

Risk Perception & Behaviour Survey of Surveyors. Risk-SoS 2020 Preliminary results

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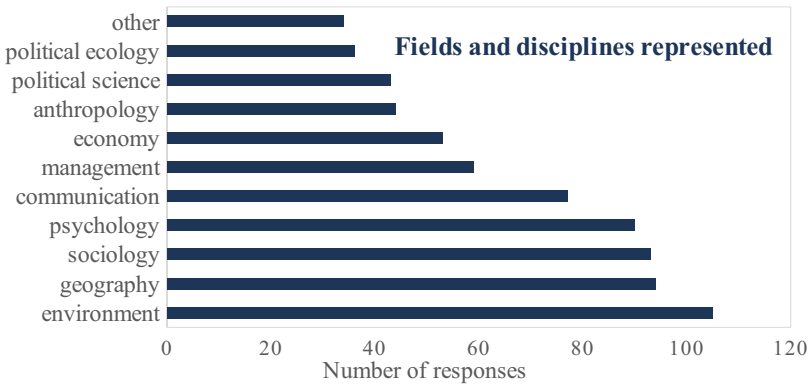
Risk Perception & Behaviour Survey of Surveyors

Risk SoS 2020 Preliminary results

One of the key challenges in risk, vulnerability and resilience is how to address the role of risk perceptions and how perceptions influence behaviour. A central question is why people still fail to act in an adaptive manner to reduce future losses, even when there are ever richer risk information provided by several communication channels (e.g. websites, social media, mobile applications, television, and print news). The current fragmentation of the field makes it an uphill battle to cross-validate the results of the current collection of independent case studies. This, in turn, hinders comparability and transferability across scales and contexts, and hampers giving recommendations for policy and risk management.

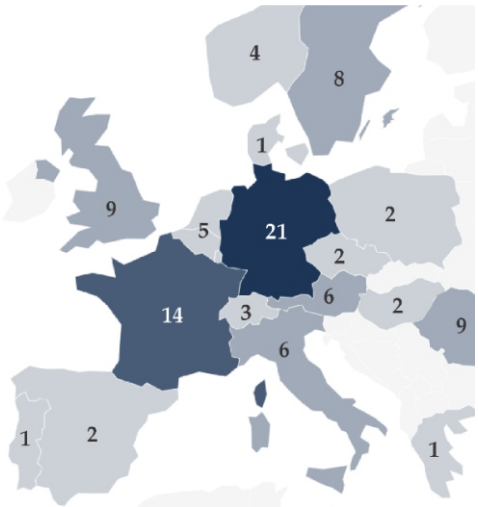
While we obviously cannot all run the very same questionnaire or focus groups because we have different research interests, our ability to work together and build cumulative knowledge could be significantly improved by having: (1) a common list of minimal requirements to compare studies and surveys, (2) shared criteria to address context-specific aspects of countries and regions, (3) a selection of survey questions or themes allowing for comparability and long-term monitoring. Following the First European Conference on Risk Perception, Behaviour, Management and Response, the aim of the *Risk Perception & Behaviour Survey of Surveyors (SoS)* was to provide answers to move towards this direction.

Participants characteristics		n
Gender	Female	66
	Male	63
	Prefer not to say	19
	Other	1
Years since PhD	Student or no PhD	29
	1 - 3 years	19
	4 - 7 years	25
	8 - 12 years	22
	13 - 20 years	21
	> 20 years	19
	Prefer not to say	15
Work affiliation	Academia	113
	Prefer not to say	12
	Public service or agency	8
	Think tank, consulting	6
	Other	4
	Retired, emeritus	3
	International body	3
Main field of PhD or studies	Geography	38
	Other	23
	Prefer not to say	18
	Environment	18
	Sociology	14
	Psychology	12
	Economy	10
	Political science	7
	Anthropology	3
	Management	3
	Communication	2
	Political ecology	1

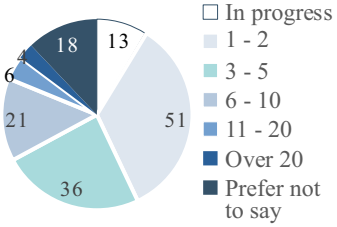


Country of employment
(only Europe is shown)

