

# Building resilience: Risk perception and hurricane preparedness in Florida

January 7 2025, by Amer Hamad Issa Abukhalaf

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When I first delved into the study on hurricane preparedness among communities in Florida, I was struck by a paradox. Here we have a group of individuals living in one of the most hurricane-prone regions of the

United States, yet their preparedness often leaves much to be desired.

Why do so many Floridians, despite living with the annual threat of storms, fail to take the steps that could one day save their lives or mitigate disaster-related losses? This question resonates deeply for anyone living in the state.

## **College students as a microcosm of broader challenges**

For college students, the barriers to [preparedness](#) include tight budgets, academic pressures, and unfamiliarity with local emergency resources. Behavioral factors—like perceived control over actions, societal norms, and expected outcomes—play significant roles in determining whether someone takes action. It's not just about knowing a hurricane might hit; it's about believing that your preparation will make a difference and feeling empowered to act.

This dynamic is mirrored in Florida's broader population. Many residents view hurricanes as inevitable but distant threats. There's often an overreliance on last-minute preparation, with people rushing to stock up on supplies as a storm approaches. But hurricanes are unpredictable, and delays in preparation can lead to severe consequences—especially for those in vulnerable regions.

## **The role of social norms and community**

One striking insight from our study, [published](#) in the *International Journal of Disaster Risk Reduction*, was the power of subjective norms—essentially peer influence. Among [college students](#), seeing peers prioritize preparedness increased their likelihood of doing the same significantly.

For the general population, community norms play a similar role. Neighbors and local organizations can either foster a culture of readiness or perpetuate complacency. If preparedness becomes a visible, collective effort, it's far more likely to influence individual behavior.

Community networks in Florida, especially in coastal and [rural areas](#), have a unique role to play. Social groups, churches, and neighborhood associations can act as hubs for disseminating information, coordinating evacuation plans, and even pooling resources. These networks are particularly critical for elderly residents or individuals with mobility challenges, who may struggle to prepare on their own.

## **Perceived control and accessibility**

Another key factor is perceived behavioral control—how capable someone feels of carrying out specific actions. This extends beyond students to include people with varying socioeconomic circumstances. A family living paycheck-to-paycheck might find it difficult to set aside funds for [emergency supplies](#), while someone without reliable transportation might question how they'll evacuate.

Florida's [emergency management agencies](#) have made strides in addressing these gaps, but more can be done. For example, distributing free or subsidized hurricane kits, ensuring accessible transportation for evacuations, and providing multilingual resources can help reduce barriers. Empowering people with practical tools and clear information builds confidence and readiness.

## **Overcoming risk perception bias**

One of the more surprising findings from the study was that risk perception—how likely and severe people thought a hurricane might

be—didn't significantly influence their decisions to prepare. This aligns with a common psychological phenomenon: the tendency to underestimate risks until they're imminent. For Floridians who have experienced multiple hurricanes without major personal impact, there's often a sense of invulnerability.

Changing this mindset requires a shift in [how preparedness messages are framed](#). Instead of focusing solely on the potential devastation of hurricanes, campaigns can emphasize actionable steps and their tangible benefits. For instance, rather than saying, "A Category 4 hurricane could destroy your home," messaging could focus on, "Securing your windows can reduce damage by X%." Concrete, relatable advice is more likely to motivate action.

## **Building resilient communities**

Preparedness is not just an individual responsibility; it's a collective effort. Local governments, businesses, and community organizations all have roles to play. Businesses, for instance, can offer incentives for employees to prepare early, such as discounts on emergency supplies or time off to finalize evacuation plans. Schools can integrate disaster education into their curricula, teaching children and teens practical skills like assembling emergency kits or mapping evacuation routes.

In my experience, some of the most effective initiatives are those that foster a [sense of community](#). Neighborhood preparedness events, where residents come together to learn and share resources, can be transformative. Not only do they equip individuals with knowledge, but they also build relationships that can be lifesaving during a disaster.

## **Preparing for the long haul**

As climate change increases the intensity and frequency of hurricanes, Florida's need for robust preparedness strategies has never been greater. This includes investing in resilient infrastructure, such as storm-resistant buildings and flood mitigation systems, and enhancing emergency communication channels. It also means [tailoring preparedness efforts](#) to the unique needs of diverse populations, from students and retirees to [immigrant communities](#) and low-income families.

Ultimately, [hurricane preparedness](#) is about more than surviving the storm—it's about building a culture of resilience. When communities come together, equipped with the knowledge, resources, and support they need, they're not just weathering disasters; they're emerging stronger from them. Whether you're a student, a lifelong Floridian, or a newcomer to the state, preparedness is a shared responsibility. And with small, consistent actions, we can all contribute to a safer, more resilient Florida.

*This story is part of [Science X Dialog](#), where researchers can report findings from their published research articles. [Visit this page](#) for information about Science X Dialog and how to participate.*

**More information:** Amer Hamad Issa Abukhalaf et al, Understanding hurricane preparedness behaviors: The case study of Florida college students, *International Journal of Disaster Risk Reduction* (2024). [DOI: 10.1016/j.ijdrr.2024.105097](#)

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