

# CONVERGE Training Modules, Check Sheets, and Other Resources

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Natural Hazards Center



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CONVERGE offers  
free **resources** to help  
train a diverse **next-**  
**generation** of the  
**interdisciplinary**  
**hazards and disaster**  
**workforce.**

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# CONVERGE Training Modules

The CONVERGE Training Modules are free, interactive, online trainings designed for students, early career professionals, and others who are new to hazards and disaster research and practice. They incorporate an all-hazards approach grounded in cutting edge research from the social sciences, public health, engineering, and other disciplines. Each module features:

- Learning objectives
- Lesson plans
- Case studies
- A list of additional resources
- A final quiz worth **one contact hour** of general management training through the International Association of Emergency Managers (IAEM) certification program.



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# Available Training Modules

- Since July 2019, there have been:
- 11 Training Modules released
- 8012 registrants
- 10,005 module completions

[converge.colorado.edu/resources/training-modules/](https://converge.colorado.edu/resources/training-modules/)

			
<b>Broader Ethical Considerations</b>	<b>Collecting and Sharing Perishable Data</b>	<b>Cultural Competence</b>	<b>Disaster Mental Health</b>
			
<b>Emotionally Challenging Research</b>	<b>Gender-Based Violence in Fieldwork</b>	<b>Institutional Board Procedures</b>	<b>Public Health Implications</b>
			
<b>Reciprocity in Research</b>	<b>Social Vulnerability and Disasters</b>	<b>Positionality</b>	<b>Indigenous Sovereignty (forthcoming)</b>



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## Training Modules

Shared Themes



### Foundational Training Module Topics

- Institutional Review Board (IRB) Procedures and Extreme Events Research
- Conducting Emotionally Challenging Research
- Cultural Competence
- Collecting and Sharing Perishable Data
- Social Vulnerability and Disasters
- Disaster Mental Health

### Advanced Training Module Topics

- Broader Ethical Considerations
- Positionality
- Reciprocity
- Understanding and Ending Gender-Based Violence in Fieldwork
- Public Health Implications of Hazards and Disaster Research






# Annotated Bibliographies

We offer annotated bibliographies that summarize the various readings that informed the development of the CONVERGE Training Modules. If you have a reading to contribute as a shared resource for our broader community, please contact us at [converge@colorado.edu](mailto:converge@colorado.edu).

- 📄 CONVERGE Cultural Competence Annotated Bibliography
- 📄 CONVERGE Disaster Mental Health Annotated Bibliography
- 📄 CONVERGE Emotionally Challenging Research Annotated Bibliography
- 📄 CONVERGE Ethics and Disaster Research Annotated Bibliography
- 📄 CONVERGE Gender-Based Violence in Fieldwork Annotated Bibliography
- 📄 CONVERGE Institutional Review Board Annotated Bibliography
- 📄 CONVERGE Perishable Data Annotated Bibliography
- 📄 CONVERGE Positionality in Hazards and Disaster Research and Practice Annotated Bibliography
- 📄 CONVERGE Public Health and Disaster Research Annotated Bibliography
- 📄 CONVERGE Reciprocity in Research Annotated Bibliography
- 📄 CONVERGE Social Vulnerability and Disasters Annotated Bibliography

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CONVERGE TRAINING MODULES  
ANNOTATED BIBLIOGRAPHY

**CONVERGE Ethics and Disaster Research Annotated Bibliography**

This annotated bibliography includes resources focused on the ethical conduct of hazards and disaster research. This bibliography is meant to support those interested in learning more about the ethical conduct of research and to complement the [CONVERGE Broader Ethical Considerations for Hazards and Disaster Researchers Training Module](#). These references were compiled through searching Web of Science, PubMed, and Google Scholar databases. If you identify missing references, please send them to [converge@colorado.edu](mailto:converge@colorado.edu), and we will add them to the list.

**Citation**

Agee, J. (2009). Developing qualitative research questions: A reflective process. *International Journal of Qualitative Studies in Education*, 22(4), 431-447. <https://doi.org/10.1080/09518390902736512>

**Abstract**

The reflective and interrogative processes required for developing effective qualitative research questions can give shape and direction to a study in ways that are often underestimated. Good research questions do not necessarily produce good research, but poorly conceived or constructed questions will likely create problems that affect all subsequent stages of a study. In qualitative studies, the ongoing process of questioning is an integral part of understanding the unfolding lives and perspectives of others. This article addresses both the development of initial research questions and how the processes of generating and refining questions are critical to the shaping of a qualitative study.

**Citation**

Baker, L. R., & Cormier, L. A. (2014). *Disasters and vulnerable populations: Evidence-based practice for the helping professions*. Springer Publishing Company.