Africa: 5
Middle East: 1
Other Europe: 14
Prefer not to say: 4
Americas: 18
Oceania: 1
Asia: 10



Studies completed

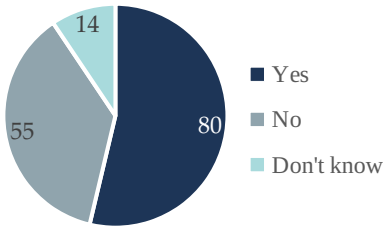


The 2020 SoS consisted of 30 questions and was disseminated in a snowball fashion to reach all the community, with an initial focus on Europe, from December 2020 to April 2021. Over this period, 149 experts from more than 25 countries have answered the survey, one quarter outside of Europe, with experience in individual or community perceptions of risk, climate impacts or hazards adaptation behaviour, using surveys, interviews, experiments or focus groups. The results are treated anonymously as no personal data was collected. They are shared and discussed with the community during regular Risk-SoS webinars.

Theoretical models and frameworks used (only > 10 are shown)



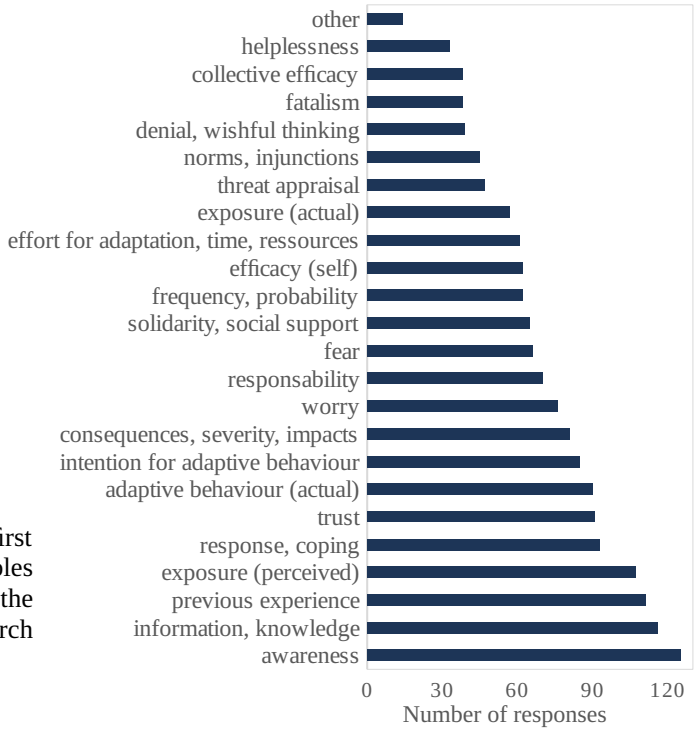
Impact of Covid-19 on research



Variables used to explain risk perception					
Variable	**n**	**Variable**	**n**	**Variable**	**n**
Age	123	Livelihoods, occupation	75	Insurance	40
Gender	119	Social capital	67	Health	39
Education	117	Coping capacity	63	Disability	34
Previous hazard experience	106	Resilience	57	Minorities	34
Exposure to hazards	92	Home-ownership	52	Language proficiency	19
Income	80	Anxiety, concerns, fears	50	Other	14
Family, household composition	79	Housing size, floor, location	46	Do not know	2
Vulnerability	78	Housing quality, resistance, context	41		

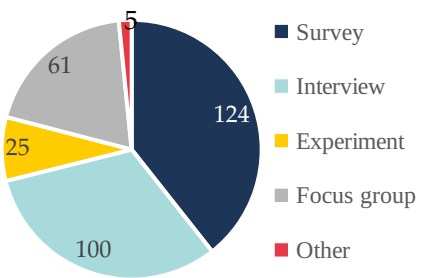
Participants experiences		n
Have designed a survey on risk perception or adaptive behaviour	Yes	134
	No	13
	Do not know	2
Implemented the survey at multiple times	Yes	62
	No	86
	Do not know	1
Conducted a formal test of the explanations or validity of a theory	Yes	50
	No	84
	Do not know	15
Did formally compare two or more theories in the same study	Yes	25
	No	116
	Do not know	8
Use risk perception as a variable to explain behaviour	Yes	97
	No	32
	Do not know	20

