

# Individual and Household Preparedness Indicators : A systematic review

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## Background

Over the past several years, research on disaster preparedness has identified numerous activities aimed at improving household and individual preparedness behaviors. However, only about 51% of Americans report being prepared for disasters, and preparedness actions such as emergency savings, community engagement, and warning sign-ups remain considerably less common (FEMA, 2025). Research also suggests that these characteristics alone are not sufficient predictors of preparedness (Choi et al., 2020; Lim, 2022; Spialek & Branton, 2024). Consequently, other factors such as demographic characteristics, socioeconomic determinants, risk perception, disaster experience, information seeking behavior, and resource availability have been highlighted as influence on disaster preparedness (Armstrong, 2024; Choi et al., 2020; Kyne, 2023; Qiu et al., 2023; Siddiqi et al., 2024).

## Objective & Research Question

**Objectives**  
Even though several indicators of disaster preparedness have been identified and studied, preparedness levels in the United States remain relatively low, highlighting the need to better understand the factors that influence preparedness behaviors.

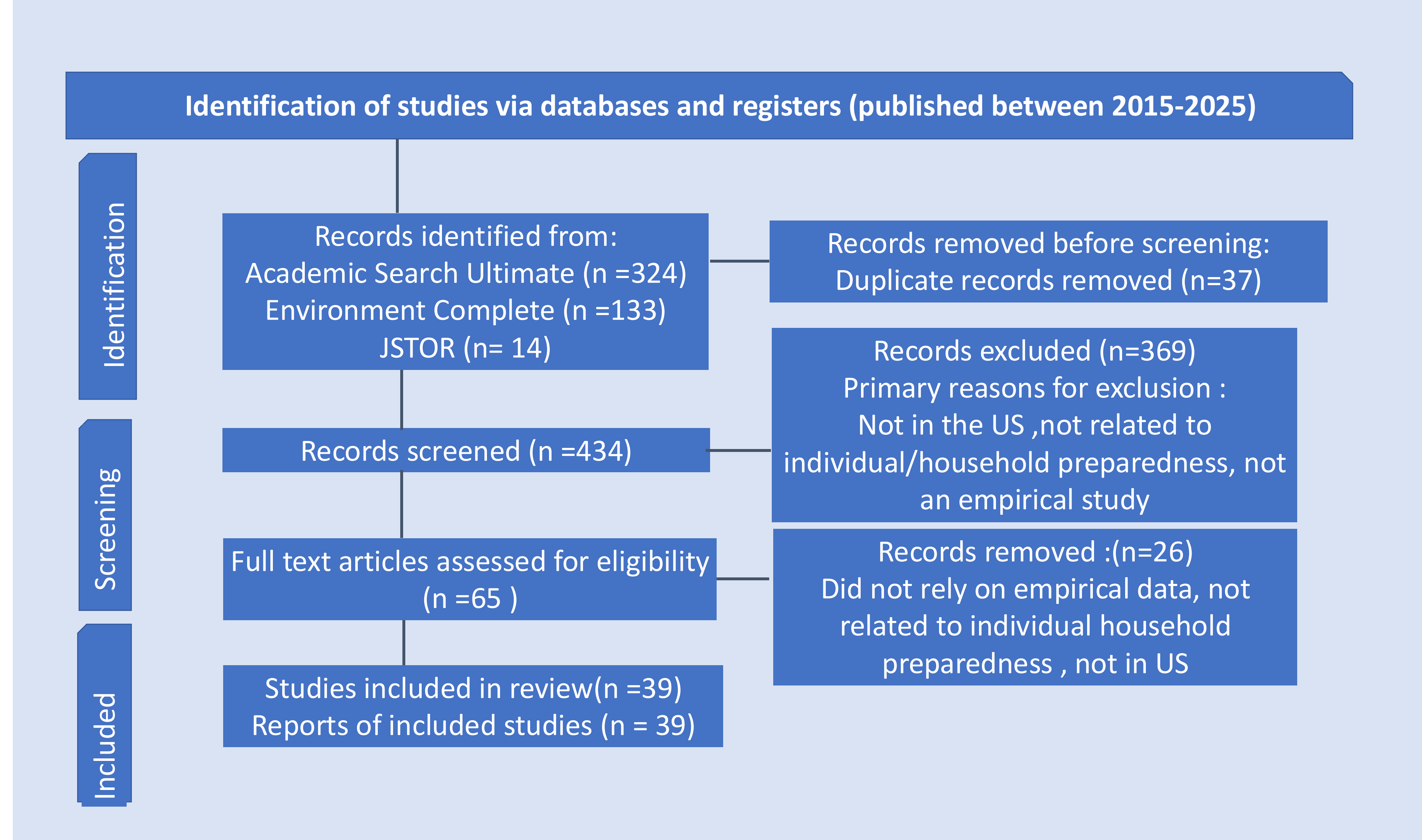


- Research Questions**
- RQ1: What factors are associated with disaster preparedness among individuals and households in the United States?
  - RQ2: What theoretical frameworks best explain disaster preparedness behaviors among individuals and households?
  - RQ3: What are the recent trends (and commonly used indicators) for measuring disaster preparedness in the United States?

## Why It Matters

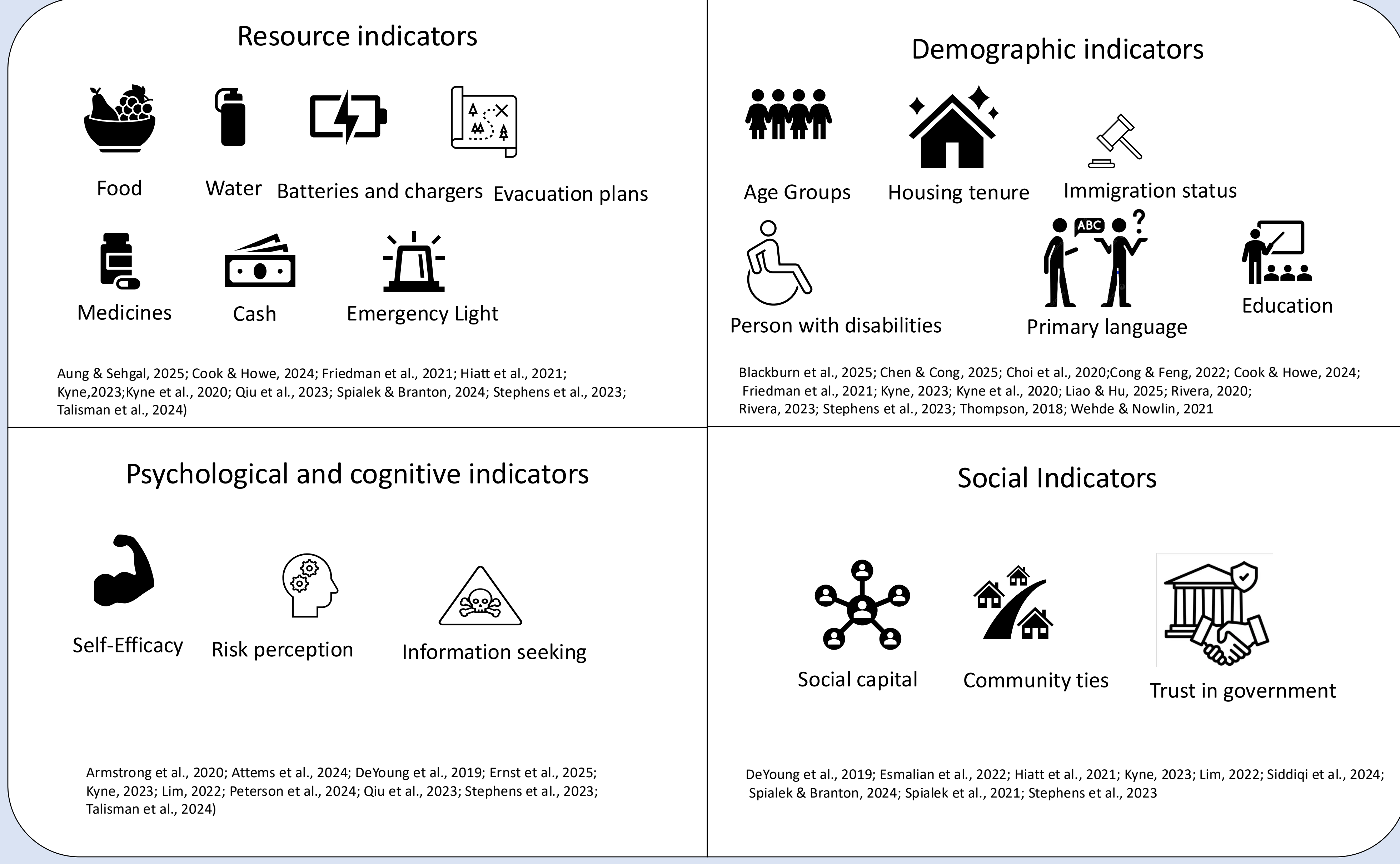
Despite decades of research identifying various indicators of disaster preparedness, national readiness levels in the United States remain alarmingly low, revealing a critical disconnect between what is currently being captured and the actual household preparedness. This disconnect suggests that the traditional system of identifying and promoting readiness factors is failing, necessitating a research shift in addressing why these measures are not yielding results.

