



CONSORTIUM FOR RESILIENT GULF COMMUNITIES

Overview of Disaster Survey Literature Search and Database

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The Consortium for Resilient Gulf Communities (CRGC) was established to assess and address the public health, social, and economic impacts of the 2010 Deepwater Horizon oil spill in the Gulf of Mexico region. Early work on the project involved a mapping literature review of published health effects of oil spills, which found a number of knowledge gaps, such as a need for further study of the medium- and long-term impacts of oil spills on the health and social well-being of individuals in affected communities, a lack of population-based survey research, and a lack of studies that include pre-disaster data. The project used this information to inform the development of the Survey of Trauma, Resilience, and Opportunity of Neighborhoods in the Gulf (STRONG), which aims to address some of the gaps in the literature. However, the mapping literature review also inspired additional questions about whether these knowledge gaps were specific to the study of health and social impacts of oil spills, or whether these gaps persisted across disaster types.

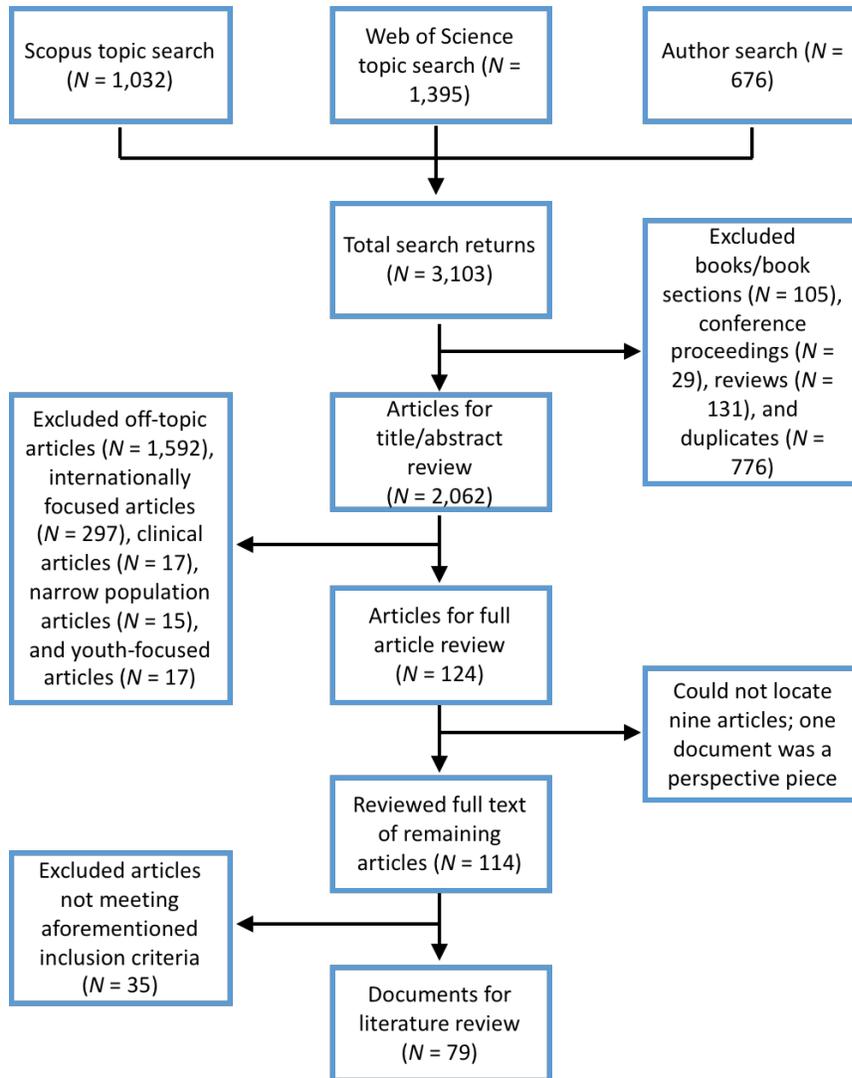
The aim of this literature review was (1) to better understand the extent of the literature involving population-based survey research on the public health, social, and economic impacts of natural and man-made disasters in the United States and (2) to identify gaps in said body of literature. To answer these questions, the literature review was scoped to focus on survey-based studies about the human impacts of disasters, published in English between 1998 and the time of the search, August 2018. The review was restricted to (1) peer-reviewed journal articles of studies conducted in the United States; (2) population-based studies, defined as applying to the general adult population (e.g., not to a specific group, such as emergency workers or pregnant women) from a defined region (typically a state or larger, but some studies were included that focused on a populous county or city); and (3) studies that used probability sampling methods.

