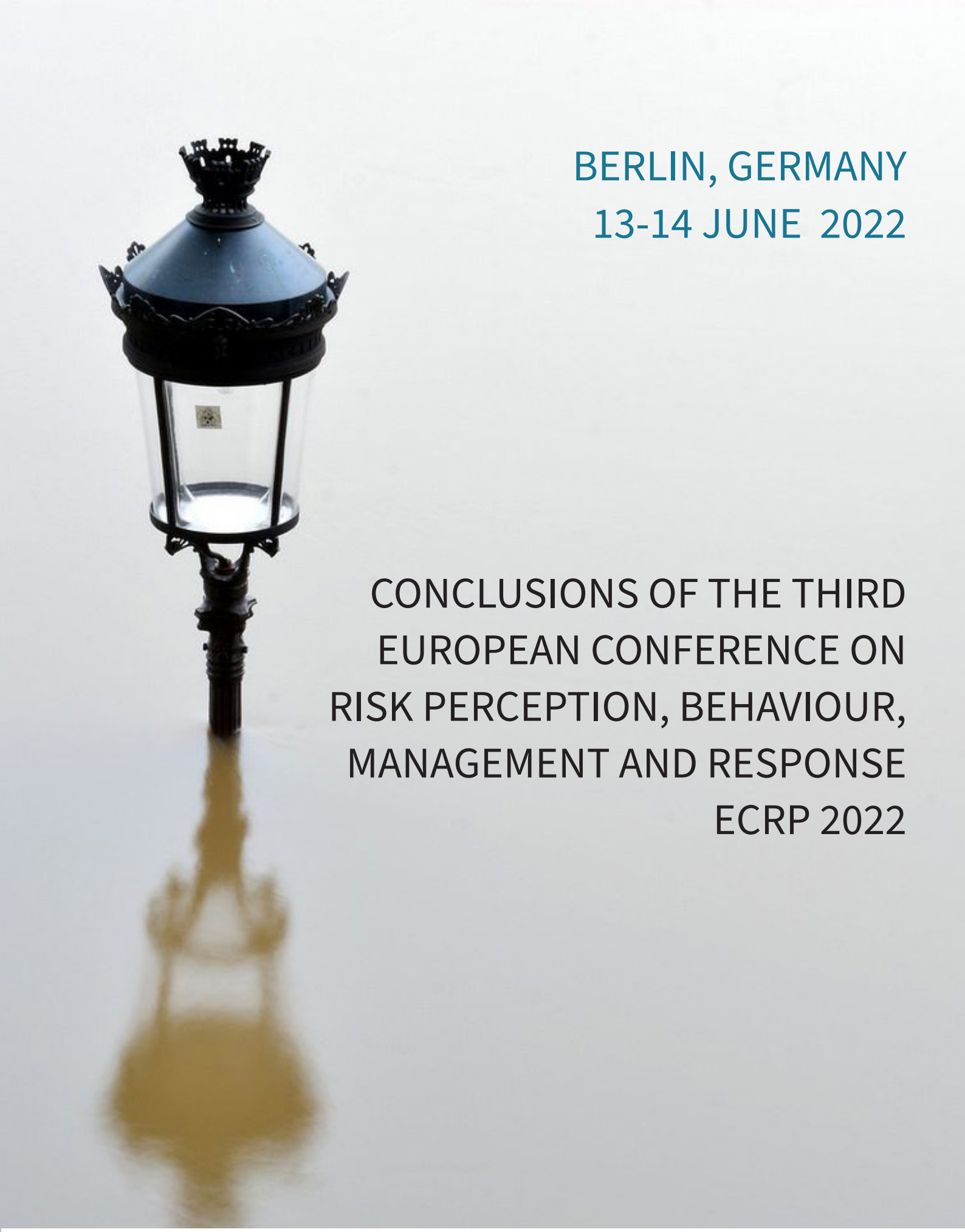
Conclusions of the Third European Conference on Risk Perception, Behaviour, Management and Response – ECRP22

Samuel Rufat, Karsten Uhing, Maike Vollmer, Alexander Fekete, Giacomo Bianchi, Christian Kuhlicke



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CONCLUSIONS OF THE THIRD EUROPEAN CONFERENCE ON RISK PERCEPTION, BEHAVIOUR, MANAGEMENT AND RESPONSE ECRP 2022

