

1st WMO/WWRP

WEATHER & SOCIETY

CONFERENCE, February 28 - 11 March 2022

Involving the public in the weather warning process

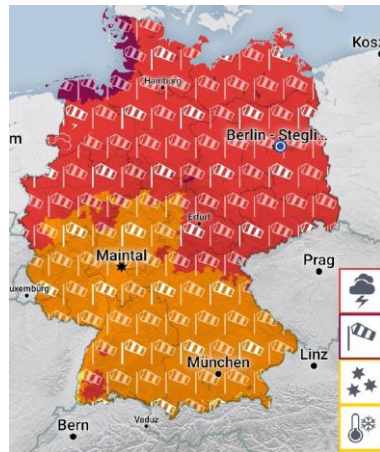
Opportunities, challenges, and lessons learned

Dr. Katja Schulze

Disaster Research Unit (DRU), Freie Universität Berlin

Effective warning communication must convey the message

What?



Information



So what?

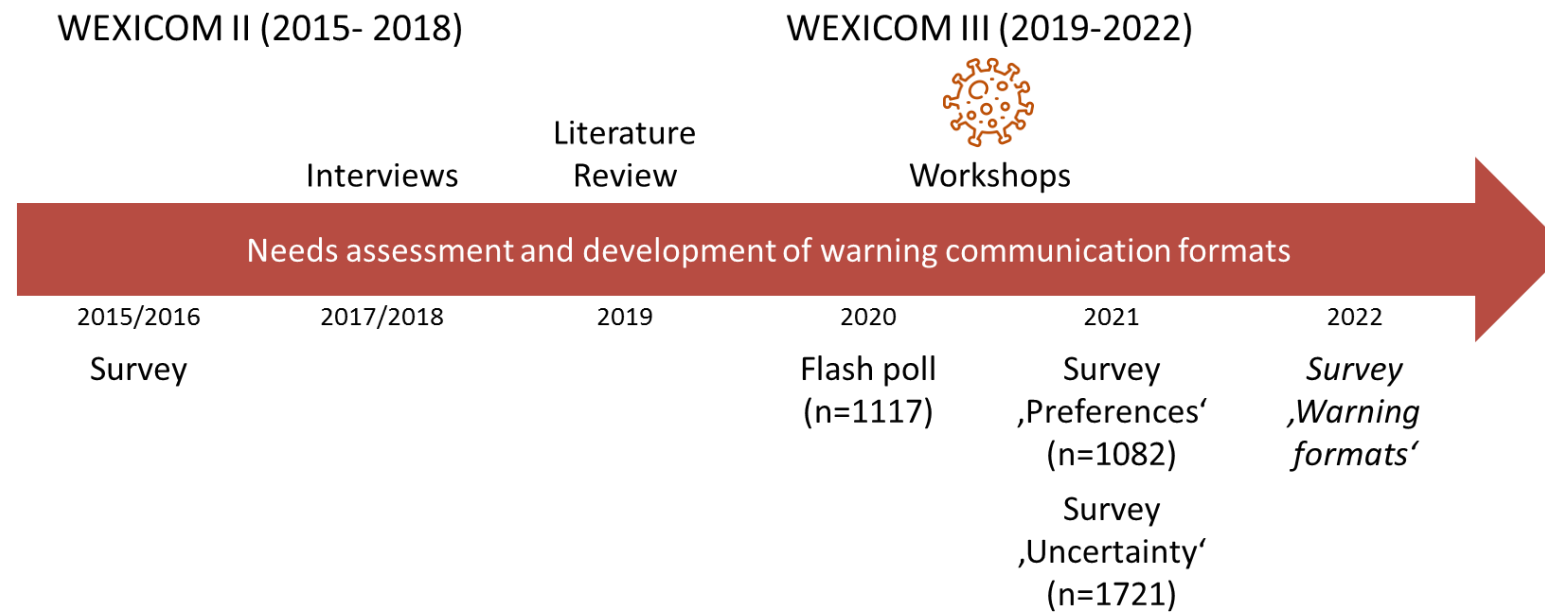


Message

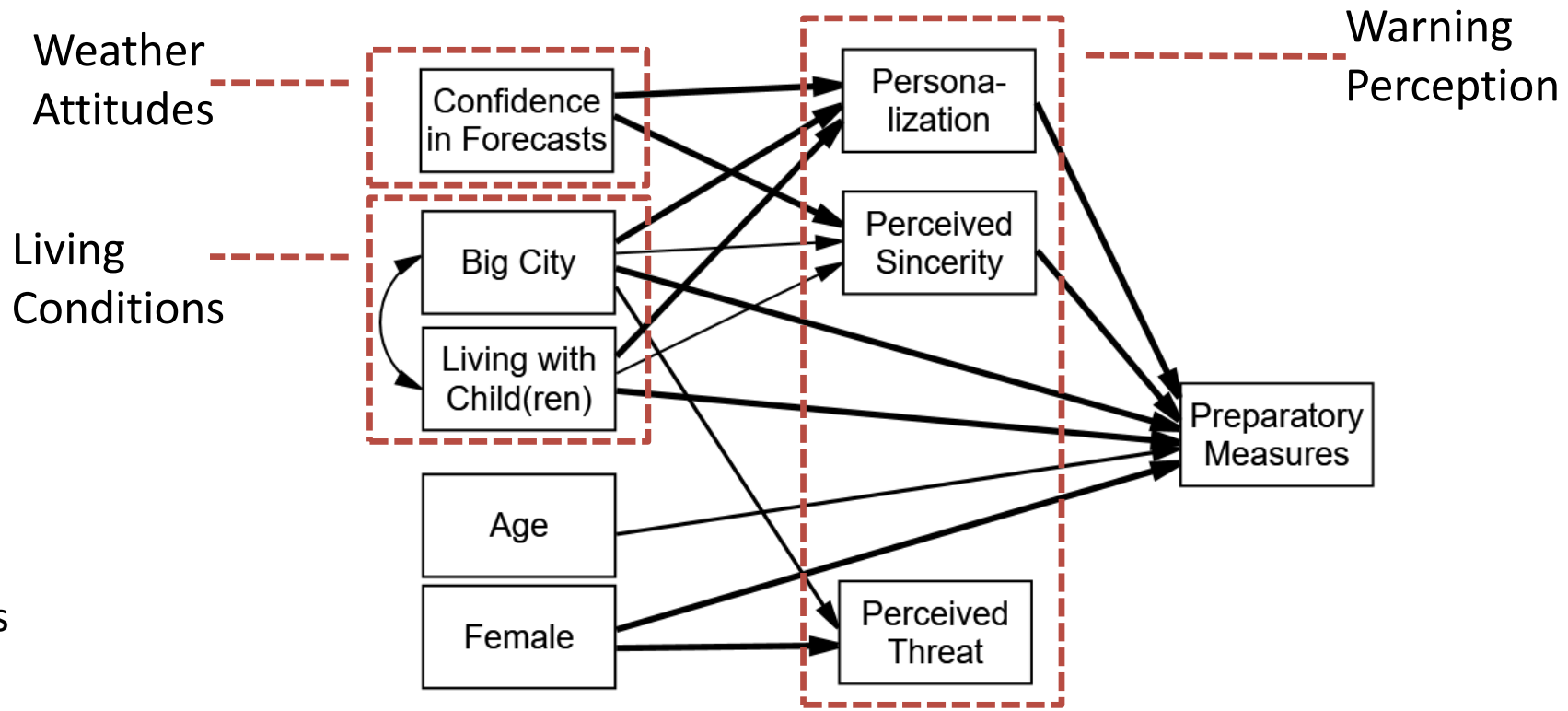
Warning communicators need to understand their audience



WEXICOM III focuses on the needs of specific user groups



Attitudes and daily practices influence the weather warning response



Daily practices
Experiences
Situational circumstances
...

