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FEMA Public Policy Impacts on Emergency Preparedness in Florida

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Walden University
2025

Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

Older adults are at an increased risk of mortality during hazardous emergencies; therefore, it is crucial to comprehend how current emergency preparedness policies are related to preparedness perceptions of older adults. Findings in recent literature identified the underrepresentation of older adults in Emergency Preparedness studies across all areas and Counties of the state of Florida as a gap that needs to be addressed. The purpose of this quantitative correlational study was to examine the relationship between the 2023 FEMA policy on emergency preparedness and the self-reported degree of preparedness among Florida's older adult residents in urban and rural areas across socioeconomic statuses through the lens of the institutional theory framework. Logistic regression analysis was conducted to assess the impact of rurality and socioeconomic status on predicting the likelihood of disaster preparedness and awareness of preparedness information among 275 older adults in Florida. Socioeconomic status emerged as a significant predictor of preparedness, X^2 (2) = 0.006, $p < .05$. Older adults experiencing socioeconomic disadvantages had 3.06 times higher odds of being unprepared for disasters compared to their counterparts who did not experience such disadvantages. The study has potential for positive social change as the results can be used to inform emergency planning to cater to the unique needs of the older population. Additionally, through the potentially improved planning, greater efficiencies can potentially be realized across government levels.

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Dedication

This project is dedicated to one of the most vulnerable populations, the older adults, who need additional support and protection, to the first responders and volunteers, to the emergency management professionals, and to the policymakers and scholars who incessantly work creating new policies considering empirical evidence that would help decision-makers in providing effective and efficient solutions directed to protect lives, properties, and infrastructure located in the high-risk areas of the United States of America and its U.S. Territories.

Acknowledgments

I want to acknowledge the paramount importance that God holds in my life. Our Heavenly Father, I am profoundly grateful for the life, blessings, and experiences you have bestowed upon me every moment; for your teachings, our Lord Jesus Christ, for your boundless compassion, and for instilling hope within me; for the Holy Spirit, who resides within us, offering companionship, comfort, joy, and unwavering protection. I am convinced that each of us has a purpose and a plan, and that your mercy is limitless. God, I thank you for my family, my husband and children, as well as my friends and all the people of the world; I also thank you for all vegetation and creatures inhabiting our ecosystem, for our family pets who bring happiness to our household, and for this magnificent Earth, our home planet, which you created for all. I am grateful for all daily blessings, for your presence among us, for revealing my calling and path, and for guiding my decisions eternally; amen.

I wish to express my heartfelt gratitude to my husband, Marcos, and our children. Marcos, I am profoundly thankful for the blessing of sharing my life with you for more than twenty-six years; it feels as though it was only yesterday when we first met at work. Prior to our meeting, it was foretold that I would share my life with someone like you, and upon meeting you, I realized you were the one I was meant to accompany on this journey. I am grateful for your unconditional love and positivity, for all that you do for our family, for your exemplary role as a father, and for providing me with the time and space necessary to achieve this significant milestone. Thank you for standing beside me as an equal partner and for persevering with faith and love. We have faced critical circumstances together, demonstrating bravery as we protected our family, defended our love, patiently recovered from past crises, learned valuable lessons, and advanced with God's guidance toward new objectives. Together, we have come to understand that during challenging times, God demonstrates His unconditional mercy by strengthening our love through reconciliation and by manifesting the fruits of the Holy Spirit. I sincerely appreciate your daily words of encouragement, which motivate me to remain focused and enjoy this journey. Thank you, my beloved.

I want to acknowledge my children, Leo, Andres, and Sarah; you will forever be my shining stars. Remember to uphold your faith and persevere. Through this, you will learn to live without fear and to view everything from a peaceful and hopeful standpoint. Be more conscious of how divine guidance will illuminate your path, fill your mind with tranquility, confidence, and wisdom, and enkindle your heart with spiritual love and compassion to share with others.

I would also like to acknowledge that it is a great honor and a great privilege to have the guidance of the Chair of the dissertation committee, Dr. Gregory Campbell, and the second committee member, Dr. Steven A. Matarelli. For the academic support of the Associate Dean, Dr. Rebecca Stout; the program manager, Dr. Karen Shafer, the academic advisors, Mr. Yoshihiko Yoshimine, Ms. Tracy Hakenhaster, and to the other outstanding faculty, professionals, and staff of the College of Health Sciences and Public Policy at Walden University who encouraged me to continue my academic journey during the different stages of this program.

May God bless you all.

