

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:

COVID-19 Communication Ecologies: Interpersonal, Familial, and Organizational Information Sources

Working Group Description:

COVID-19 Communication Ecologies include the local, state, national, and international communication resources that individuals use to understand and cope with the COVID-19 pandemic. COVID-19 communication resources can include family and friends, local organizations, news organizations, and government agencies. This Working Group examines the structure of COVID-19 communication ecologies to understand how different ecologies influence COVID-19 risk perceptions and protective actions, physical and mental health, and social connections.

Priority Research Topics and Specific Research Questions:

| Priority Research Topics | Potential Research Questions |
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| 1. Construction of COVID-19 Communication Ecologies <ul style="list-style-type: none"> • Structure (resources, clusters) • Effects (knowledge, attitudes, behavior) • Messages • Time | <ul style="list-style-type: none"> • <u>Research Question 1</u>: How do individuals construct a COVID-19 communication ecology (i.e., the network of different communication resources used to cope with COVID-19)? • <u>Research Question 2</u>: What communication resources are most tightly clustered (and thus used together) in a COVID-19 communication ecology? • <u>Research Question 3</u>: How is the use of a COVID-19 communication ecology associated with COVID-19 risk perceptions, protective behaviors, and coping? • <u>Research Question 4</u>: What COVID-19 (individual, organizational, governmental) messages, information, and opinion circulate in COVID-19 communication ecologies? • <u>Research Question 5</u>: How do COVID-19 communication ecologies compare across different stages of the COVID-19 pandemic (pre-peak, peak, post-peak, second wave, long-term recovery)? |

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| <p>2. Social Vulnerability</p> <ul style="list-style-type: none"> • Gender • Race • Age (children, elderly) • Disability • Income • Migration Status • Institutionally Bound (e.g., persons who are incarcerated, in a long-term care facility, or other institutions) • Intimate Partner Violence | <ul style="list-style-type: none"> • <u>Research Question 1</u>: How do COVID-19 communication ecologies vary for different groups and their intersectional characteristics, for example, on the basis of gender, race, age, disability, income, institutionally bound, migration status? • <u>Research Question 2</u>: What factors constrain or facilitate the inclusion of different communication resources in a COVID-19 communication ecology for different groups? • <u>Research Question 3</u>: How is the use of COVID-19 communication ecologies related to COVID-19 protective behaviors and coping for different groups? • <u>Research Question 4</u>: How do individual capacity and means to take protective behaviors (e.g., socially distance, wear PPE) affect COVID-19 communication ecology use? • <u>Research Question 5</u>: Do COVID-19 communication ecologies provide resources or supports for individuals experiencing intimate partner violence (IPV)? How do any IPV resources or support affect behavior? |
| <p>3. COVID-19 and Compounding Disasters and Resilience</p> <ul style="list-style-type: none"> • Existing and Ongoing Disasters and Crises (e.g., acute and slow-moving disasters such as racism, police violence, climate change) • Future Disasters and Hazards (e.g., wildfires, hurricanes) • Compound and Cascading Effects • Community Capacity and Resilience | <ul style="list-style-type: none"> • <u>Research Question 1</u>: How does prior individual or community experience with a disaster or public health crisis influence a COVID-19 communication ecology? • <u>Research Question 2</u>: How are COVID-19 and Black Lives Matter and/or climate change communication ecologies related/connected? • <u>Research Question 3</u>: How are COVID-19 communication ecologies utilized for other co-occurring emergent events (e.g., a hurricane or other disaster)? • <u>Research Question 4</u>: How is resilience to compounding disasters fostered via communication ecologies? |
| <p>4. Culture</p> <ul style="list-style-type: none"> • Individual vs. Collectivistic • Rural vs. Urban vs. Suburban • Religion • Race • Economic Ideology (e.g., emphasis on profits, productivity) • Power Dimensions • Level of Social Interconnectedness and/or Division | <ul style="list-style-type: none"> • <u>Research Question 1</u>: How do cultural values (listed to the left) affect the construction of COVID-19 communication ecologies? • <u>Research Question 2</u>: What cultural COVID-19 messages, information, and opinion circulate in COVID-19 communication ecologies? • <u>Research Question 3</u>: How culturally competent are COVID-19 communication ecologies? • <u>Research Question 4</u>: How do COVID-19 communication ecologies compare across different regional/national contexts? |

