risk perception and attitudes on climate-induced migration: survey insights among Geography students at the University of Turin

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Abstract

This research investigates the environmental risk perception and attitudes towards climate-induced migration among Geography students at the University of Turin, with a particular focus on the influence of fake news. Drawing from existing literature and prior research, the study aimed to assess the impact of higher education and public awareness initiatives on students' understanding of climate risk and migration. A total of 133 students from geography courses, along with 87 respondents from Earth Sciences and Life Sciences departments, participated in an online survey conducted in October 2023. The findings suggest that despite access to scientific knowledge, students are susceptible to fake news, resulting in a diminished understanding of environmental risks and reduced empathy towards climate migrants. The study underscores the significance of understanding college students' opinions, given their potential impact on shaping future climate change policies, and emphasizes the importance of providing them with essential tools to critically process information effectively in an era characterized by misinformation.

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References

- Acquadro, M.D., Begotti, T., 2021, “Media Exposure to Climate Change, Anxiety, and Efficacy Beliefs in a Sample of Italian University Students”, *International Journal of Environmental Research and Public Health*, 18, 9358.

- APAT, 2004, *L'educazione ambientale nelle Agenzie per la protezione dell'ambiente*, <https://www.isprambiente.gov.it/files/pubblicazioni/quaderni/educazione-e-formazione-ambientale/educazioneAmbientale.pdf>.

- Ashlin, A., Ladle, R., 2007, “‘Natural disasters’ and newspapers: Post-tsunami environmental discourse”, *Environmental Hazards* 7, 4, 330-341.

- Beine, M., Parsons, C., 2015, “Climatic factors as determinants of international migration”, *The Scandinavian Journal of Economics*, 117, 2, 723-767.

- Bhatti, A.K., 2009, *Seismic Vulnerability of Historical Arch Type Bridge Structures in Italy*, Master's Thesis, University of Padua.

- Biondo, F., La Rocca, G., Trapani, V., 2022, *Information Disorder*.



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Learning to Recognize Fake News, Berlin-Bruxelles, Peter Lang.

- Burke, M., Hsiang, S.M., Miguel, E., 2015, "Climate and conflict", *Annual Review of Economics* 7, 577-617, doi.10.1146/annurev-economics-080614-115430.

- BVA Doxa, 2019, *Gli italiani e la doccia. Percezione, atteggiamenti e abitudini degli italiani verso la doccia*, www.damast.it/gli-italiani-e-la-doccia-indagine-doxa/.

- Clayton, S., 2020, "Climate anxiety: Psychological responses to climate change", *Journal of Anxiety Disorders*, 74, 102263.

- Clayton, S., 2021, "Climate Change and Mental Health", *Current Environmental Health Report*, 8, 1-6.

- Corbett, C.R., 2020, "Chemtrails and Solar Geoengineers: Governing Online Conspiracy Theory Misinformation", *Missouri Law Review*, 85, 3, 633-686.

- Duffy, B., 2021, *Who cares about climate change? Attitudes across the generations (in the UK)*, <https://policycommons.net/artifacts/1813707/who-cares-about-climate-change/2549991/>.

- FIPE, 2019, *Ristorazione. Rapporto annuale 2019*, <https://www.fipe.it/wp-content/uploads/2021/12/RapportoPESito2019-2.pdf>.



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- Francis, A., 2019/2020, "Climate-induced migration and free movement agreements", *Journal of International Affairs* 73, 1, 123-134, <https://www.jstor.org/stable/10.2307/26872782>.

Genovese, E., 2022, "University student perception of sustainability and environmental issues", *AIMS Geosciences*, 8, 4, 645-657.

- Giddens, A., 2008, *The politics of climate change. National responses to the challenge of global warming*, London, Policy Network Paper.

- Gifford, R., 2008, "Psychology's essential role in alleviating the impacts of climate change", *Canadian Psychology*, 49, 4, 273-280.

- Gifford, R., 2011, "The dragons of inaction: psychological barriers that limit climate change mitigation and adaptation", *American Psychologist*, 66, 4, 290-302.

- Gilliam, F., Bales, S., 2001, "Strategic Frame Analysis: Reframing America's Youth", *Social Policy Report*, 15, 3, 1-16.

- IDOS, 2022, *Dossier statistico immigrazione*, Rome, Edizioni Idos.

- Ionesco, D., Mach, E., 2016, "Environmental migration in the New York Declaration", <https://environmentalmigration.iom.int/environmental-migration-new-york-declaration>.

- Koubi, V., 2019, "Climate change and conflict", *Annual Review of*



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Political Science, 22, 343-360.

- Koubi, V., Böhmelt, T., Spilker, G. et al., 2018, "The Determinants of Environmental Migrants' Conflict Perception", *International Organization*, 72, 4, 905-936.

- Koubi, V., Spilker, G., Schaffer, L. et al., 2016, "The role of environmental perceptions in migration decision-making: evidence from both migrants and non-migrants in five developing countries", *Population and Environment*, 38, 2, 134-163, <https://www.jstor.org/stable/44132372>.

- Kurth, C., Pihkala, P., 2022, "Eco-anxiety: What it is and why it matters", *Frontiers in Psychology*, 13, <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.981814/full>.

- Lewandowsky, S., van der Linden, S., 2021, "Countering Misinformation and Fake News Through Inoculation and Prebunking", *European Review of Social Psychology*, 32, 2, 348-384.

- Lombardi, D., Sinatra, G.M., 2012, "College Students' Perceptions About the Plausibility of Human-Induced Climate Change", *Research in Science Education*, 42, 201-217.

