Identifying How NWS Meteorologists Localize and Personalize Hazard Specific Messaging for Core Partners

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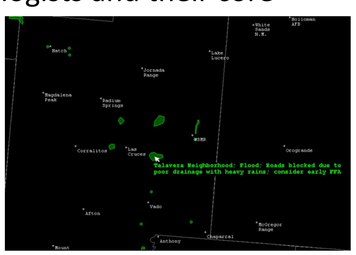
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Background

- Within the past few decades, the National Weather Service (NWS) has increased its efforts to offer impact-based decision support services (IDSS) to core partners.
- One way is to provide vulnerability information between NWS meteorologists and core partners by using the Brief Vulnerability Overview Tool (BVOT) (Friedman et al. 2024).
- The goal is to document meteorologists' current processes and conceptions of how they personalize and localize hazard-specific messaging to their core partners before incorporating BVOT into operations.

What is a BVOT?

- GIS Shapefiles that display weather hazard-specific, local vulnerabilities, that provide meteorologists increased situational awareness during operational forecasting, warning responsibilities, and daily tasks to enhance Decision Support Services (DSS).
- Each BVOT hazard layer is determined by each WFO and is created through a collaborative mapping process between NWS meteorologists and their core partners.



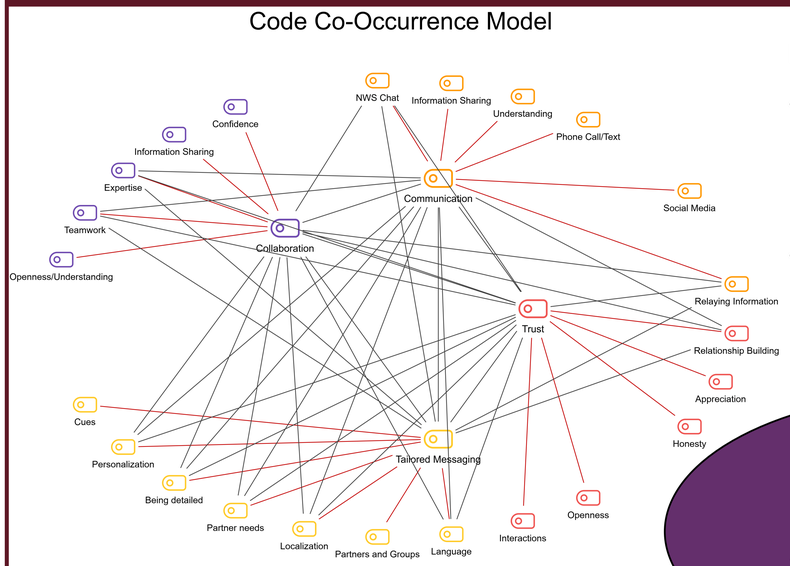
Methodology

- **Research Question: Before using BVOT, how does an NWS meteorologist communicate/ tailor (personalize/localize) hazard information to their core partners?**
- Qualitative, semi-structured interviews were conducted through Google Meet during Summer 2024. Interviews were recorded, transcribed, and quality-checked for accuracy.
- Interview topics include: *Meteorologist's background in the NWS; Communication and relationships with core partners; Vulnerabilities in their CWA; and Initial ideas about BVOT.*
- Responses were analyzed through the process of thematic analysis (Braun and Clarke 2022).

5 interviews were analyzed from one test BVOT test office

WCM	BVOT Team Lead	Senior Meteorologist	Journey Meteorologist	Random

Making Connections/Findings



IDENTIFYING THEMES

- Four broad code categories were determined, with each containing many subcodes.
- The code categories led to developing two preliminary themes:

Theme 1: Approaching Communication

- Mediums for relaying critical information (NWS Chat; Social Media; Briefings)
- Details core partners are looking for in their messaging (Language; Verbal cues; Conciseness)
- Understanding the information core partners need

> **"It's [information] a little bit more concise and targeted toward them. We're trying to give them [core partners] more information than just there's a warn-**

> **"They [core partners] like hearing what's actually going on. Part of that is I think they're looking for their own cues as well."**

Findings

Theme 2: Relationship Building Blocks

- Starts before major events (Conferences; Partner Visits; In-person/virtual meetings)
- Good qualities to have (Honesty; Appreciation; Openness; Trust)
- Collaboration and communication is key

> **"You're asking them [core partners] questions about their specific community and you're... building trust and you're strengthening the relationship because... they see you trying to understand and learn about, okay, I'm really interested in what is going on here in your town and what specific things and how we can help with that. So I think that's helpful...."**

Future Works

- Continue analyzing Pre-BVOT interviews from additional BVOT test offices to fine tune previous themes and determine additional themes between all.
- Determine how going through the BVOT mapping process has impacted a WFOs understanding of vulnerabilities in their CWA and its implications for IDSS through Post-BVOT creation interviews.

Acknowledgements

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References:

Braun, V., & Clarke, V. (2022). Thematic Analysis (A. Maher, Ed.). SAGE Publications Ltd.

Friedman, J. R., LaDue, D. S., Hurst, E. H., Saunders, M. E., & Marmo, A. N. (2024). Making Social Science Actionable for the NWS: The Brief Vulnerability Overview Tool (BVOT). Bulletin of the American Meteorological Society, 105(6), E915–E931. https://doi.org/10.1175/BAMS-D-23-0042.1