**Abstract**

Vulnerable populations such as children, older adults, and people with disabilities are disproportionately affected by large-scale disasters. This hands-on resource for students and professionals in social work, counseling, nursing, mental health, and other helping professions encompasses the best and most current evidence-based interventions for effectively responding to the needs of vulnerable populations following disasters. Using an all-hazards perspective, the book provides dedicated sections containing population-

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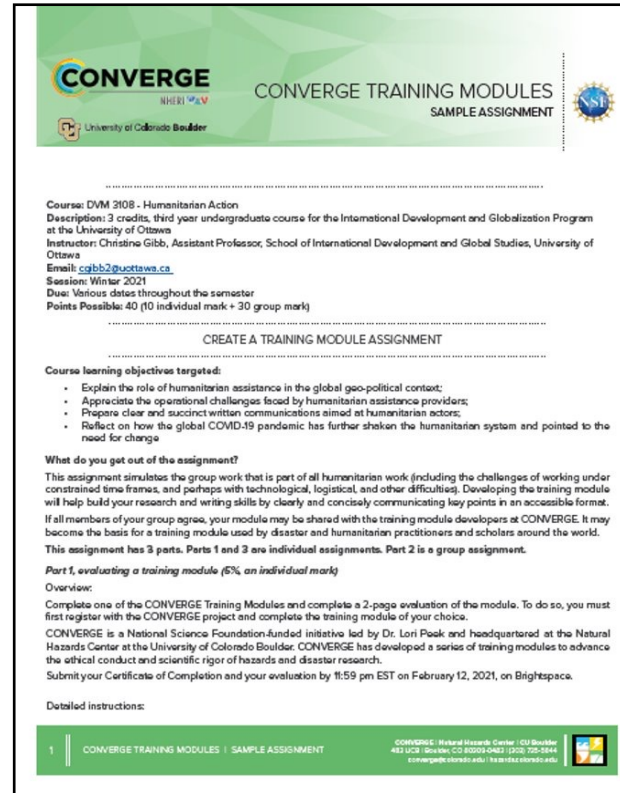
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# Assignment Bank

The Assignment Bank contains assignments from a range of courses that have integrated the CONVERGE Training Modules into the learning curriculum. We currently offer:

- 10 undergraduate course assignments
- 3 graduate course assignments
- 2 undergraduate/graduate course assignments



If you have an assignment to contribute as a shared resource for our broader community, please contact us at [converge@colorado.edu](mailto:converge@colorado.edu).

[converge.colorado.edu/resources/training-modules/assignment-bank/](https://converge.colorado.edu/resources/training-modules/assignment-bank/)

## CONVERGE Training Modules Assignment Bank

This page contains sample assignments from a range of courses that have integrated the CONVERGE Training Modules into the learning curriculum. Please click on the title below for the full text of the assignments. If you have an assignment to contribute as a shared resource for our broader community, please contact us at [converge@colorado.edu](mailto:converge@colorado.edu).

### Undergraduate Course Assignments

- ▢ [Create a Training Module Assignment](#)
- ▢ [Disaster Health Research Assignment](#)
- ▢ [Social Dimensions of Natural Hazards Training Module Assignment](#)
- ▢ [Social Inequalities in Health Training Module Assignment](#)
- ▢ [Social Vulnerability and Disasters Training Module Assignment](#)
- ▢ [Social Vulnerability and Engineering Training Module Assignment](#)
- ▢ [Social Vulnerability and Warning Systems Training Module Assignment](#)
- ▢ [Understanding Mental Health as Public Health Assignment](#)

### Graduate Course Assignments

- ▢ [Disaster Mental Health Training Module Assignment](#)
- ▢ [Human and Social Factors of Disaster Training Module and Tabletop Exercise](#)
- ▢ [Research Design and Methods Training Module Assignment](#)

### Undergraduate and Graduate Course Assignments

- ▢ [Disasters and Public Health Assignment](#)
- ▢ [Puerto Rico Resiliency Lab Training Module Assignment](#)

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# Extreme Events Research Check Sheets Series

These short, graphical check sheets are meant to be used as researchers design their studies, prepare to enter the field, conduct field research, and exit the field. The series offers best practices for extreme events research and includes check sheets for free to the research community.

[converge.colorado.edu/resources/check-sheets/](https://converge.colorado.edu/resources/check-sheets/)



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.



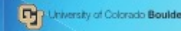

Determining what type of methods are appropriate depends on the research questions and associated goals. In designing a research study, it is useful to consider: 'What am I trying to understand, and for what purpose?'

- ☐ **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?

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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 licenses (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.

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# THANK YOU



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