Chapter 4.5 Advanced statistical techniques

Author: Vigneri M, White H.

Further reading

1. Allaire MC. Disaster loss and social media: Can online information increase flood resilience? Water Resources Research; 2016: 52(9): 7408-23.

Summary of this document: This reading provides information to understand the challenges, considerations, and methods available to measure impact in Emergency Disaster Response Management.

This research article presents the results of a study that was conducted, with a mixed methods approach, to investigate the effectiveness of online information and social media in enabling households to reduce disaster losses. The 2011 Bangkok flood is utilized as a case study since it was one of the first major disasters to affect a substantial population connected to social media. This article provides background information on social media and natural disasters and presents a conceptual framework of how online information could affect mitigation decisions and flood losses. The study relies on two data sources—survey responses from 469 Bangkok households and in-depth interviews with internet users who were a subset of the survey participants. The authors conclude that online information can enable effective disaster preparedness and reduce losses.

2. White H, Sabarwal S. Quasi-experimental Design and Methods, Methodological Briefs: Impact Evaluation 8. Florence, Italy: UNICEF Office of Research. 2014.

Summary of this document: This reading provides information to understand the challenges, considerations and methods available to measure impact in EDRM.

This methodological brief from the UNICEF Office of Research focuses on quasi-experimental designs and methods. This document provides a brief description of quasi-experimental designs and methods and when it is appropriate to use such methods. It outlines how such methods may be used for constructing comparison groups and data analysis. The brief presents ethical issues and practical limitations of quasi-experimental designs and methods as well as other methods that may work well with them. The authors provide information about how to present results and analysis based on a quasi-experimental evaluation and examples of good practices and challenges associated with quasi-experimental methods.