- Lujala, P., Bezu, S., Kolstad, I. et al., 2020, "How do host-migrant proximities shape attitudes towards internal climate migrants?", *Global Environmental Change*, 65, <https://www.sciencedirect.com/science/article/>



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[pii/S0959378020307391?via%3Dihub](https://doi.org/10.1111/pii/S0959378020307391?via%3Dihub).

- Ma, T., Moore, J., Cleary, A., 2022, "Climate change impacts on the mental health and wellbeing of young people: A scoping review of risk and protective factors", *Social Science and Medicine*, <https://pubmed.ncbi.nlm.nih.gov/35367905/>.

- Magliulo, C., Talluri, M., 2022, "Non è un Paese per bici. Come rendere ciclabili le città italiane: piani, scenari, risorse", *Clean Cities Campaign*, Fiab, Kyoto Club and Legambiente, https://italy.cleancitiescampaign.org/wp-content/uploads/2022/11/Clean_Cities_Non_Un_Paese_Bici_06Nov2022.pdf.

- MASE, 2023, Archivio Dossier Campagne Nazionali di Tutela Ambientale, <https://www.mase.gov.it/pagina/dossier-campagne-nazionali-di-tutela-ambientale>.

- Mashamaite, M.M., 2023, "The Impact of Misinformation and Fake News on Climate Change Perception and Response: A Comprehensive Review", *International Journal of Social Science Research and Review*, 6, 9, 183-193.

- McAdam, J., 2010, *Climate Change and Displacement. Multidisciplinary Perspectives*, Oxford and Portland, Oregon, Hart Publishing.

- Metzger, M.J., Flanagin, A.J., Zwarun, L., 2003, "College student web use, perceptions of information credibility, and verification behaviour", *Computers & Education*, 41, 3, 271-290.



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- Ministry of the Interior, 2023, *Cruscotto statistico*,
https://www.interno.gov.it/sites/default/files/2023-09/cruscotto_statistico_giornaliero_15-09-2023.pdf.

- Pasquaré, F., Oppizzi, P., 2012, “How do the media affect public perception of climate change and geohazards? An Italian case study”, *Global and Planetary Change*, 90-91, 152-157.

- Phillips, M., Cinderich, A., Burrell, J. et al., 2015, “The Effect of Climate Change on Natural Disasters: A College Student Perspective”, *Weather, Climate, and Society*, 7, 60-68.

- Pihkala, P., 2020, “Eco-Anxiety and Environmental Education”, *Sustainability*, https://www.researchgate.net/publication/346732307_Eco-Anxiety_and_Environmental_Education.

- Pini, J., 2023, “Fuori casa: prima colazione in ripresa, ma occorre svecchiare il target”, <https://www.mixerplanet.com/bar/217198/fuori-casa-prima-colazione-in-ripresa-ma-occorre-svecchiare-il-target.html>.

- Pirovano, G., 2023, “Colazione, un’opportunità per bar e hotel”, <https://www.italiaatavola.net/attualita-mercato/prima-colazione-degli-italiani-non-soltanto-tradizione/93719/>.

- Santolini, F., 2021, “Ambiente, l’Italia apre le porte ai migranti climatici”, *la Repubblica*,



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https://www.repubblica.it/green-and-blue/2021/01/19/news/gli_invisibili_in_fuga_per_il_clima_chi_sono_i_nuovi_migranti-282709863/.

- Semenza, J.C., Hall, D.E., Wilson, D.J. et al., 2008, “Public perception of climate change: Voluntary mitigation and barriers to behaviour change”, *American Journal of Preventive Medicine*, 35, 479-487.

- Sonetti, G., Sarrica, M., Norton, L.S., 2021, “Conceptualisation of sustainability among students, administrative and teaching staff of a university community: An exploratory study in Italy”, *Journal of Cleaner Production*, 316, 1-9.

- SWG, 2019, *Fighting climate change*, <https://www.swg.it/politicapp?id=yedv>.

- The World Bank, 2018, *Groundswell: Preparing for Internal Climate Migration*, Washington DC, <https://openknowledge.worldbank.org/handle/10986/29461>.

- Tingley, D., Wagner, G., 2017, “Solar geoengineering and the chemtrails conspiracy on social media”, *Palgrave Communications*, 3, 12, <https://www.nature.com/articles/s41599-017-0014-3>.

- Trigila, A., Iadanza, C., Lastoria, B. et al., 2021, *Dissesto idrogeologico in Italia: pericolosità e indicatori di rischi*, ISPRA, https://www.isprambiente.gov.it/files2022/pubblicazioni/rapporti/rapporto_dissesto_idrogeologico_



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[italia_ispra_356_2021_finale_web.pdf](#).

- Usher, K., Durkin, J., Bhullar, N., 2019, “Eco-anxiety: How thinking about climate change-related environmental decline is affecting our mental health”, *International Journal of Mental Health Nursing*, 28, 1233-1234.

- Wachholz, S., Artz, N., Chene, D., 2014, “Warming to the idea: university students’ knowledge and attitudes about climate change”, *International Journal of Sustainability in Higher Education*, 15, 2, 128-141.

- Warner, K., 2011, “Environmental change and migration: methodological considerations from ground-breaking global survey”, *Population and Environment*, 33, 1, 3-27.

- Wilson, K.M., 2000, “Communicating climate change through the media: Predictions, politics, and perceptions of risks”, in: Allen, S., Adam, B., Carter, C. (eds), *Environmental Risks and the Media*, London, Routledge, 201-217.

- Witmarsh, L., 2009, “Behavioral responses to climate change: asymmetry of intentions and impacts”, *Journal of Environmental Psychology*, 29, 13-23.