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| <p>5. Misinformation, Uncertainty, Consistency, Trust, Politics, Science Communication</p> <ul style="list-style-type: none"> • Information Verification (e.g., by citizens, journalists, scientists) • Interactions between Scientists, Media, and the Public • Information Correction, Updating • Rumors, conspiracy theories, disinformation, misinformation, fake news | <ul style="list-style-type: none"> • <u>Research Question 1</u>: How does misinformation spread in COVID-19 communication ecologies? What is the structure (and power centers) of “misinformation” COVID-19 communication ecologies? How is misinformation corrected in a COVID-19 communication ecology? • <u>Research Question 2</u>: How does COVID-19 uncertainty influence the construction of COVID-19 communication ecologies? How do COVID-19 communication ecologies in turn influence COVID-19 uncertainty? • <u>Research Question 3</u>: How do community members, journalists, scientists, and government officials interact in a COVID-19 communication ecology to share and verify information and express opinions, beliefs, and values? • <u>Research Question 4</u>: How do COVID-19 communication ecologies affect trust, including, for example, social trust, trust in science, trust of public officials, etc.? • <u>Research Question 5</u>: How are COVID-19 and political communication ecologies related/connected? |
| <p>6. Government/Public Sector</p> <ul style="list-style-type: none"> • Intergovernmental communication and collaboration • State and federal government • Public sectors • Private/public • Government and NGO • Leadership | <ul style="list-style-type: none"> • <u>Research Question 1</u>: What government/public sector communication resources are included in COVID-19 communication ecologies? • <u>Research Question 2</u>: How does government/public sector messaging circulate in a COVID-19 communication ecology? How is this messaging consistent/inconsistent? How is conflicting government/public sector messaging handled in a COVID-19 communication ecology? What are the effects of this messaging? • <u>Research Question 3</u>: Does government/public sector leadership bias related to gender, race or ethnicity affect the role of government/public sector communication resources in a COVID-19 communication ecology? |
| <p>7. Organizational Communication</p> <ul style="list-style-type: none"> • Audiences • Organizational messages • Org to Org Communication • Org to Public Communication • Public Relations • Culture | <ul style="list-style-type: none"> • <u>Research Question 1</u>: What organizational communication resources are included in COVID-19 communication ecologies? • <u>Research Question 2</u>: How do organizational leaders think about the role of their organization and organizational messaging in a COVID-19 communication ecology? What are the goals of organizational COVID-19 communication? • <u>Research Question 3</u>: How does organizational messaging circulate in a COVID-19 communication ecology? • <u>Research Question 4</u>: How is this messaging consistent/inconsistent? How is conflicting organizational messaging handled in a COVID-19 communication ecology? • <u>Research Question 5</u>: What are the effects of this messaging? |
| <p>8. Interpersonal</p> <ul style="list-style-type: none"> • Roles • Family • Social support • Social capital (bonding, bridging, linking) • Coping (problem and emotion) | <ul style="list-style-type: none"> • <u>Research Question 1</u>: What interpersonal communication resources are included in COVID-19 communication ecologies? • <u>Research Question 2</u>: How does social capital influence the construction of COVID-19 communication ecologies? • <u>Research Question 3</u>: How does family communication impact the construction of COVID-19 communication ecologies? |

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| | <ul style="list-style-type: none">• <u>Research Question 4</u>: What types of crisis narratives about the pandemic are shared across family, friends, and neighbors?• <u>Research Question 5</u>: How do individuals use interpersonal disaster communication to make sense of COVID-19 and COVID-19 media coverage? |
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Ethical / Methodological Considerations:

Ethical Considerations: COVID-19 Communication Ecology researchers must consider whether our research is creating a burden for individuals, families, systems, and communities responding to and coping with COVID-19. Researchers should develop plans to address any mental health reactions that arise related to research. This research also has a potential to foster coping or offer some therapeutic benefit to participants. Researchers should debrief participants when appropriate (e.g., following a COVID-19 communication experiment) and provide information about community resources relevant to the research topic (e.g., links to sources of verified COVID-19 information).