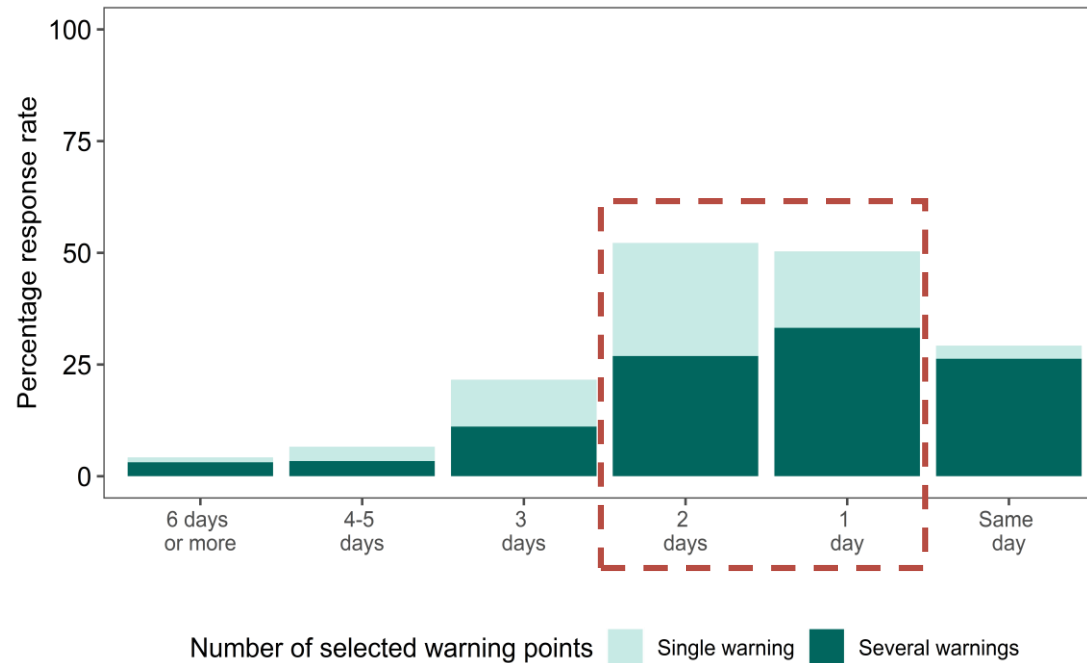
Storm Sabine/Ciara
9/10 Feb 2020
Up to 12 Bft
Flash poll
n = 1117

Most Germans want to receive a weather warning one or two days in advance

Preferred warning time depending on number of selected warning times

Question: A weather warning can be issued several days in advance. But the further in advance the forecast is made, the less accurate it is and also the lower the probability that the severe weather will actually occur. At what time would you like to be warned about a storm?

