Social Science Fridays

RAPID Facility Resources to Support Social Science Extreme Events Research

HAZARDS.COLORADO.EDU

NSF

NATURAL HAZARDS CENTER

CONVERGE

NHERI

SSEER

SOCIAL SCIENCE EXTREME EVENTS RESEARCH

SSEER
SOCIAL SCIENCE EXTREME EVENTS RESEARCH

SSEER is a **global network** of 1,400+ social scientists who study hazards and disasters. It seeks to **advance scholarship** on the root causes and human consequences of extreme events by coordinating social science research teams in large-scale disasters. Among other resources, SSEER issues an **annual census** report on the state of the social science workforce and maintains an **interactive map** of its researchers.

HAZARDS.COLORADO.EDU

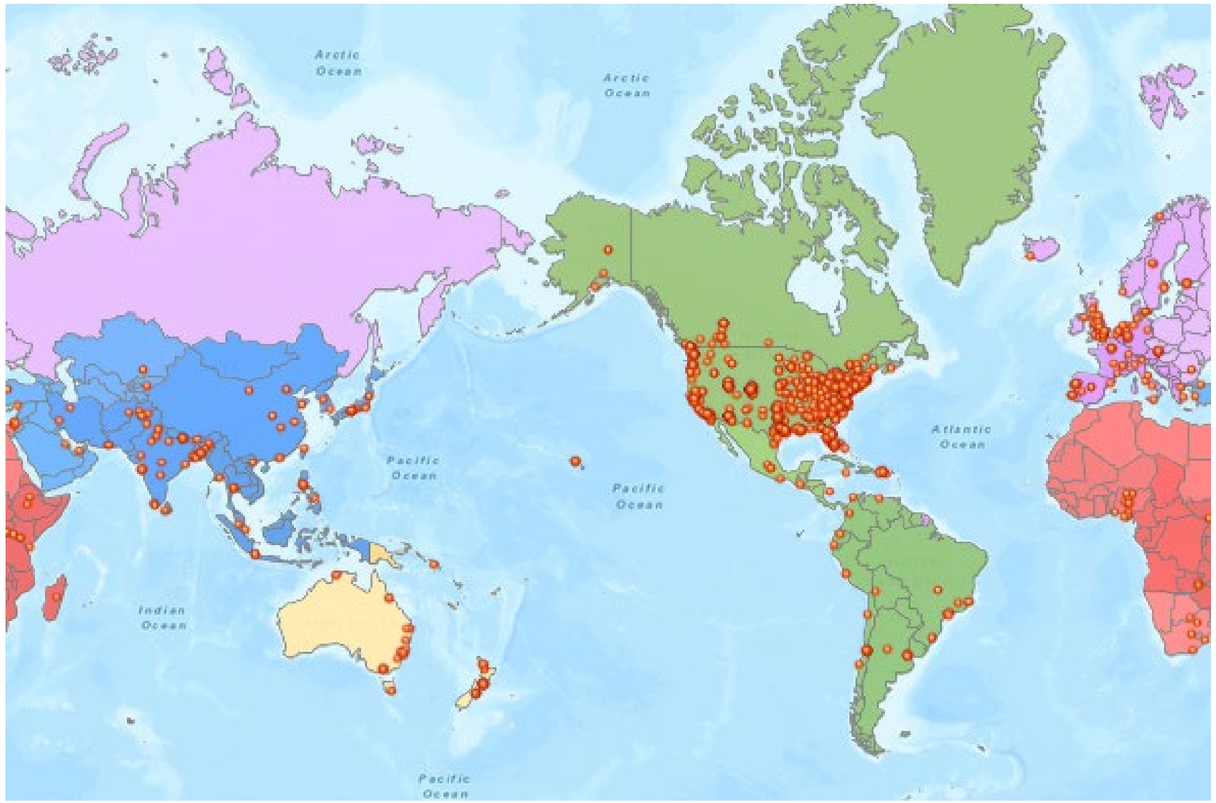
NSF

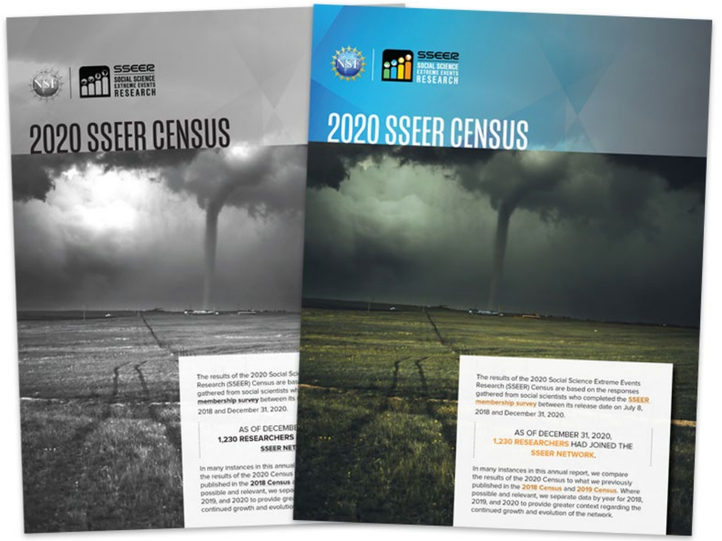
NATURAL HAZARDS CENTER

CONVERGE NHERI

SSEER SOCIAL SCIENCE EXTREME EVENTS RESEARCH

Join the **Social Science Extreme Events Research** (SSEER) Network