Online COVID-19 Communication Ecology research may not reach all groups equally. Disparities in online access could exist for lower income or rural groups, for example. Online research can also present challenges for data security and getting participant consent (e.g., what is valid consent in an online research interaction?). When COVID-19 Communication Ecology research is conducted in-person, researchers must ensure those interactions are safe for participants and researchers (e.g., social distancing and mask use should be utilized when appropriate).

As COVID-19 Communication Ecology researchers, we must be aware of biases toward conducting research with English speaking populations, and/or in the U.S. or with other Western cultures. When conducting research on social vulnerabilities and COVID-19 Communication Ecologies, we should engage groups and communities and partner/collaborate with them in the developing and implementing the research and disseminating the results.

Methodological Approaches and Considerations: Given the broad nature of COVID-19 Communication Ecologies, a variety of research methods may be useful. These include surveys, experiments, semi-structured interviews, focus groups, content analysis, big data analysis (of social media or online search data), social network analysis, and other network analyses. Data may be conducted online, in-person, or with existing data (e.g., social media posts).

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

Communication and Social Ecology Visualizations

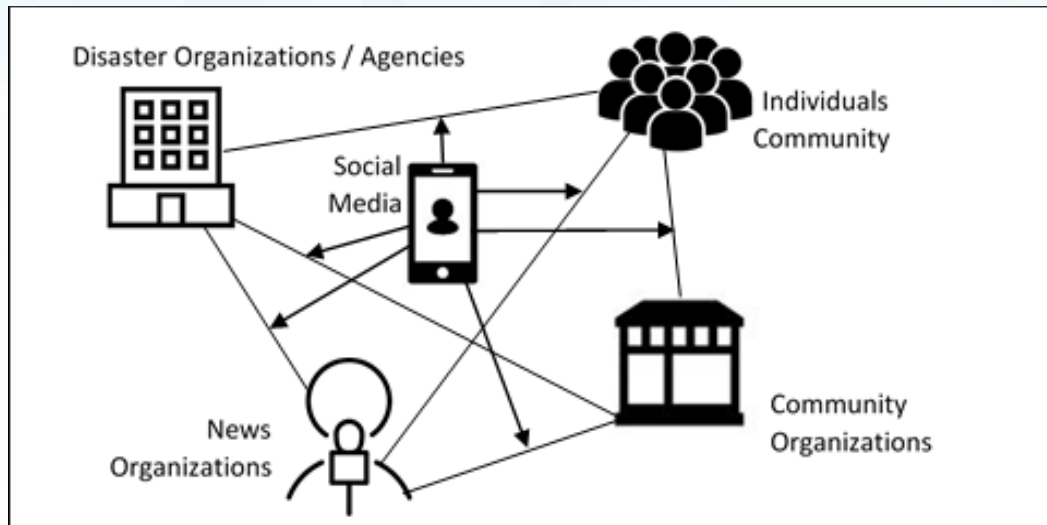


Figure 1. Disaster (Social Media) Communication Ecology (Houston, 2019)

