



## Ten expert views on the COVID-19 pandemic

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The COVID-19 pandemic poses severe challenges to many societies and affects the daily life of people worldwide for the foreseeable future. This editorial introduces a collection of ten short pieces written by experts and researchers from several European countries. The authors belong to a research consortium which aims to develop methods for making societies more resilient to disasters and crises and which started its joint activities before the COVID-19 pandemic evolved.

The collection starts with two papers that are particularly suitable for setting the frame—from individual citizens to authorities and policy-makers, from individual experiences of the COVID-19 pandemic to professional crisis management, from short-term actions to long-term preparedness:

The paper of *Panagiotis V. Katsikopoulos*, an expert in civil protection, highlights the particular characteristics of pandemic disasters compared to other types of disasters and stresses the importance of risk communication. He argues that pandemics may be the only type of disasters in which authorities take measures with the potential to decrease individual and community resilience in the future. *Mario Brito*, *Maxwell Chipulu*, *Ian G. Dawson*, *Yaniv Hanoch* and *Konstantinos V. Katsikopoulos*, starting with some personal narratives about the crisis, call for research to predict the effects of interventions on citizens, companies and society while, at the same time, questioning the pathways to policy-makers.

Next, this collection presents four papers, which focus on issues of information and communication in disasters from different angles:

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*Laura Macchi* stresses the role of communication for promoting an adequate perception of risk by individuals. She points out that in disaster situations, statistical and probabilistic data as well as warnings, suggestions and tips overwhelm citizens in order to affect their behaviour and that, at the same time, language style and other dimensions of communication are crucial for the absorption of information. Actually, in crises, also misinformation occur—may it be intentionally or not. *Stefan Rass* provides a set of valuable suggestions how to judge the quality of information in the internet. He puts particular emphasis on fake news, i.e., unverified and, may be, even unverifiable information which look trustworthy and follow a hidden agenda. *Stephan Leitner* places (mis-)information in a pandemic in a broader context, which lets him use the term “infodemics”. He argues that an infodemic may accompany and even enforce an acute pandemic due to complex social dynamics and claims to increase the preparedness of a society to deal with disasters, which, of course, is a long-term endeavour. This directs to the paper of *Laura Martignon, Shabnam Mousavi and Joachim Engel* who advocate forms of education that enforce the capability to absorb information and to unmask misinformation. They also stress that disaster situations per se are of a dynamic nature, which makes particular competencies to communicate and education to grasp dynamic information a necessity to increase a society’s resilience.

Disasters require decisions from particular experts, like in the COVID-19 pandemic, by physicians. *Riccardo Viale* focusses on the epistemic uncertainty in clinical decisions and the success and failures of decision-making heuristics. In particular, he studies recognition-based heuristics and one reason-based heuristics in COVID-19 related decision-making situations.

The last three papers in this collection address topics of coordination in a broader sense of meaning. At the levels of individual citizens, *Silvia Felletti* states that the commitment of individuals to means like “social distancing” reflect a public goods game or a social dilemma. She argues that the trust in others, i.e., that other members comply with the means, is a key element to increase individuals’ propensity to cooperate too; hence, authorities are advised to stress in their communication that most people are contributing to the actions. Taking a management control perspective, *Friederike Wall* also refers to public goods games and the problem of voluntary cooperation of individuals in “unpleasant” actions. She outlines that agent-based modelling may be powerful approach to predict the effects of actions at the collective’s level emerging from individuals’ behavior taking heterogeneity of risk perceptions, preferences or social norms of citizens into account. Finally, *Christian Wankmüller* highlights differences in measures taken in the countries of the European Union during the COVID-19 crisis. He finds that failures in coordination, insufficient communication and problems of resource handling appear to be recurrent issues in disaster management and stresses to role of academia in helping to overcome these problems.

We are convinced that research is a powerful mean to help making societies more resilient to disasters—while, at the same time, we hope that disasters as we all go through these days do not occur.