

## CONVERGE COVID-19 Working Groups for Public Health and Social Sciences Research

### Research Agenda-Setting Paper

*This paper was written to help advance convergence-oriented research in the hazards and disaster field. It highlights areas where additional research could contribute new knowledge to the response to and recovery from the pandemic and other disasters yet to come. Questions about the research topics and ethical and methodological issues highlighted here should be directed to the authors who contributed to this paper.*

#### Working Group Name:

Global Researchers' Network for COVID-19 – Research Agenda I

#### Working Group Description:

The Global Researchers' Network for COVID-19 focuses on identifying dynamic mechanisms operating during a global pandemic in spreading across communities, organizations, jurisdictions, sectors, and nations. It seeks to understand factors that build collective cognition of risk among whole communities, enabling coordinated action to control a pandemic. It also seeks to explore factors that inhibit such action. The group will model information flows that support or inhibit collective decision processes.

#### Priority Research Topics and Specific Research Questions:

Priority Research Topics	Potential Research Questions
<p>1. Research Coordination Network for COVID-19: <i>Proposal to the U.S. National Science Foundation for funding to support coordinating activities among a network of researchers from 13 nations: China, South Korea, Japan, Italy, Ireland, Turkey, United Arab Emirates, Mexico, United States, Canada, Portugal, India, New Zealand.</i></p>	<ul style="list-style-type: none"> <li>• How did cognition of risk differ among the 13 selected countries regarding COVID-19?</li> <li>• What factors linked cognition to collective action in each country?</li> <li>• What factors inhibited the transition to collective action and control in each country?</li> <li>• How could coordination by international bodies—EU Commission, WHO, UNDRR—strengthen global data collection, comparability by advising member states on protocols, measurement?</li> </ul>
<p>2. Countries in Crisis: Comparing COVID-19 Responses Globally. <i>Proposal for an edited book that would include chapters from researchers in the 13 countries listed in item 1.</i></p>	<ul style="list-style-type: none"> <li>• What can we learn from the COVID-19 experience to inform redesign of an improved global public health infrastructure?</li> <li>• To what extent has there been a global (and constituent local) learning process among nations?</li> <li>• What are the trade-offs between public health/economic costs/ public trust in decision making in response to COVID-19?</li> <li>• What role did technology play in facilitating/hindering communication at different phases of response operations?</li> </ul>

<p>3. Transition from Cognition to Collective Action in the COVID-19 Pandemic: Webinar, American Society of Public Administration (ASPA), Six panelists from Global Researchers' Network.</p>	<ul style="list-style-type: none"> <li>• When does collective cognition shift to collective action against a threat?</li> <li>• How does this shift differ among nations?</li> </ul>
<p>4. Implementation of Non-Pharmaceutical Pandemic Control Interventions: Differences between Developed and Developing Countries.</p>	<ul style="list-style-type: none"> <li>• What indicators are needed to identify a public health emergency by governments?</li> <li>• What level of integration in preparation and response exists within country, vertically and horizontally?</li> <li>• What role do indicators play in magnifying or reducing social awareness?</li> <li>• What prompts governments to implement non-pharmaceutical controls?</li> </ul>
<p>5. China's and the World's Response to COVID-19. Panel, <i>European Consortium for Political Research (ECPR)</i>: Five panelists from Global Researchers' Network.</p>	<ul style="list-style-type: none"> <li>• How did China organize a massive response to COVID-19 across multiple administrative levels?</li> <li>• How did different governance systems enable/hinder civil society from responding to the pandemic?</li> <li>• How was policy designed for interorganizational collaboration to respond to the COVID-19 crisis?</li> <li>• At what points did collaboration fail in practice?</li> </ul>
<p>6. Differences in policy implementation among sub-national administrative units: States/regions/provinces/prefectures/municipalities</p>	<ul style="list-style-type: none"> <li>• What drivers of collaborative governance are unique to global pandemics?</li> <li>• What properties and patterns of tie formation do policy networks use to address the pandemic?</li> <li>• What mechanisms do policy networks implement to produce substantive outcomes at the individual, organizational, and community level?</li> </ul>
<p>7. Cognition and Disaster Risk Governance in COVID-19 Prevention and Response: A Review of Reported Experiences from the United Arab Emirates</p>	<ul style="list-style-type: none"> <li>• What are the costs of a reactive approach to the pandemic?</li> <li>• What types of information elicit governmental response to risk?</li> </ul>
<p>8. Nonprofit Organizations Redefine Their Role in a Pandemic</p>	<ul style="list-style-type: none"> <li>• Who do nonprofit organizations serve when everyone is at risk?</li> </ul>
<p>9. Data Collection, Analysis, and Modeling of Pandemic Risk</p>	<ul style="list-style-type: none"> <li>• What kinds of data, analytics, and modeling are used to support decision making by policy makers, citizens?</li> </ul>