Notes: Multiple answers possible

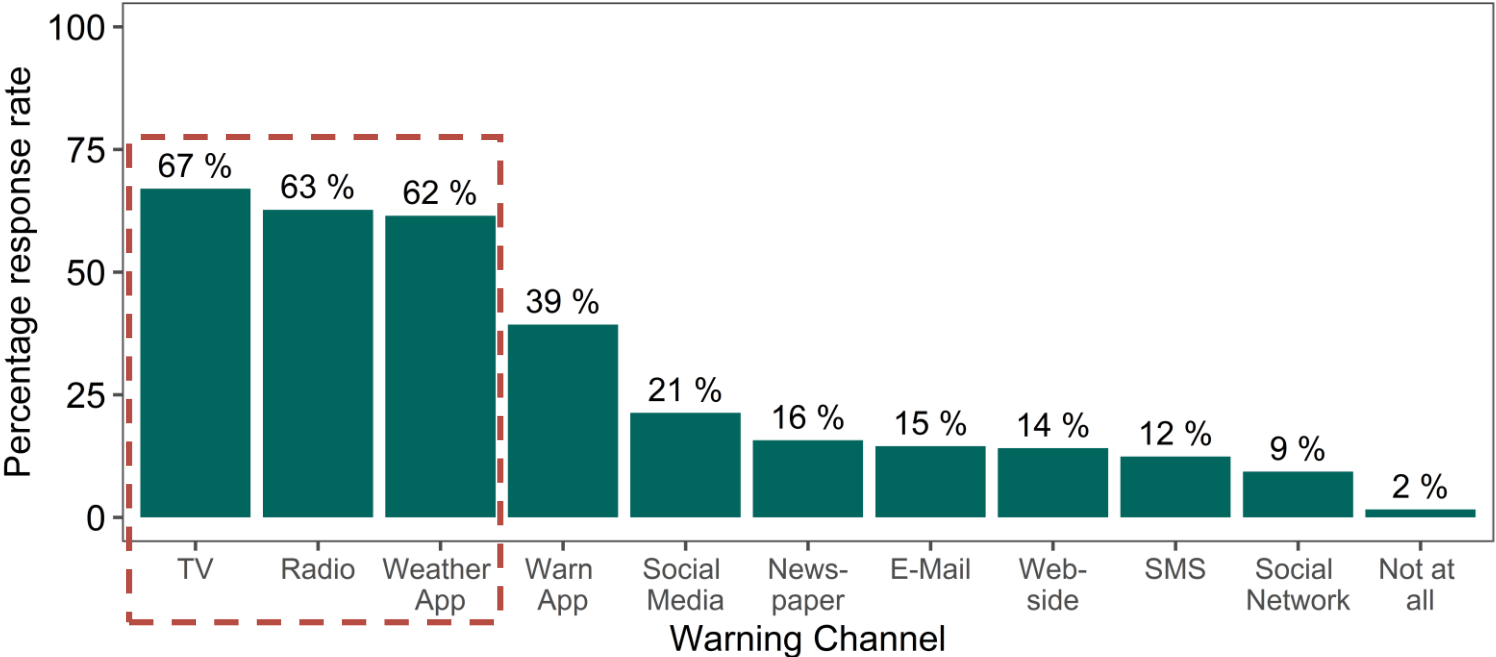


Representative Survey
March 2021
n = 1086

Traditional media and weather apps are the favored weather warning channels

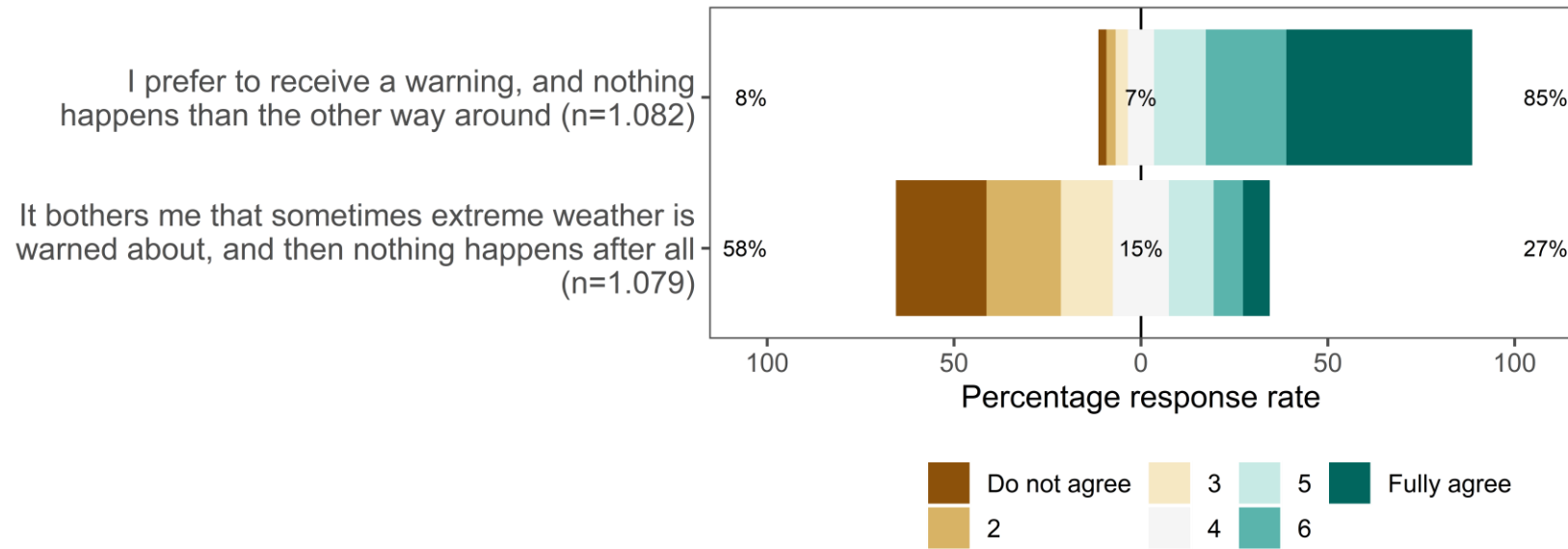
Which channel do you prefer to receive warnings of severe weather in the future?

