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"Who Leaves & Who Stays? A Review & Statistical Meta-analysis of Hurricane Evacuation Studies"
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The steady increase of people living on coasts and the lack of satisfactory land use and building construction practices has made evacuation even more important as a protective action for hurricanes. Although there is some evidence that behavioral expectations provide accurate estimates of how citizens will act in actual emergencies, more proof is needed about the validity of evacuation expectations. This study seeks to answer the question of which individuals do not evacuate in a disaster.

Findings

The study is a statistical meta-analysis (SMA) and examined 38 studies involving actual responses to hurricane warnings and 11 studies involving expected responses to made up hurricane scenarios conducted since 1991. The results confirm that local officials are very important sources of information because citizens think that they are experts, trustworthy, and responsible for their protection. The responses to made up hurricane scenarios are mostly like the responses to actual hurricanes. Another finding of the study is that environmental signs of a hurricane are more likely to serve as confirmation of social warnings than as a freestanding source with information about a threat.

Implications

The experimental studies of hypothetical scenarios can provide an important addition to studies of actual evacuations. Consistency between actual evacuation studies and hypothetical scenario studies supports the types of hypothetical evacuation studies that are often used as the foundation for local evacuation transportation plans. The study identifies that hurricane education materials and warning messages need to define evacuation zones with identifiable characteristics, such as geographical boundaries. Authorities can increase the protection motivation of people who are at risk and decrease the protection motivation of those who aren't by identifying how likely it is for different areas to experience personal impacts. This would help people not have to draw from their beliefs about storm wind and surge at their locations to guess what the impacts and damages a hurricane will have.