Elements captured with the risk perception questions

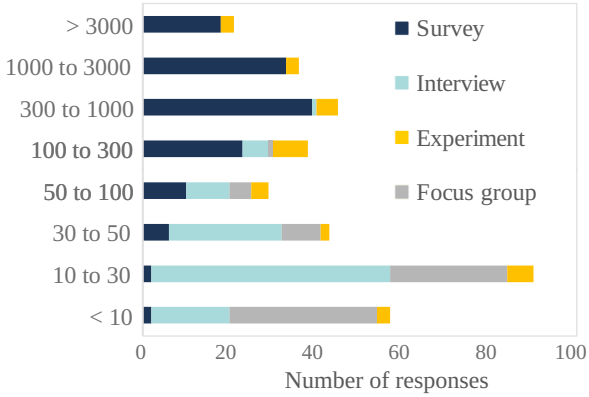


The Risk-SoS preliminary results are for the very first time mapping the theories, methods, questions, variables used by the community as well as shedding light on the diversity of the risk perception and behaviour research community and the variety of context and case studies.

Methods used



Maximal sample size, number of interviews or respondends



How was the sample size chosen	Timing constraint	76
	Funding constraint	68
	Statistical power testing	58
	Previous experience	47
	From the literature	40
	Ad hoc or empirical sample	40
	Comparison with other studies	31
	Other	9
	Do not know	3
Preferred method of adminis-tering studies before Covid-19	Face-to-face	97
	Online survey	61
	Focus groups, workshops	45
	Phone, call, telco	25
	Email	19
	Mail, mailbox	15
	Collective interviews	15
	Lab experiment	12
	Video or audio self-recording	7
	Do not know	6
	Other	4
Have compared the results of own studies on risk perception with the data from others	From published review studies	88
	From published tables and results of specific studies	52
	No specific comparison	36
	From discussion with the authors of published studies	36
	From published supplementary or additional data	15
	From requesting the data, answers, questionnaires	15
	Other	8
	Performing replication, repeata-bility, or reproducibility studies	6
	Do not know	3
Types of hazards (only >5 are shown)	Floods	91
	Climate, climate change impacts	77
	Earthquakes, volcanos, landslides	39
	Storm, cyclones, weather events	37
	Drought, extreme temperatures	37
	Epidemics, pandemics	24
	Multiple hazards	32
	Pollution, environmental disasters	23
	Other	19
	Fires, wildfires	15
	Submersion, sea level rise	14
	Hazard agnostic, no specific haz.	12
	Industrial accidents	12
	Compounded, cascading events	9
	Terror, military, attacks	9
	Nuclear accidents	8
	Traffic and transport accidents	6

Most important explanatory variables (> 6 are shown)

	As 1st	As 2nd	As 3rd
Previous hazard experience	32	18	10
Education	13	13	9
Age	18	9	4
Gender	11	15	5
Vulnerability	5	9	13
Coping capacity	5	6	13
Social capital	4	10	5
Exposure to hazards	5	7	6
Anxiety, concerns, fears	5	6	5
Income	2	6	5
Livelihoods, occupation	3	2	7
Other	4	3	5
Family, household, composition	2	4	4
Resilience	1	4	5

Explanatory variables for cross-study comparability (> 6 are shown)

	As 1st	As 2nd	As 3rd
Do not know	53	55	54
Previous hazard experience	16	9	11
Education	11	8	9
Vulnerability	8	8	8
Coping capacity	2	6	16
Social capital	12	7	3
Exposure to hazards	3	7	10
Age	11	7	1
Gender	8	7	1
Livelihoods, occupation	6	6	3
Resilience	0	5	10
Family, household, composition	5	5	3
Anxiety, concerns, fears	1	4	5
Income	4	3	2
Insurance	4	2	2

Questions/themes for cross-study comparability (> 6 are shown)