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Chapter 1: Introduction to the Study

The frequency of emergency incidents, including flooding, earthquakes, hurricanes, tornadoes, riverine flooding, wildfires, heatwaves, and radiological emergencies, has increased (Merdjanof, 2021). Consequently, residents of areas at high risk of experiencing these incidents face various challenges in terms of preparing effectively to manage and mitigate these risks, as well as maintaining readiness to respond should such events occur, and undertaking necessary recovery steps given the substantial economic impact of disaster consequences. According to the Federal Emergency Management Agency (FEMA, 2023a), the estimated expenditure for emergency management (EM) assistance at the national level in 2023 was $29.4 billion, with $1.3 billion allocated for emergency support in the state of Florida. By October 2024, FEMA had committed over $1 billion in public assistance exclusively for Florida, a region that is characterized by a high incidence of hazards.

This study is significant as it examined the influence of FEMA on public policy concerning emergency preparedness (EP) among rural and urban elderly populations in Florida. It consisted of analyzing how the welfare needs of vulnerable populations residing in high-risk disaster zones, such as Florida's older adults, who are more susceptible to mortality during emergencies and disasters, are addressed through collaboration with designated public institutions and agencies, as mandated by constitutional law (U.S. Const. art. I, § 8). While FEMA policies involve assistance to general populations regarding plans for emergency preparedness (EP), emergency response (ER), and disaster recovery (DR), it was necessary to assess the level of preparedness among Florida's older adult residents. Specifically, it is essential to examine their self-reported degree of preparedness for 2023 and determine whether significant variations existed based on rural or urban setting and socioeconomic status.

FEMA (2023e) defined the degree of preparedness as the extent to which individuals self-assess their readiness for emergencies, indicating whether they are prepared, when their preparedness was established, or if they are unprepared or lack intentions to prepare for emergencies or disasters. I examined how older adult populations in Florida, in both rural and urban areas, were prepared for emergencies and assessed whether their socioeconomic status significantly influenced their preparedness. Furthermore, I employed a prescriptive approach, which involved offering specific recommendations derived from study findings to identify effective and efficient solutions that could enhance efforts of Americans and their designated public institutions in providing EP for vulnerable populations.

FEMA developed the National Household Survey (NHS) on Disaster Preparedness (DP) to support its EM mission by evaluating how populations prepare for emergencies or disasters. This comprehensive survey offers valuable insights regarding preparedness levels across various demographic groups, including older adults. I analyzed the responses from the 2023 NHS on DP, with a specific focus on older adult populations in Florida. According to Gilmartin et al. (2019), during natural disasters, individuals over 65 are at a higher risk of mortality compared to younger populations. This increased vulnerability may be attributed to age-related health changes affecting cognitive, sensory, and functional abilities (Gilmartin et al., 2019). Furthermore, some older adults experience their senior years without support from relatives or friends, which may expose them to additional challenges. These challenges could contribute to increased susceptibility in emergencies, where rapid response and urgent shelter-seeking are often required, necessitating a departure from their usual comfort zones to confront life-threatening disaster scenarios.

This prescriptive correlational quantitative study provides crucial information on solutions that could be used to improve current policies, EM outreach, and diffusion efforts, as well as enhance the quality of surveys on DP. This could help prevent more older adults from becoming victims of emergencies caused by incidents or disasters. It may also be used to ensure that during hazardous emergencies, these individuals do not lack access to food, potable water, medicines, healthcare, proper shelter, functional utilities, electricity, gas, and access to emergency services and support, which are issues due to inadequate EP planning.

Moreover, the study emphasizes the development of improved policies. These policies must ensure that all older adults, their caregivers, and emergency responders receive updated, comprehensive emergency training. Such training programs should involve disseminating pertinent and current information regarding procedures for contacting government and community services, as well as appropriate times for evacuation and designated locations for emergency sheltering. Ensuring in this way that local authorities will be equipped with updated lists of residents, including contact numbers and addresses, to facilitate follow-up on safety measures that are aimed at reducing risks of loss of life during disasters.

Likewise, local, state, and federal authorities aim to ensure older adults have equitable access to EP support and educational resources concerning development or adherence to effective ER plans for managing incident situations. These emergency plans include practical information on enhancing home preparedness, as well as facilitating connections with community resources for responding to local emergencies by contacting EM representatives during incidents that may disrupt normal operations of utility services, access to food and potable water, and procedures for obtaining emergency services, including temporary shelters, community, and public services. Consequently, increasing the number of well-prepared individuals might reduce the proportion of persons who are inadequately prepared to respond to emergency needs or those who may experience prolonged difficulties involving safety and recovery following disasters. Study findings enhance the existing body of literature on EP by investigating whether significant correlations existed between older adults' rural or urban residency, socioeconomic status, level of preparedness, and awareness of disaster information. Additionally, providing prescriptive solutions and practical recommendations that could potentially enhance older adults' EP.