Notes: Multiple answers possible



Representative Survey
March 2021
n = 1086

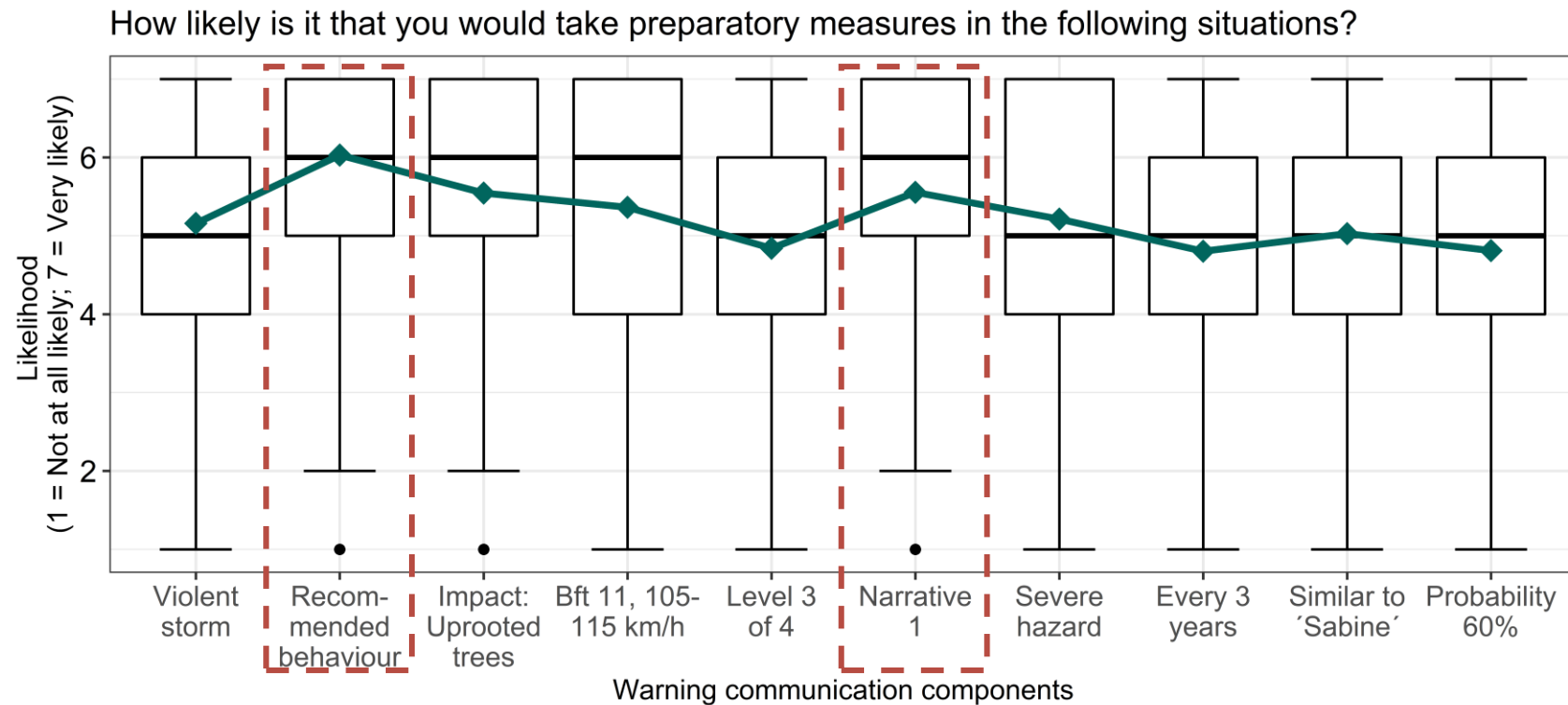
Most Germans prefer to receive a false alarm rather than a missed event



