Preparedness Efficacy: Respond Smarter, Faster & Better Following Simulated Learning

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Abstract

The challenges, threats, and risks that impact our communities today are more complex, frequent, and volatile than ever before. Critical planning can keep individuals and families safe when disaster strikes but may requires real-time situational awareness in order move from knowing what to do to taking action. Miller's Pyramid of Learning and Behavior suggest that cognition (awareness) is the first step to demonstrating and practicing behavior change. Preparedness efficacy refers to having a belief that preparing can help in a disaster and can increase one's confidence in their abilities to prepare. The transtheoretical model of behavior change has been applied to a broad range of behaviors and according to the model, individuals progress through a series of stages (as they adopt and maintain a new behavior).

Background & Purpose

Although progress has been made to raise individuals and families understanding of personal preparedness, only 44% report being prepared for a disaster. To help build resilience among students, faculty, educators, and other health professionals, it is important to identify local geographical threats and enhance understanding of what actions can be taken to reduce vulnerabilities.

As natural disasters have become more frequent, severe, and complex, efforts are needed to encourage proactive strategies to take before disasters strike. The purpose of this study is to examine the use of a weather-related video to determine the impact of simulated learning on disaster risk perception.

Methods & Progress to Date

Research shows that feelings of preparedness efficacy is an indication of a belief that preparing for a disaster will help and that they learner will be able to prepare in advance. Increasing efficacy will support an individual's confidence in their ability to become better prepared.

Topics will include:

- Demographics
- Subjective preparedness
- Objective preparedness
- Communication items
- Decisional balance on whether to prepare for storms
- Preparedness efficacy

An IRB protocol is under review.

The target audience was established after careful review of those who have some existing education on disaster preparedness and are first responders. The target audience will be EMORY SORT members at large. Consent language and pre- and post-test instruments are developed.



Miller's Pyramid of Learning and Behavior

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Results

Learners can improve their level of confidence and move to action by improving their preparedness efficacy following viewing of a simulation video. Miller's pyramid suggests online simulations which include a demonstration and educational component of actions to take 'shows' learners how they can enhance performance in practice by 'doing'.

Hurricane and flood preparedness kits or 'go bags' can be customized for all kinds of needs and are useful in disaster situations with little notice. Multiple checklist can help determine what supplies to pack or take depending on whether you stay at home, head to a shelter, or go to someone's home.

Future Plans

Tentative date set in the fall 2022.

Will obtain consent for learners to respond to a series of questions related to disaster risk perception and perceived efficacy to large scale natural disasters such as hurricanes or floods that would leave you isolated in your home or displace you from your home for 3 days. A link to a video and post-test will be shared to see the results of the decisions made.

Publish to disseminate information.

Preparedness efficacy (PE) refers to having a belief that preparing can help in a disaster AND are confident in their abilities to prepare

High PE (adaptive to threat) Low PE (avoidance control)

Importance:

Feelings of PE is an indication of a belief that preparing will help and that they are able to prepare. Increasing efficacy will support an individual's confidence in their ability to become better prepared.

Current Conclusion

Critical events happen every day and most people are not prepared. Simulated videos capture context and circumstances surrounding real-world challenges and provide learners with reflective time on alternative courses of action that might have occurred and result in better outcomes. Education on this topic holds promise that simulated learning can support public health initiatives and reach large numbers of geographically dispersed communities.

References

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