Creating safety through media narratives: A framework for investigating potential biases in describing adverse complex phenomena.

Martina Ivaldi[1], Fabrizio Bracco[1], **Marina Mantini**[2], and Luca Ferraris[2]
[1]University of Genoa, Department of Education Science, Italy
[2]CIMA Research Foundation, Savona, Italy

In the contemporary era dominated by media, communication channels significantly shape citizens' perception and preparedness for environmental emergencies. Specifically, media narratives about floods contribute significantly to citizens' comprehension of river conditions, warning systems, and appropriate behaviors for safety. However, if these narratives oversimplify events there is a risk of limiting citizens' learning, potentially leading to distorted perceptions. Similarly, media descriptions that focus on assigning blame, spotlighting the negligent behavior of infrastructure managers, scientists, politicians, and others, may lead citizens to perceive the event solely because of individual mistakes or violations. This perspective has the potential to foster a sense of citizen disengagement during emergencies, instead of emphasizing the pivotal role that each individual plays in ensuring safety during floods. Moreover, when institutions errors occur, such as inaccurate predictions, public opinion may deem these institutions unreliable, nurturing mistrust. Distrust in institutions negatively affects the communication of risk to the population, risking the cultivation of a heightened sense of autonomy among citizens, which could potentially translate into risky behaviour.

In the aftermath of floods, individuals form explanations and beliefs that influence their behavior. Therefore, media narratives should consider multiple factors for a comprehensive understanding.

This research aims to investigate whether media descriptions of a flood event in the Marche Region, in Italy, on September 15-16, 2022, exhibit tendencies towards oversimplification of causal factors, individual culpability, signs of institutional distrust, or whether the narratives account for the complexity of the phenomenon through a systemic approach. The event was caused by a severe storm, resulting in injuries and fatalities eight years after a previous flood.

This research was conducted in three distinct phases. The initial phase involved the creation of a dataset through an extensive review of narratives provided by the Civil Protection Unit of Marche Region in articles published in both local and national newspapers. In the second phase, various themes were outlined based on the literature covering blame approach, systemic approach, and institutional distrust in the context of natural disasters. A framework organized into four categories was established: 1) simplistic descriptions of causes, 2) inclination to attribute blame to

institutions, groups, individuals, 3) indicators of institutional distrust, and 4) systemic and multifactorial perspectives. In the third phase, independent judges were tasked with evaluating the presence of these categories of the framework within the media review. Inter-judge agreement was then calculated to validate the framework, ensuring a thorough analysis of the media narratives surrounding the flood event. We discuss the potential usefulness of the framework for the assessment of media narratives accuracy and as a guide for future accounts of complex natural disasters, for the sake of fostering in citizens a proper representation of the events, an accurate risk perception and, eventually, setting the ground for community resilience.