

Systematic analysis of communication in social media for the preparation of psychosocial situation reports in crises and disasters



PROJECT BACKGROUND

CHANGING COMMUNICATION CULTURE IN CRISES AND DISASTERS

STARTING POINT

The experiences of past crises and disasters show a changing communication culture towards an interactive communication. Communication is increasingly conducted in private conversations or chat groups, so that the usual data analyses of individual platforms with publicly accessible information (such as Twitter) are no longer representative for the entire population.

In addition, the large and diverse amount of data makes manual monitoring difficult. This increasingly limits the systematic collection and presentation of information from social media. Digital volunteers, who organize and engage themselves in Virtual Operations Support Teams (VOST), are therefore increasingly active in crises and disasters by utilizing novel methods to extract, analyze, visualize, and communicate situationally relevant data from social media.

Decision-makers

INFORMATION REQUIREMENTS

VOST

ESTABLISHED METHODS FOR SOCIAL MEDIA ANALYSIS

Population

DATA BASE OF PUBLIC MESSAGES IN SOCIAL MEDIA

Improved situation management

PSYCHOSOCIAL SITUATION REPORT

RESEARCH PROJECT

RESEARCH IN INTERDISCIPLINARY COOPERATION

PROJECT

Project duration:
08/2022-07/2025

Funding:
Federal Office of Civil Protection and Disaster Assistance

Announcement:
„Evaluation of social media with regard to psychosocial needs of the population in crises and disasters“ (No. 0013)

Collaboration:
University of Wuppertal (BUW)
University of Greifswald (UG, Subcontractor)
Federal University of Applied Administrative Sciences (HS Bund, Cooperation partner)

PROJECT OBJECTIVE

Sustainable improvement of disaster management by integrating social media data in a psychosocial situation reports

RESEARCH FOCUSES

- # State of the practice for extracting psychosocial needs and resources from social media
- # VOST methods, standard procedures and mechanisms
- # Ways to evaluate psychosocial needs and resources of the population

PROJECT RESULT

Social science-based framework recommendations for national crisis management on evaluation strategies for social media with regard to psychosocial needs and resources of the population in crisis and disaster

- Psychology
- Social Sciences
- Engineering
- Computer Sciences

RESEARCH QUESTIONS

- 1 In which regard do decision-makers and the public use social media in crises and disasters?
- 2 Which methods do VOST use to analyze and visualize social media data with the goal of supporting psychosocial situational reports?
- 3 How to categorize and assess psychosocial needs and resources present in social media?
- 4 What are the requirements of authorities and organizations with security tasks regarding the integration of data from social media in psychosocial situation reports?