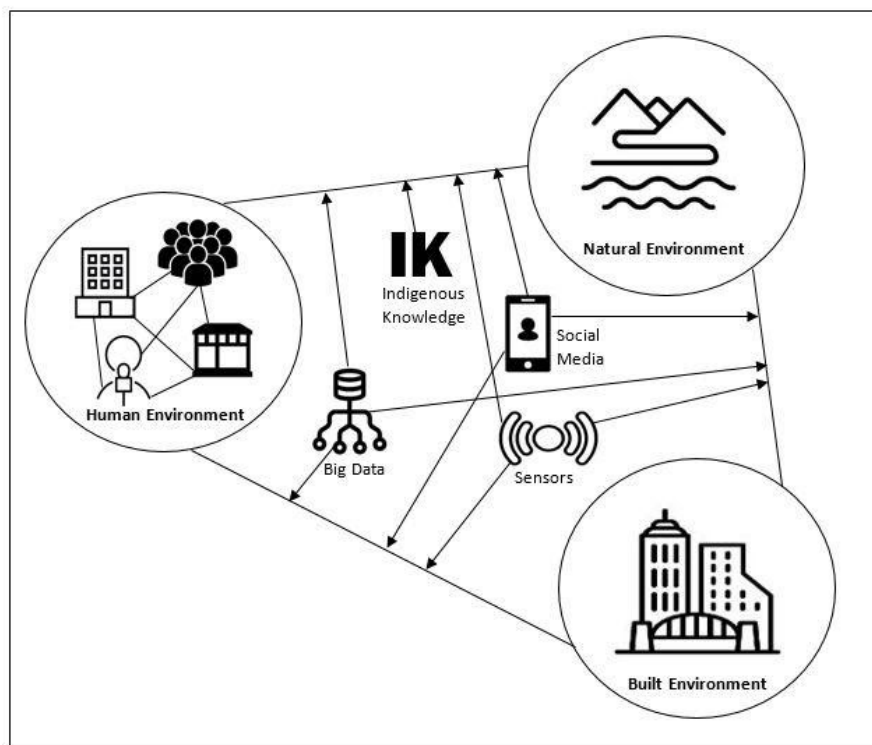


Figure 2. Converged Disaster Communication Ecology (Houston, 2019)

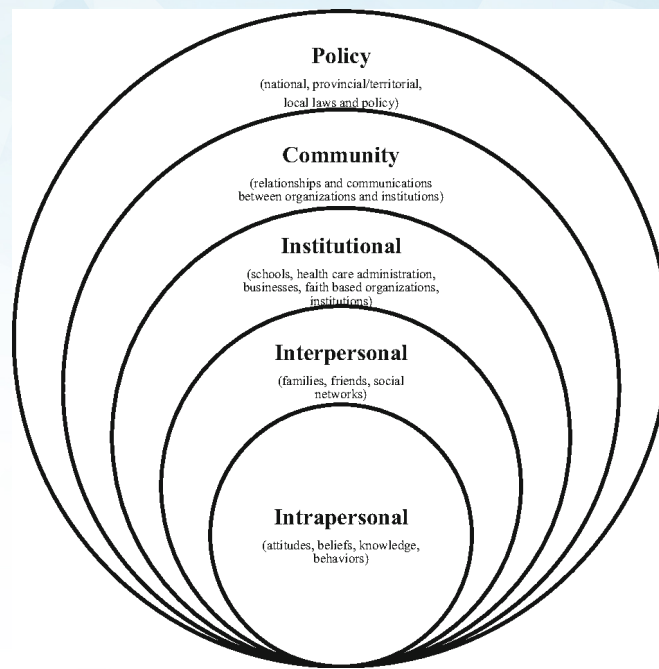


Fig. 3 The Social Ecological Model. Source. Adapted from the Centers for Disease Control and Prevention (CDC), The Social Ecological Model, <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/health-equity/framing-the-issue.html>. (Retrieved December 13, 2016)

Recommended Readings

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This COVID-19 Working Group effort was supported by the National Science Foundation-funded Social Science Extreme Events Research (SSEER) network and the CONVERGE facility at the Natural Hazards Center at the University of Colorado Boulder (NSF Award #1841338). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the NSF, SSEER, or CONVERGE.