Scholars specializing in public policy and administration examine policies that advance justice, promote fair trade economies, enhance quality of life, and improve education, health, safety, and peace for both American populations and global communities. I am committed to examining the public sector's role in enhancing its efforts to meet the needs of American citizens. This includes but is not limited to assessing how U.S. society, institutions, agencies, and organizations adhere to the constitutional requirement of uniformity. The Constitution guarantees, even during emergencies involving hazardous conditions and catastrophic consequences, the allocation and receipt of monetary resources by governments to ensure the safety and welfare of the general population.

In accordance with legal requirements, financial resources allocated for EP, ER, and DR must be distributed through authorized federal, state, and local agencies. They must ensure equity in terms of the fundamental needs of all Americans in these endeavors, with particular attention to the most vulnerable populations. These resources must be made available to all American citizens, regardless of their state or territory of residence. All branches and levels of government are responsible for providing necessary assistance, education, and economic support to foster resilience, safety, and health among populations.

This chapter includes the background, a preview of the scope of the recent empirical literature reviewed on EM and DP, problem statement, purpose, research questions and hypotheses, theoretical framework, nature of the study accompanied by the rationale for the research design, methodology, data sources, definitions of terms, assumptions, scope, delimitations, limitations, and potential contributions to public policy, administration, EM disciplines, as well as broader implications for positive social change.

Background

Scholarly literature concerning EM is both vast and extensive. Specific investigations concentrate on EP, whereas others focus on ER, and yet some address emergency or DR.

Recent studies have concentrated on examining EP within various segments of the general population. Other research has primarily focused on individual behaviors concerning preparedness. Although most of the literature is descriptive, specific scholarly literature offers valuable prescriptive insights that can serve as potential solutions to the issue of insufficient EP among older populations. These include essential academic considerations regarding disaster preparedness, response, and recovery. This research was undertaken to address the existing literature gap concerning the preparedness of Florida's rural and urban older adult populations for emergencies, with particular attention to whether socioeconomic status significantly influences their preparedness in 2023. Furthermore, this investigation aimed to contribute to closing gaps identified in current prescriptive studies on EP within vulnerable groups and identified potential solutions in the current literature on EM. Policymakers may utilize these findings or recommendations to enhance existing EM policies and to assess the justification for funding aimed at improving EP for hazard risk mitigation (HRM), thereby supporting the older adult demographic.

Problem Statement

Although FEMA upholds national policies for EP, the issue remains that the comprehensive level of readiness among individuals aged 60 and above residing in rural or urban regions across various socioeconomic statuses has not been examined over the past five years. Recent research has compared older adults with younger populations but has not considered rurality and socioeconomic status as factors that may pose significant challenges to the preparedness of vulnerable groups (Fazeli et al., 2024). Older adults individuals may face additional obstacles that influence their perceived or actual readiness for emergency incidents. These obstacles could include whether they reside in rural or urban settings, which may restrict their access to community or emergency services, as well as other factors such as socioeconomic status that can profoundly impact their sense of preparedness and actual readiness for emergency procedures.

Therefore, it has become essential to investigate the extent of preparedness among older adults and their awareness of the information required to respond to emergencies and recover from disasters adequately. The absence of proper support and a lack of understanding regarding effective emergency preparedness among older adults may increase their risk of harm or mortality. According to Fazeli et al. (2024), there exists a gap in the literature concerning a prescriptive approach to examining Emergency Preparedness (EP) for older adults. This vulnerable demographic necessitates additional focus to ensure they receive the required support during emergencies. Consequently, this study addresses the issue through a prescriptive framework. Moreover, it investigates practical solutions that could enhance this population's ability to prepare for disaster-inducing emergencies.

Purpose of the Study

This quantitative correlational study examined the relationship between FEMA’s 2023 policy on EP (FEMA, 2023c), the reported degree of preparedness, and the awareness of preparedness information among Florida’s rural or urban older adults, considering their socioeconomic status.

Research Questions and Hypotheses

RQ1: Based on FEMA’s 2023 National Household Survey on Disaster Preparedness for Florida’s older adults, what effects do rurality and socioeconomic status have on predicting the likelihood of degree of disaster preparedness?

$1H_0$: There are no significant effects between rurality and socioeconomic status on predicting the likelihood of degree of disaster preparedness on Florida’s older adults.