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### **Ethical / Methodological Considerations:**

#### *Ethical Considerations:*

(1) Develop responsible partnerships with international researcher and research centers to ensure equitable data exchange and research credit; (2) Establish systematic capacity to update information and check data in changing operational environments; (3) Revise inferences based on updated, more complete information; and (4) Conduct interviews in a trauma-informed manner, sensitive to human loss.

#### *Methodological Considerations:*

(1) Use digital data where possible, but check sources for validity, reliability; (2) Make assumptions underlying study explicit; (3) Identify limitations of studies; (4) Establish a review panel to check inferences; (5) Use a mix of methods to provide qualitative and quantitative assessments of social interactions and networks.

### *Implementation Considerations:*

(1) Design study for potential impact on global public health infrastructure; (2) Examine interdependencies between international development and inter-organizational communications infrastructures to anticipate, identify, and treat public health threats; and (3) Review capacity of international agencies to strengthen public health education, practice, and learning in the developed and developing world.

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### **Other Frameworks, Considerations for Collaboration, and/or Resources:**

#### *Reference:*

Comfort, L.K. 2007. Crisis management in hindsight: Cognition, communication, coordination, and control. *Public Administration Review*, 67, 189-197.

#### *Research Proposals Submitted and Under Review:*

1. *Pan-European multiscale and multisectorial guidance to foster adaptive management and resilient responses to pandemic outbreaks impacts (ENLIVEN)*. European Commission. SC1-PHE-CORONAVIRUS-2020-2C. PI: S. Menoni, Milano Politecnico. Link to Global Researchers' Network.
2. *Differential Effects of COVID-19 on Interpersonal Networks in Turkey*. AXA Research Fund. PI: G. Ertan, Koc University, Turkey. <https://www.axa-research.org/en/page/call-for-proposals-mitigating-risk-in-the-wake-of-the-covid-19-pandemic>
3. *Transition from Cognition to Collective Action: A Comparative Analysis of Response to COVID-19 between S. Korea and the U.S.* SSRC Rapid-Response Research Grants 2020. PI: L Comfort, University of Pittsburgh. SSRC-3227. [covidresearch@ssrc.org](mailto:covidresearch@ssrc.org)

#### *Publications Accepted:*

4. **PAR Viewpoint.** *Crisis Decision Making on a Global Scale: Transition from Cognition to Collective Action under Threat of COVID-19*. L. Comfort, N. Kapucu, K. Ko, S. Menoni, M. Siciliano. 30-5-20. <https://onlinelibrary.wiley.com/doi/abs/10.1111/puar.13252?campaign=wolacceptedarticle>
5. **PAR Viewpoint.** *Hybrid Coordination for Coping with the Medical Surge from the COVID-19 Pandemic: Paired Assistance Programs in China*. Q. Hu, H. Zhang, N. Kapucu, W. Chen. 30-5-20. <https://onlinelibrary.wiley.com/doi/abs/10.1111/puar.13253?campaign=wolacceptedarticle>
6. **American Review of Public Administration.** Li, Y., Chandra, Y., & Kapucu, N. (2020). *Crisis Coordination and the Role of Social Media in Response to COVID-19 in Wuhan, China*.

#### *Manuscript Under Review:*

7. Ko, Kilkon. *Is the Travel Ban a Necessary Option for Fighting COVID-19? Experience From Korea*. **Natural Hazards Review**.

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