## Method

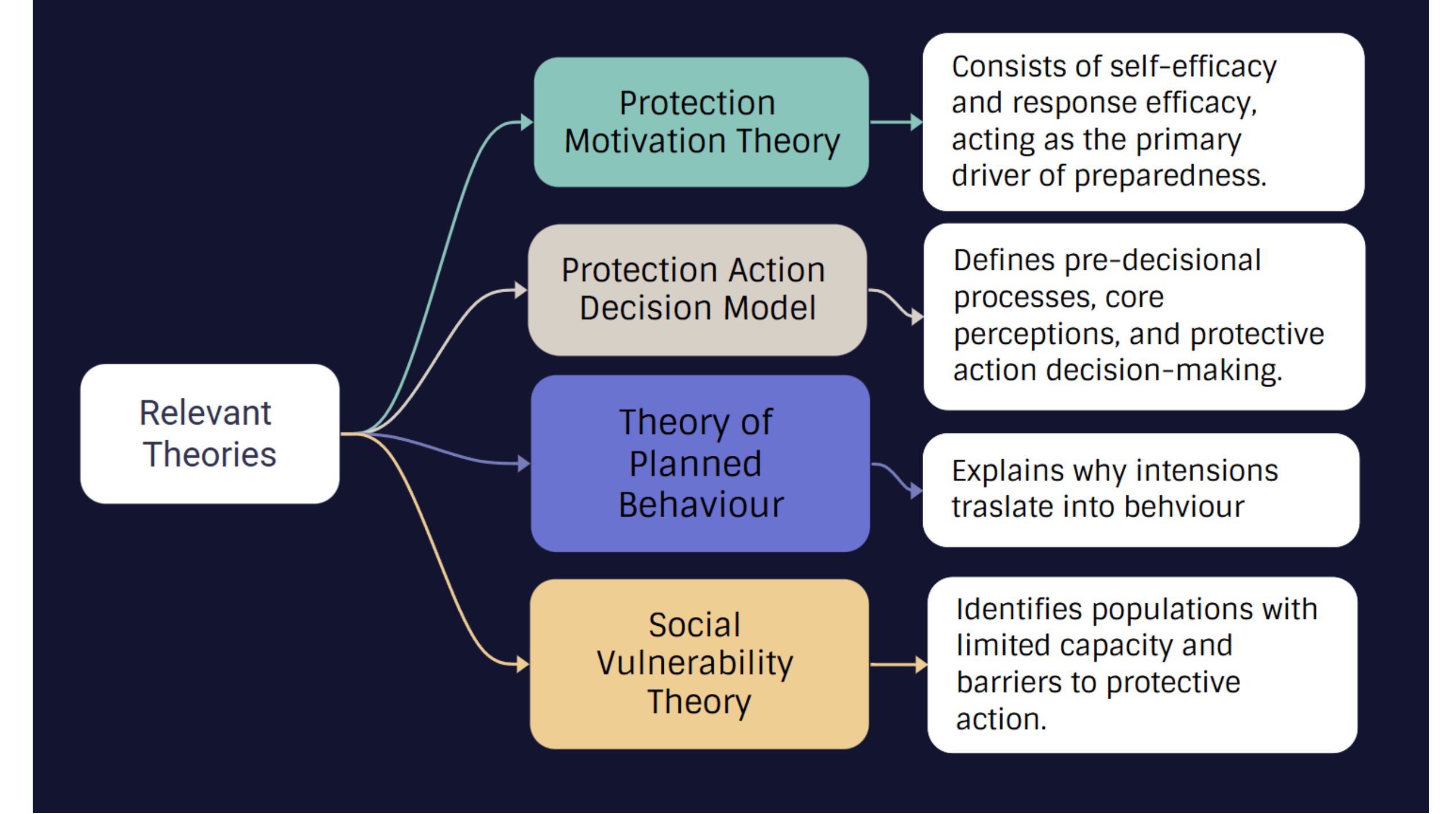


## Findings RQ1

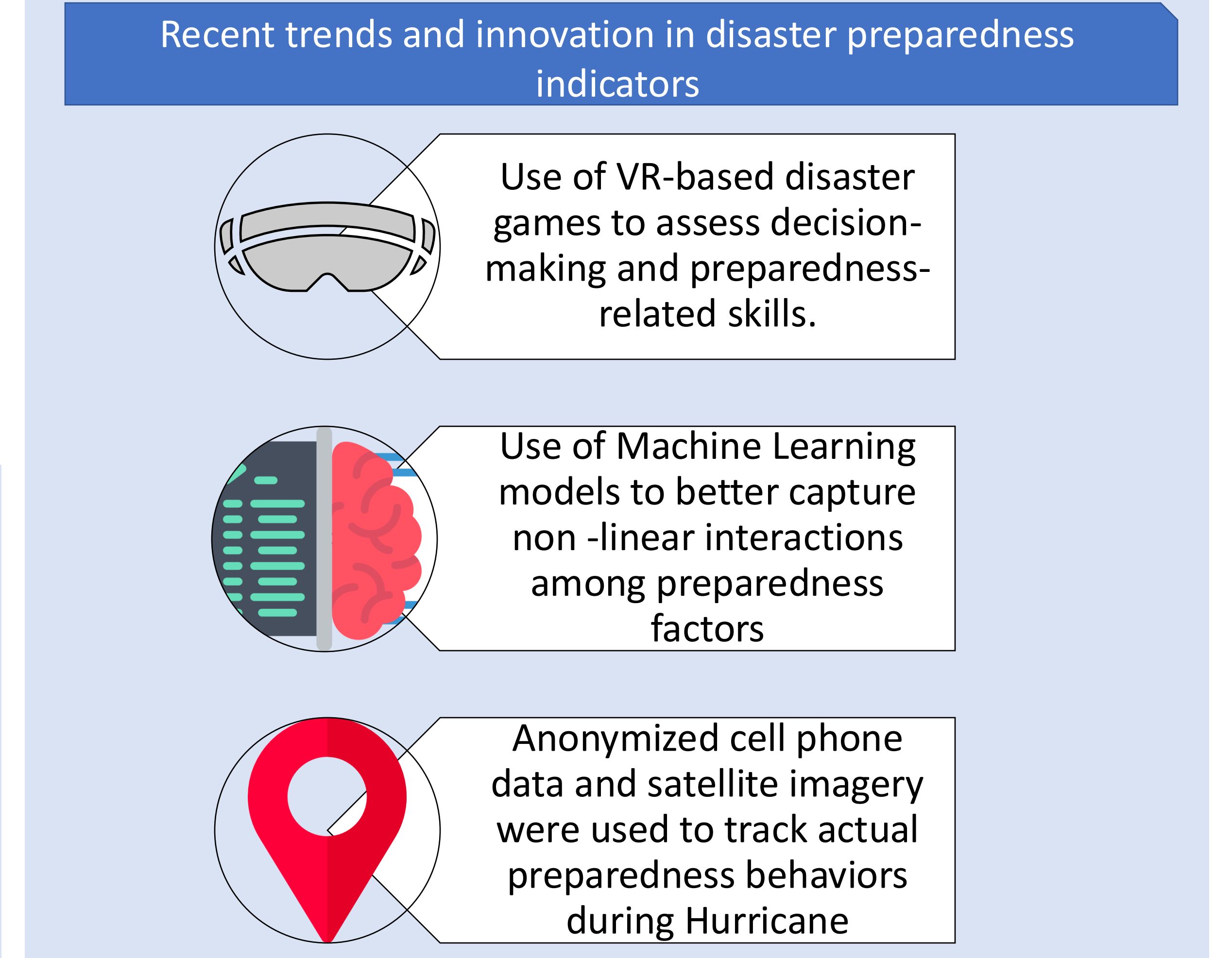
Disaster preparedness is a multidimensional construct influenced by diverse indicators that can be differentiated into four primary categories: resource and action-based indicators, socio-demographic indicators of vulnerability, psychological and cognitive indicators, and community-level social dynamics.



## RQ2



## RQ3



## Conclusion

There is a growing trend of exploring new ways of generating preparedness indicators to complement traditional methods to strengthen disaster preparedness.

## Application

- ❑ Develop better household preparedness assessment frameworks.
- ❑ Explore innovative methods, including VR tools, machine learning, and mobility data, to measure actual preparedness behaviors.

## References