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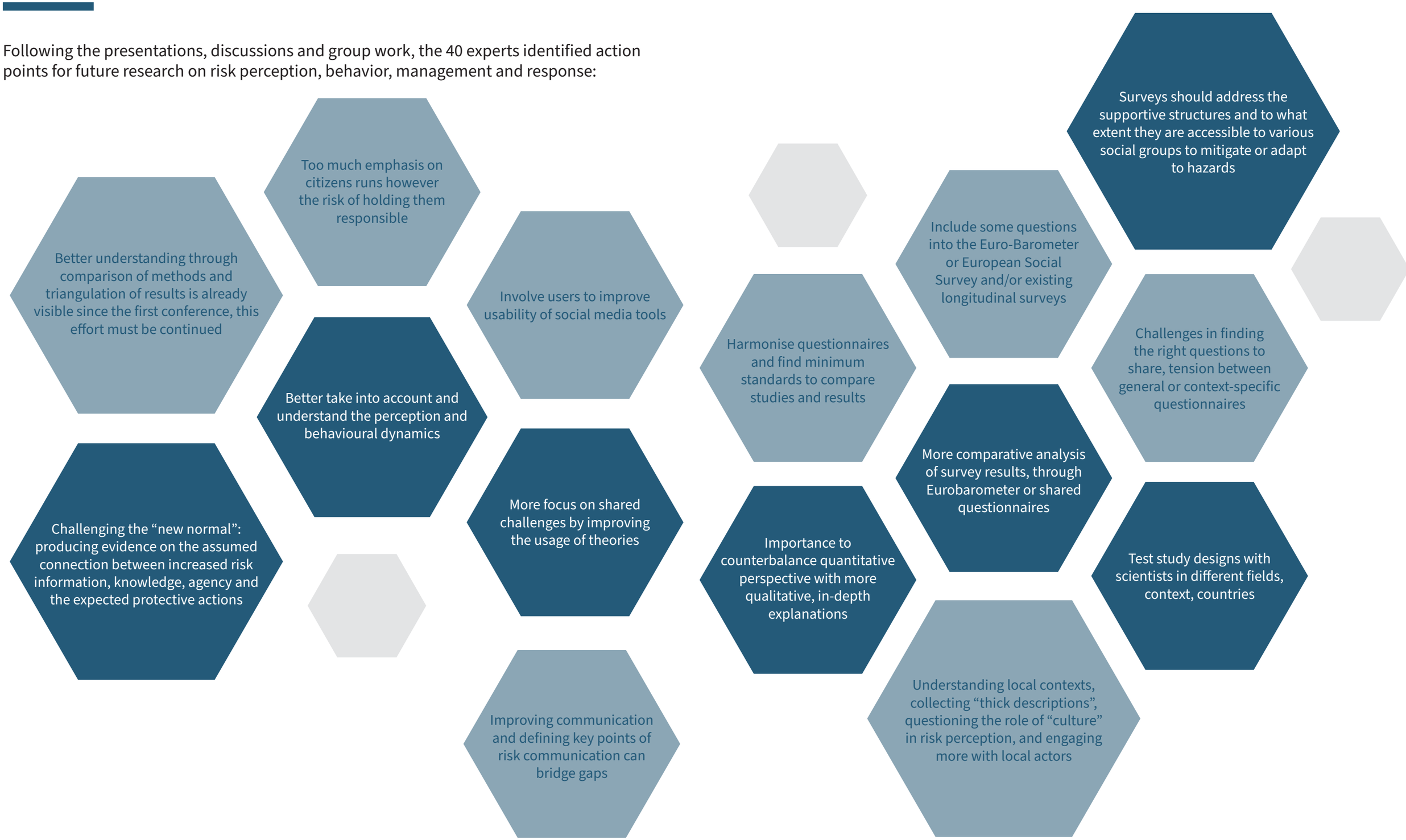
CONCLUSION OF THE EUROPEAN CONFERENCE ON RISK PERCEPTION, BEHAVIOUR, MANAGEMENT AND RESPONSE

The Third ECRP conference in June 2022 in Berlin, Germany, has gathered again our two communities, the Risk Perception and Behaviour Survey of Surveyors (Risk-SoS) and the H2020-DRS-01 Cluster on risk perception and adaptive behaviour (a grouping of several Horizon Europe – Disaster Resilient Societies projects, most notably RESILOC, BUILDERS, CORE, ENGAGE, LINKS, RiskPACC). One of the key challenges for risk, vulnerability and resilience research is how to address the role of risk perceptions and how perceptions influence behaviour. It remains unclear why people fail to act adaptively to reduce future losses, even when there is ever-richer information available on natural and human-made hazards (flood, drought, etc.). The current fragmentation of the field makes it an uphill battle to cross-validate the results of existing independent case studies. This, in turn, hinders comparability and transferability across scales and contexts and hampers recommendations for policy and risk management. The ECRP conference cycle aims to contribute to improve the ability of researchers in the field to work together and build cumulative knowledge.