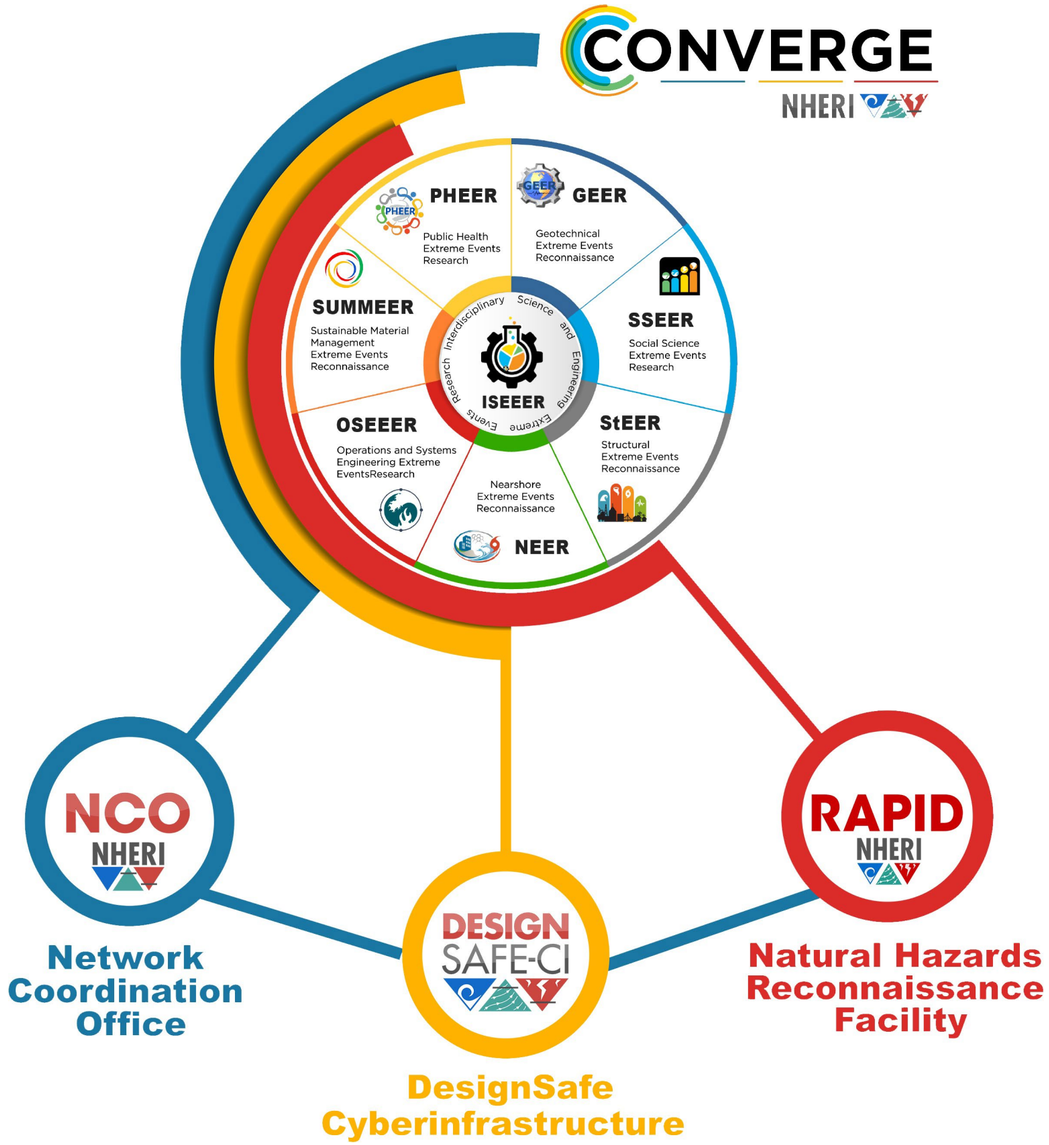


National Science Foundation Award #1841338

converge.colorado.edu/research-networks/sseer

HAZARDS.COLORADO.EDU

CONVERGE Research Networks



The 8 NSF-funded Extreme Events Research/Reconnaissance (EER) networks **bring together natural hazards researchers** across disciplinary boundaries and **connect research teams to shared use facilities and resources**.

RAPID Facility Resources to Support Social Science Extreme Events Research

Nicole Errett, PhD, MSPH
University of Washington

Jamie Vickery, PhD
University of Washington

https://converge.colorado.edu/social-science-fridays/rapid-facility-resources-to-support-social-science-extreme-events-research/

HAZARDS.COLORADO.EDU

CONVERGE Resources

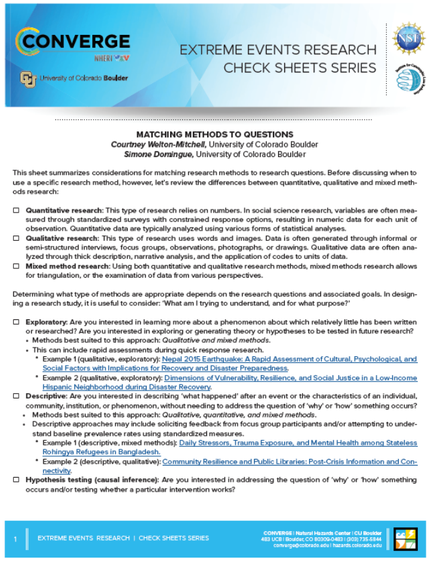
Reciprocity in Hazards and Disaster Research

This Training Module focuses on the reciprocal relationship between researchers and disaster affected communities, with an emphasis on providing mutual benefits for both the people involved with and affected by hazards, as well as those participating in disaster research.

Release Date: November 2021

Authors: West, Jocelyn, Heather Champeau, Jessica Austin, Candace M. Evans, Rachel M. Adams, and Lori Peek

Funding Support: U.S. Geological Survey and National Science Foundation


CONVERGE NHERI University of Colorado Boulder

EXTREME EVENTS RESEARCH CHECK SHEETS SERIES

MATCHING METHODS TO QUESTIONS

Courtney Welton-Mitchell, University of Colorado Boulder
Simone Domingue, University of Colorado Boulder

This sheet summarizes considerations for matching research methods to research questions. Before discussing when to use a specific research method, however, let's review the differences between quantitative, qualitative and mixed methods research:

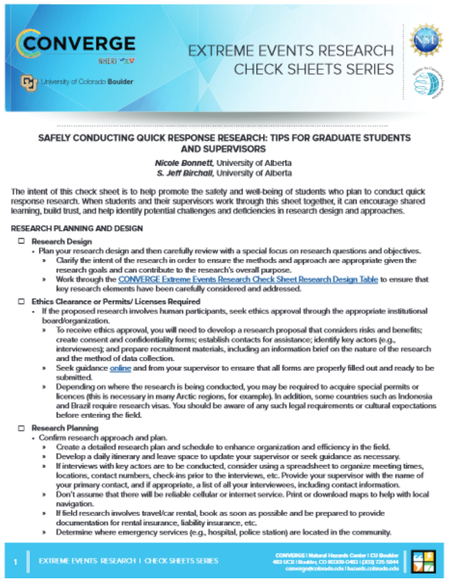
- ☐ **Quantitative research:** This type of research relies on numbers. In social science research, variables are often measured through standardized surveys with constrained response options, resulting in numeric data for each unit of observation. Quantitative data are typically analyzed using various forms of statistical analyses.
- ☐ **Qualitative research:** This type of research uses words and images. Data is often generated through informal or semi-structured interviews, focus groups, observations, photographs, or drawings. Qualitative data are often analyzed through thick description, narrative analysis, and the application of codes to units of data.
- ☐ **Mixed method research:** Using both quantitative and qualitative research methods, mixed methods research allows for triangulation, or the examination of data from various perspectives.

Determining what type of methods are appropriate depends on the research questions and associated goals. In designing a research study, it is useful to consider: 'What am I trying to understand, and for what purpose?'

- ☐ **Exploratory:** Are you interested in learning more about a phenomenon about which relatively little has been written or researched? Are you interested in exploring or generating theory or hypotheses to be tested in future research?
  - Methods best suited to this approach: *Qualitative and mixed methods.*
  - This can include rapid assessments during quick response research.
    - Example 1 (qualitative, exploratory): Nepal 2015 Earthquake: A Rapid Assessment of Cultural, Psychological, and Social Factors with Implications for Recovery and Disaster Preparedness.
    - Example 2 (qualitative, exploratory): Dimensions of Vulnerability, Resilience, and Social Justice in a Low-Income Hispanic Neighborhood during Disaster Recovery.
- ☐ **Descriptive:** Are you interested in describing 'what happened' after an event or the characteristics of an individual, community, institution, or phenomenon, without needing to address the question of 'why' or 'how' something occurs?
  - Methods best suited to this approach: *Qualitative, quantitative, and mixed methods.*
  - Descriptive approaches may include soliciting feedback from focus group participants and/or attempting to understand baseline prevalence rates using standardized measures.
    - Example 1 (descriptive, mixed methods): Daily Stressors, Trauma Exposure, and Mental Health among Stateless Rohingya Refugees in Bangladesh.
    - Example 2 (descriptive, qualitative): Community Resilience and Public Libraries: Post-Crisis Information and Connectivity.
- ☐ **Hypothesis testing (causal inference):** Are you interested in addressing the question of 'why' or 'how' something occurs and/or testing whether a particular intervention works?

1 | EXTREME EVENTS RESEARCH | CHECK SHEETS SERIES

CONVERGE | Natural Hazards Center | CU Boulder
483 UCB | Boulder, CO 80309-0483 | (303) 735-5844
converge@colorado.edu | hazards.colorado.edu


CONVERGE NHERI University of Colorado Boulder

EXTREME EVENTS RESEARCH CHECK SHEETS SERIES

SAFELY CONDUCTING QUICK RESPONSE RESEARCH: TIPS FOR GRADUATE STUDENTS AND SUPERVISORS

Nicole Bonnett, University of Alberta
S. Jeff Birchall, University of Alberta

The intent of this check sheet is to help promote the safety and well-being of students who plan to conduct quick response research. When students and their supervisors work through this sheet together, it can encourage shared learning, build trust, and help identify potential challenges and deficiencies in research design and approaches.