Representative Survey
March 2021
n = 1086

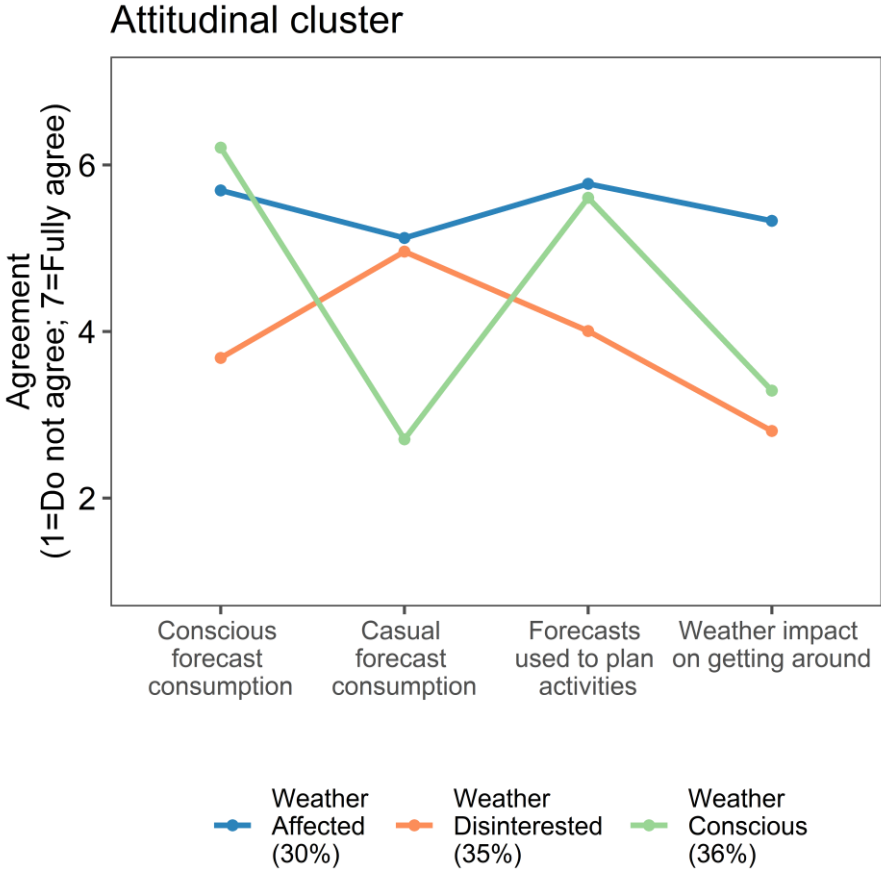
What kind of information do people want?

What impact do different kinds of information have?



Representative Survey
March 2021
n = 1086

The public is heterogeneous



Representative Survey
 March 2021
 n = 1086

Warning communicators can only understand their audience if they involve them from the beginning



Involving the public is challenging ...

... but we learned some lessons



- Budget sufficient resources
- Have back-up plans
- Engage interdisciplinary team
- Use mixed methods
- Identify and involve subgroups
- More culturally diverse research

Thank you for your attention!

katja.schulze@fu-berlin.de

<https://www.geo.fu-berlin.de/met/wexicom/index.html>