In an hybrid format, the Third ECRP conference has gathered 40 researchers, experts and practitioners from 14 countries (Austria, Belgium, Estonia, France, Germany, Italy, the Netherlands, Norway, Poland, Romania, Spain, Sweden, Switzerland, and the United Kingdom) at the Fraunhofer Forum in Berlin, Germany. The panels and workshops crossed disciplines (complexity science, economics, engineering, geography, history, life science, psychology, sociology, among others), including fields from all the Disaster Risk Reduction cycle phases (from early warning to insurance through perception, vulnerability, behaviour, management, resilience, etc.), and using diverse case studies from ongoing European projects to bring together a panoramic European discussion of the on-going research and practice.

BERLIN ACTION POINTS

Following the presentations, discussions and group work, the 40 experts identified action points for future research on risk perception, behavior, management and response:



CHALLENGES IN USING THEORIES IN DISASTER RISK RESEARCH

All research is based on theoretical assumptions. Yet, such assumptions are often not clearly stated. In research on risk perception and adaptive behaviour a rather small proportion of studies explicate their theoretical basis and how it informed their empirical analysis. However, **explicating theoretical assumption is beneficial to various reasons:**

Increasing transparency

i.e. other researchers can assess underlying assumptions and rationales

Stimulating incremental or revelatory advancements

i.e. building on existing theoretical framework or developing new frameworks allowing counter-intuitive insights

Ensuring comparability of findings

i.e. comparing studies conducted in different geographical settings and, by doing so, drawing more general conclusions

Informing and influencing decision-making processes on the policy-level

i.e. distilling a clear-cut message from science to stakeholders, especially for decision-making processes, based on a robust evidence base

Further reading: Kuhlicke, C., de Brito, M. M., Bartkowski, B., Botzen, W., Doğulu, C., Han, S., Hudson, P., Karanci, A. N., Klassert, C., Otto, D., Scolobig, A., Moreno Soares, T., & Rufat, S. (2023). Spinning in circles? A systematic review on the role of theory in social vulnerability, resilience and adaptation research. Global Environmental Change, 80, 102672.

Explicit engagement is challenged by different reasons:

1 Theories are usually grounded in disciplinary traditions and “languages” which often hamper cooperation in an interdisciplinary research environment

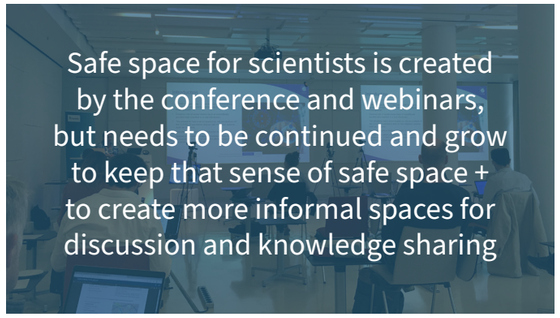
2 A lack of awareness of and/or knowledge (incl. training) about the existence and relevance of theories in research on risk perception and adaptive behaviour

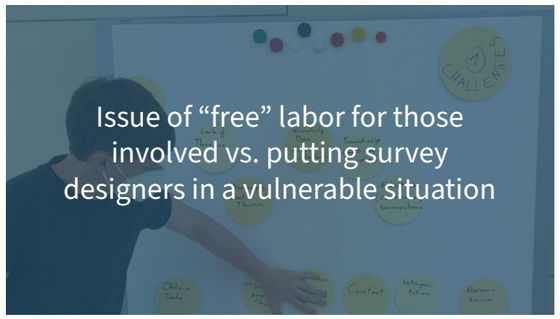
3 Responding to the demands of practitioners are often favoured over contributing to an established theoretical reference body

What is needed?

- A greater reflexivity about and appreciation of the role of theories in this field of research, including tolerance for new ideas and for younger researchers
- An awareness of the relevance of institutional capacity and long-term commitment to certain topics, themes and frameworks
- A greater encouragement to engage with theories in applied research projects to ensure outcomes that are of relevance not just for specific settings and contexts but contribute to a larger body of empirical evidence

RECOMMENDATIONS ON SHARING AND TESTING QUESTIONNAIRES





OPEN QUESTIONS FROM THE ECRP

- How to integrate risk perception work into risk assessments?
- What does risk peception mean to decision-makers and how can it be integrated into the resilience cycle?
- What is the risk tolerance of actors being influenced by risk perceptions?
- How is risk perception influencing the various components of national (government) resilience cycles (or framework)?
- Develop a holistic review of tools to bridge science – policy
- Challenge of operationalising constructs such as social capital
- To explore more the consequences of risk communication on risk perception – define key points of risk communication for improving

Suggested questions to implement in future questionnaires:

Question to capture Awareness

- Are you aware of risks? (follow-up) which ones?
- On a scale of 1-5-10 do you expect a disaster to happen in the next one to xxx years?
- What are the first five words that come to your mind when speaking of…
- What are the most effective ways to mitigate such risks?
- What kind of risk can this hazard pose?
- Do you agree? do you expect? Many discussions on the framing of the questions and answer scales
- Usually questions target awareness with exposure, impacts, danger, mitigation, worry, anxiety, thoughts, emotions
- Prefer list of examples instead of open questions
- Other constructs are drivers for this one (awareness)

Question to capture Previous hazard experience

- How likely do you think the area you live in is at risk of the following types of natural disasters?
- In the last xx years, have you experienced any of the following natural or man-made hazards?
- Do you feel that your property is exposed to a hazard?
- Is your property exposed to a hazard?
- Do you think you are living in a flood prone area?
- In your opinion what is the probability, that a hazard X will occur in your area in the next xx years?
- Have you ever been directly involved in xxx?
- How likely do you think you are exposed to xxx?
- Asking the zip code / address to then compare with existing risk maps
- To which extend do you feel you will harmed by the occurrence of hazard xxx?

Question to capture Information & knowledge

- Where did you get your information on hazard xxx from?
- Do you think the information was useful? Was it good information?
- Would you share this information with someone?
- Did you know where to get help to actually get something?
- What helps you make better decisions?
- What support would you need? What would you need to act?
- How did you act upon receiving the information? gaining knowledge?
- Did you know what to do after you got the information?
- Did you actively look for information or was it provided to you?
- Large scale surveys: closed list such as news, neigbours, friends, social networks
- Smaller scale surveys: open ended questions
- More important to know if people have actual empirical knowledge, rather than theoretical knowledge
- Rather not asking about right and wrong

Question to capture Actual & perceived exposure

- To what extent do you agree with the statement? I have taken steps to prepare myself in case of a natural disaster affecting my home (1-5).
- There are various measures to reduce and prevent damage caused by xxx, according to you, what are the most urgent ones to adopt in your neighbourhood?
- Have you ever personally looked for information on how to protect your home against xxx?
- If you took protective measures, after disaster xxx, how satisfied were you with the effectiveness of these measures?
- How effective do you believe implementing this measure would be in reducing the risk of xxx to your home and possessions?
- Have you taken any measures to reduce the risk of harm to yourself or your property in the last xxx years?
- How likely is it that you implement this mitigation / adaptation measure within the next 12 months? Scale 1-5. Repeat question aiming for 5 years perspective
- What is the most important factor that would help you to implement this mitigation / adaptation measure?
- What measure or steps did you take?
- If you have taken measures, what is the reason for the adaptation?

Keynote presentations

Kristi Nero, *Risk scepticism among socially marginalised individuals in Europe: lessons from BuildERS survey*, University of Tartu, Finland

Joseph Cullen, *Community-based adaptive behaviour modelof resilience*, The Tavistock Institute, United Kingdom

Bruria Adini, *Survey on risk perceptions of natural and humanmade disasters, a cross-sectional study in eight coun-tries*, Tel Aviv University, Israel

Selby Knudsen, *The "Risk Perception-Action Gap": Two-waycommunication in risk management*, Trilateral Research, United Kingdom

Nadya Komendatova, *Impact of social media on risk perceptions*, IIASA, Austria

Philip Bubeck, *Surveying people at risk on warnings andcommunication after the 2021 flood in Germany*, University of Potsdam, Germany

Paola Fon-tanella Pisa, *Surveying disaster risk perception and climatechange adaptation in global mountain regions*, UNU-EHS, Eurac Research, Italy

Previous conferences

Rufat S., Plattard O., Fekete A., Gilli L., Hudson P., Santoni V. (2021). *Conclusions of the Second European Conference on Risk Perception, Behaviour, Management and Response - ENCORE 2021.* CY Cergy Paris University, France. ANR-20-CE03-0009. https://hal.science/hal-03465539v1/document

Rufat S., Fekete A. (2019). *Conclusions of the first European Conference on Risk Perception, Behaviour, Management and Response*. University of Cergy-Pontoise, Paris, France. https://shs.hal.science/halshs-02486584v1/document

Rufat, S., de Brito, M. , Fekete, A., Comby, E., Robinson, P. J., Armaş, I., Kuhlicke, C. (2022). *Surveying the surveyors to address risk perception and adaptive-behaviour cross-study comparability.* Natural Hazards and Earth System Sciences, 22(8), 2655-2672. https://doi.org/10.5194/nhess-22-2655-2022

DRS-01 cluster: https://www.riskpacc.eu/drs-01-cluster/

Subscribe to the Risk-SoS webinars: https://groupes.renater.fr/sympa/subscribe/risk-sos

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