	As 1st	As 2nd	As 3rd
Do not know	49	50	54
Awareness	24	7	3
Information, knowledge	13	14	6
Response, coping	1	7	20
Previous experience	13	8	5
Adaptive behaviour (actual)	7	5	13
Exposure (perceived)	8	9	2
Trust	7	5	4
Consequences, severity, impacts	4	6	3
Solidarity, social support	3	5	5
Exposure (actual)	3	4	5
Responsability	2	5	2
Fear	2	2	4
Frequency, probability	2	3	3
Worry	3	2	2
Efficacy (self)	2	3	2

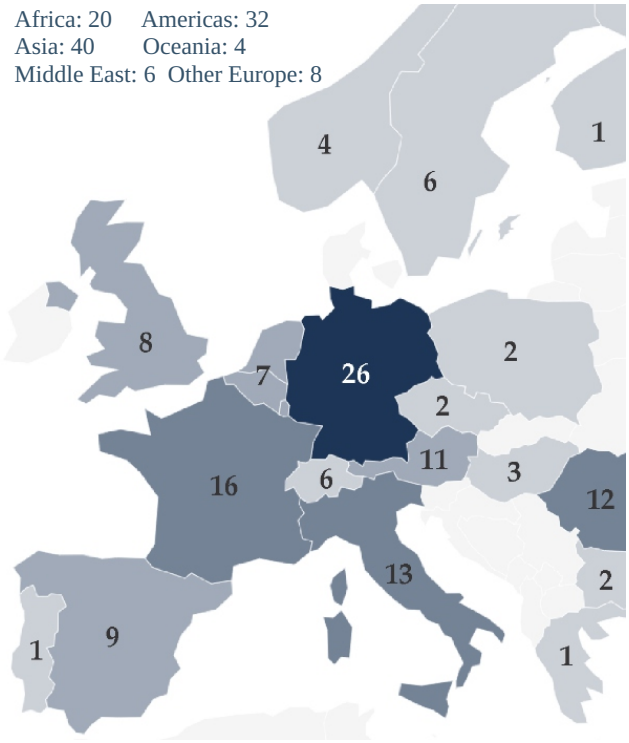
How were the interviews, questionnaires, focus groups designed?



Countries or regions studied

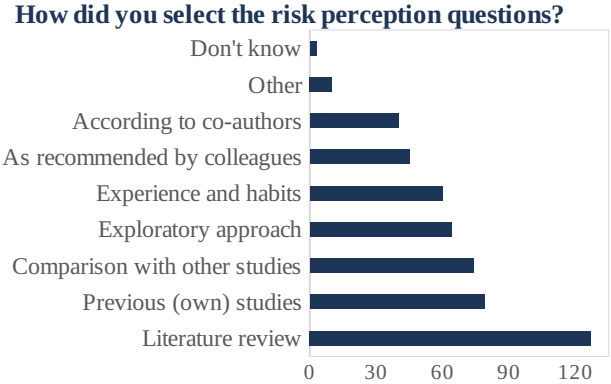
(only Europe is shown)

Africa: 20 Americas: 32
Asia: 40 Oceania: 4
Middle East: 6 Other Europe: 8

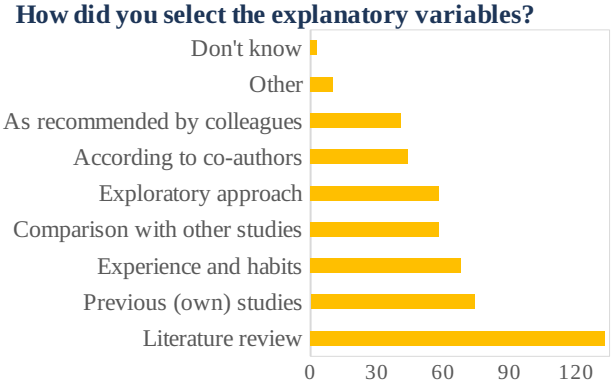


The objective is to co-produce with the community and respondents the analysis, identifying the common items allowing for comparability and long-term monitoring, publishing a list of shared questions, specifications, variables to include in future studies, aiming for the production of a common baseline, studying variations from one context to another, significantly improving our ability to work together, building cumulative policy-relevant actionable knowledge, robust evidence-based knowledge for action on risk perception, adaptive behaviour, resilience and adaptation. *This is an ongoing collective effort, we wish to thank all anonymous respondents*.

How did you select the risk perception questions?



How did you select the explanatory variables?





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