RESEARCH PLANNING AND DESIGN

- ☐ **Research Design**
  - Plan your research design and then carefully review with a special focus on research questions and objectives.
    - Clarify the intent of the research in order to ensure the methods and approach are appropriate given the research goals and can contribute to the research's overall purpose.
    - Work through the CONVERGE Extreme Events Research Check Sheet Research Design Table to ensure that key research elements have been carefully considered and addressed.
- ☐ **Ethics Clearance or Permits/ Licenses Required**
  - If the proposed research involves human participants, seek ethics approval through the appropriate institutional board/organization.
    - To receive ethics approval, you will need to develop a research proposal that considers risks and benefits; create consent and confidentiality forms; establish contacts for assistance; identify key actors (e.g., interviewees); and prepare recruitment materials, including an information brief on the nature of the research and the method of data collection.
    - Seek guidance online and from your supervisor to ensure that all forms are properly filled out and ready to be submitted.
    - Depending on where the research is being conducted, you may be required to acquire special permits or licences (this is necessary in many Arctic regions, for example). In addition, some countries such as Indonesia and Brazil require research visas. You should be aware of any such legal requirements or cultural expectations before entering the field.
- ☐ **Research Planning**
  - Confirm research approach and plan.
    - Create a detailed research plan and schedule to enhance organization and efficiency in the field.
    - Develop a daily itinerary and leave space to update your supervisor or seek guidance as necessary.
    - If interviews with key actors are to be conducted, consider using a spreadsheet to organize meeting times, locations, contact numbers, check-ins prior to the interviews, etc. Provide your supervisor with the name of your primary contact, and if appropriate, a list of all your interviewees, including contact information.
    - Don't assume that there will be reliable cellular or internet service. Print or download maps to help with local navigation.
    - If field research involves travel/car rental, book as soon as possible and be prepared to provide documentation for rental insurance, liability insurance, etc.
    - Determine where emergency services (e.g., hospital, police station) are located in the community.

1 | EXTREME EVENTS RESEARCH | CHECK SHEETS SERIES

CONVERGE | Natural Hazards Center | CU Boulder
483 UCB | Boulder, CO 80309-0483 | (303) 735-5844
converge@colorado.edu | hazards.colorado.edu

Our training modules, extreme events research check sheets, and other resources accelerate the education and mentoring of a diverse next generation of researchers

HAZARDS.COLORADO.EDU

NSF NATURAL HAZARDS CENTER CONVERGE NHERI SSEER SOCIAL SCIENCE EXTREME EVENTS RESEARCH

CONVERGE

NHERI

CONVERGE Training Modules

Welcome to the CONVERGE Training Modules!

Each module takes 30-60 minutes to complete and features specific learning objectives and detailed lesson plans along with resources for further reading, analysis, and exploration. At the close of the module, you will have the opportunity to take a 10-question quiz. If you get 8 out of 10 questions correct, you will receive a Certificate of Completion for each module. Each completed CONVERGE Training Module is worth one contact hour of general management training through the International Association of Emergency Managers (IAEM) certification program.

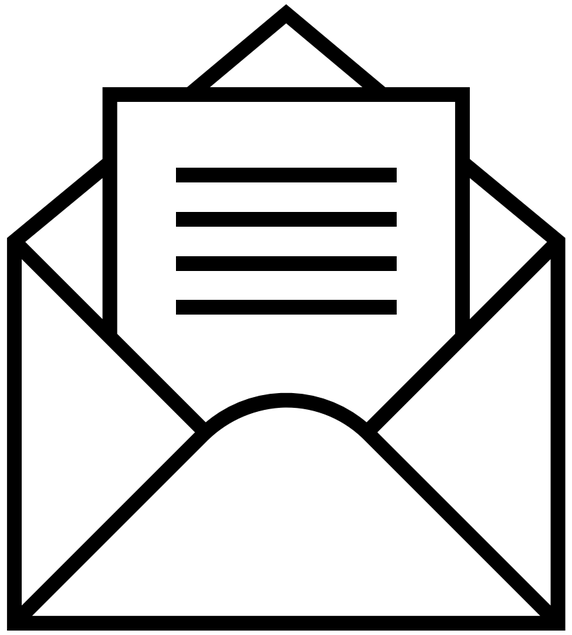
https://converge-training.colorado.edu/modules/

- Broader Ethical Considerations for Hazards and Disaster Researchers
- Collecting and Sharing Perishable Data
- Conducting Emotionally Challenging Research
- Cultural Competence in Hazards and Disaster Research
- Disaster Mental Health
- Institutional Review Board (IRB) Procedures and Extreme Events Research
- Public Health Implications of Hazards and Disaster Research
- Reciprocity in Hazards and Disaster Research
- Social Vulnerability and Disasters
- Understanding and Ending Gender-Based Violence in Fieldwork

Visit the Natural Hazards Center website to subscribe to updates!

HAZARDS.COLORADO.EDU

HAZARDS.COLORADO.EDU



Subscribe to CONVERGE News Updates

converge.colorado.edu/signup

converge.colorado.edu

HAZARDS.COLORADO.EDU