Literature Review Strategy

Searches were conducted in the Scopus and Web of Science databases, supplemented with targeted reviews of publications by scientists known by the research team to have conducted disaster-related surveys. This produced a database of 3,103 documents, including duplicate records when documents appeared in multiple search results (Figure 1). Duplicates, books, book sections, conference proceedings, and reviews were excluded, leaving a database of 2,062 articles for further review. Using article titles and abstracts, the database was further refined to exclude articles that were not on topic and articles describing studies that were conducted internationally, in laboratory or clinical settings, or which studied only children or specific subpopulations of adults, resulting in 124 articles for full review. Nine of the articles could not be located, and one perspective piece was subsequently excluded,

resulting in full review of 114 articles. During the full article review, 35 articles additional articles did not meet the aforementioned inclusion criteria, leaving a database of 79 articles.

Figure 1. Literature Review Selection Diagram



Database Construction

Of particular interest to the research team were studies focused on risk perception and those targeting the Gulf Coast region. Therefore, during review of titles and abstracts, each article was categorized as belonging (or not) to each category:

- *Risk perceptions: any article that investigates risk perceptions about disasters.* These articles may be about survey-based studies that took place before, during, or after a disaster, or studies involving hypothetical scenarios with experimental manipulations. Ultimately, 38 of the 75 reviewed articles directly addressed risk perception.

- *Gulf Coast: any article that focused on a disaster that took place in the Gulf or whose survey participants were primarily located in the Gulf Coast region of the United States.* Twelve of the 75 reviewed articles were specific to the Gulf Coast region.

The disaster described in the article was also noted (e.g., outbreak, terror attack, hurricane) during the title and abstract review. During the full-text review of the article, these data were verified and additional data were extracted, including the specifics of the disaster of interest (e.g., Ebola outbreak in 2014–2015, Hurricane Katrina), year of data collection, whether the data were collected prior to the disaster (or only after), sample size, population sample and description, explanatory variables, outcome variables, survey method, analytic strategy, relevant results, and study limitations and additional questions. A note was also made to indicate whether the survey was representative or probability-based. When the determination could not be made, the label “unclear” was applied.

Using the Database

The database was implemented as an Excel spreadsheet and is downloadable from the Resources tab of the CRGC website (<https://www.resilientgulf.org/resilience-resources/disaster-survey-literature-search-and-database/>). Although the entire database may be of interest to some users, others may find it beneficial to enable the filter function and search for papers on a particular topic of interest, such as studies related to hurricanes on the Gulf Coast.

Limitations of the Database

This database is limited to the scope of the search terms, which focused on disasters and probability-based surveys. Although both the Scopus and Web of Science databases contain articles from more than 20,000 journals, books, and other peer-reviewed literature, as with all databases they may miss some peer-reviewed literature on survey-based studies of the human impacts of disasters. Therefore, the database we developed might not include all articles published on this topic in the past 20 years. Further, this study deliberately excluded internationally focused research, research on narrow populations, and research on children. As a result, this database might not be of use to individuals seeking information about those topics. Finally, the literature for this database was compiled in August 2018, so articles published after that date will not be contained in this database.

Data Dictionary

Study Citation: Citation with the article's title, author(s), journal, publication date, and other publication details

Gulf Coast: Whether the article focused on a disaster occurring in the Gulf Coast region of the United States

Risk Perception: Whether the article focused on individuals' risk perceptions about a specific disaster or potential disaster

Disaster Type: Type of disaster that the article focused on

Specific Disaster: Name of specific disaster(s) the article focused on. An "N/A" in this column indicates that the study was not focused on a specific disaster.

Year of Data Collection: Description of the time frame(s) that data was collected for the article

Were Data Collected Prior to Disaster? If So, What Was the Collection Process? Description of how data collected prior to disaster(s) were collected (e.g., part of the original study design, convenience collection from another study that happened to take place during a disaster). An "N/A" in this column indicates that data were not collected prior to the disaster or that the study was not focused on a specific disaster.

Sample size: Number of interviews or surveys collected for study described in the article

Population and Sample Description: Description of population who was interviewed or surveyed for the study described in the article

Representative or Probability-Based Survey: Whether the study described in the article utilized a representative or probability-based survey

Explanatory Variables: List of variables collected about and from participants that were analyzed as a possible explanations for the outcome measures (e.g., participant age, participant prior exposure to disasters). An "N/A" in this column indicates that information about explanatory variables used in the study was not available.

Outcome Measures: List of variables being studied or collected about and from participants (e.g., post-disaster psychological health)

Method (longitudinal, etc.): Description of method of data collection (e.g., cross-sectional, longitudinal)

Analytic Strategy: Description of primary analytical methods used to determine article findings

Relevant Results: Text extracted from article abstract and/or results section describing the key findings of the study

Questions/Issues/Limitations: Text extracted from the article discussion and/or limitations section describing study limitations and questions for future research