

Cognitive Authority in Online Social Media during Severe Weather

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ABSTRACT

Severe thunderstorms in the Midwest and South of the United States reveal situations with a high degree of uncertainty and concern beckoning a continued need to improve understanding of the ways the severe weather enterprise seek, utilize, and disseminate information during severe weather events. The increasing use of online social media (OSM) during emergency or potentially threatening situations creates conditions in which emergency planners and responders need a high level of investigative skill to weed through a dynamic information landscape to determine the quality of information to contribute to improved situation awareness. This weeding process transforms the big data environment of OSM to focused information retrieval. This study investigated indicators of quality in OSM during severe weather situations to identify how OSM impacts the information behavior of the severe weather enterprise of the U. S. Specifically, this study investigated how a particular element of the severe weather enterprise in the Midwest, the integrated warning team (IWT), identifies relevant information in OSM during severe weather events.

This study explored the application of an information framework that extends cognitive authority to the Twittersphere where author is potentially unknown. Wilson's (1983) cognitive authority theory and Bonnici's (2016) CAF-QIS framework served as lenses to identify factors of quality that inform decisions of credibility and trustworthiness in second-hand knowledge from cognitive authority sources in OSM. The current study advanced the understanding of cognitive authority (Wilson, 1983) in OSM and the CAF-QIS framework (Bonnici, 2016) by exploring the application of the model in the Twitter environment during a severe weather event focused on the information use of the IWT.

REFERENCES

- Bonnici, L. J. (2016). Subjectivity filtering: Finding cognitive authority in online social media opinion posts. *Proceedings from the Document Academy*, 3(2), 1-20.
- Wilson, P. (1983). *Second-hand knowledge: An inquiry into cognitive authority*. Westport, CT: Greenwood Press.

TOPICS

information seeking; information use; social media; linked data