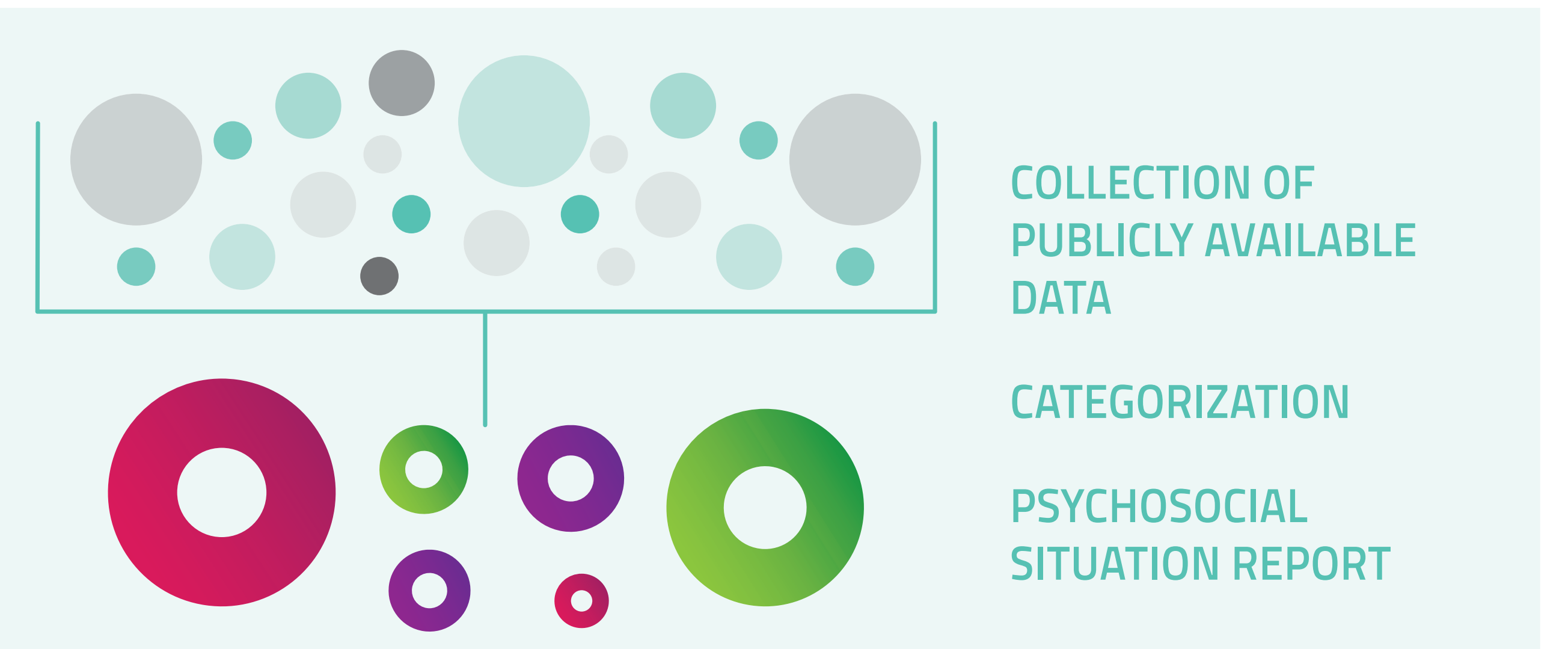
MULTI-METHOD RESEARCH APPROACH

- Scoping review according to JBI methodology
- Document analysis
- Scientific field observations
- Delphi survey and expert interviews
- Focus groups and workshops with simulated scenarios
- Focus groups and group discussions
- Qualitative data and content analysis

CONTRIBUTION TO SCIENCE AND PRACTICE

KEY WORK OBJECTIVES

- # Overview of social media use in crises and disasters
- # Categorization grid for assessing and evaluating psychosocial needs and resources of the population
- # VOST methods handbook
- # Development of a digitally supported psychosocial situation report
- # Integration concept for education and training
- # Enhancement of situational awareness and situation reports in crises and disasters
- # Connection of science and practice



PROJECT COORDINATION

Prof. Dr.-Ing. Frank Fiedrich
University of Wuppertal
Mechanical Engineering and Safety Engineering

Institute for Public Safety and Emergency Management

Phone: +49 202 439-5600
E-mail: buk@uni-wuppertal.de

CONTACT

Francesca Müller, M.Sc.
University of Wuppertal
Mechanical Engineering and Safety Engineering

Institute for Public Safety and Emergency Management

Phone: +49 202 439-5608
E-mail: framueller@uni-wuppertal.de

CONTRACT

Jun.-Prof. Dr. phil. Samuel Tomczyk
University of Greifswald
Institute of Psychology

Digital Health and Prevention

Phone: +49 383 4420-3806
E-mail: samuel.tomczyk@uni-greifswald.de

COOPERATION

Prof. Dr. Lars Tutt
Federal University of Applied Administrative Sciences

Phone: +49 228 99629-7024
E-mail: lars.tutt@hsbund.de

ASSOCIATED PARTNERS

Associated with the project are various organizations relevant to the project work:

Virtual Operations Support Teams (VOST THW, VOSThh, VOSTbw), authorities and organizations with security tasks (PolB, DHPol, IdF), actors of psychosocial emergency care (DRK, JUF, LZ PSNV M-V) as well as other governmental and non-governmental institutions (M M-V, VIS).

FUNDED BY

Bundesamt für Bevölkerungsschutz und Katastrophenhilfe