$1H_a$: There are significant effects between rurality and socioeconomic status on predicting the likelihood of degree of disaster preparedness on Florida’s older adults.

RQ2: Based on FEMA’s 2023 National Household Survey on Disaster Preparedness for Florida’s older adults, what effects do rurality and socioeconomic status have on predicting the likelihood of awareness of disaster preparedness information?

$2H_0$: There are no significant effects between rurality and socioeconomic status on predicting the likelihood of awareness of disaster preparedness information on Florida’s older adults.

$2H_a$: There are significant effects between rurality and socioeconomic status on predicting the likelihood of awareness of disaster preparedness information on Florida’s older adults.

Theoretical Framework for the Study

The institutional theory articulated by William Richard Scott (Scott, 1995; Scott, 2014) elucidates how institutions formulate policies to assess and steer social behavior. There are several policies related to Emergency Preparedness (EP), including how the federal government, guided by principles articulated in the Constitutional Law, collaborates with the President and Congress to develop policies, institutions, and agencies aimed at safeguarding and enhancing the resilience of American citizens confronting imminent hazards or disasters (DHS.gov, 2011, March 30). These policies authorized FEMA to establish guidelines to foster individual EP. Scott's (2014) institutional theory illustrates how institutions and agencies are designed to serve social objectives, which, in the context of this study, involves developing policies that ensure the safety and well-being of the population during emergencies or disasters, with a specific focus on vulnerable groups, such as older adults. Numerous examples provided by Scott (2014) illustrate how the institutional theory aligns with the purpose and objectives of contemporary agencies, such FEMA's development of EP policies, for instance, the 2023 NHS on DP, which aims to gather public feedback regarding their level of preparedness.

Scott (2014) stated that transactions delineate interactions, idea-sharing, and the development of intricate concepts concerning the rules of conduct employed by individuals within a society. Furthermore, Scott claimed that everyday social needs and interests serve as impulses for collaboration and agreements, which in turn establish constitutional regulations that guide the creation and establishment of governments, as well as public institutions and agencies committed to fostering positive social change. However, Scott stated that behavior, quality of service, and performance of groups of individuals working within these institutions and agencies can adversely impact the performance and legitimacy of current institutions. The United States Government Accountability Office (GAO, 2019) issued an assessment on FEMA's progress and challenges in its efforts to improve EM, which indicated that the agency was still in the process of implementing further improvements with new strategies. Considering the high frequency of hazards that increase human losses and displacement counts during catastrophic events, such improvements are highly critical and in need of immediate government EM attention and support. Such issues may justify the creation of new institutions, reforms to existing ones, or deinstitutionalization due to a loss of focus and disconnection from the services and outcomes envisioned in their primary missions.

From the lens of institutional theory, this correlational quantitative study aimed to examine the extent of preparedness as perceived by respondents, along with their awareness of preparedness information, after receiving the EP messages promoted by FEMA. The 'degree of preparedness' indicates whether an individual was prepared or unprepared, while 'awareness of preparedness information' reflects whether the individual was cognizant of such information or not (FEMA, 2023d). The findings of this analysis elucidated how, at the time of survey administration, older adults responded regarding their level of preparedness and awareness of preparedness information, as well as the relationship of these responses with their rural or urban residence and socioeconomic status.

Nature of the Study

The research methodology involved secondary data analysis utilizing information collected by FEMA in 2023 to address the research questions. Specifically, the analysis was based on their 2023 National Household Survey on Disaster Preparedness (FEMA, 2023e). This survey was designed to collect responses from the national population regarding their preparations for emergencies and disasters. The survey instrument comprised core questions related to disaster preparedness, along with other survey items, demographic information, and various emergency-related disaster types or hazard categories that individuals might encounter in the country, such as coastal flooding, earthquakes, hurricanes, riverine flooding, radiological emergencies, wildfires, and pandemics (FEMA, 2023e). The survey was administered from February 1st, 2023, to March 14th, 2023, and was available exclusively in English and Spanish. Nationwide, out of the 50 U.S. states and territories, a total of 7,604 surveys were completed. Of these, 978 responses originated from the state of Florida, and among these, 326 respondents were residents aged 60 years or older. Consequently, older adults constituted approximately 33% of the Florida respondents to the 2023 FEMA Survey, representing a substantial segment of the population that participated in this survey from the state of Florida (FEMA, 2023e).

This quantitative correlation design investigated whether a significant relationship exists between the outcome and predictor variables (Burkholder et al., 2019). I employed statistical analysis, including descriptive statistics that identify the dataset's name, sample population size (*N*), variable descriptions, units of analysis, levels of measurement, evaluation of the seven assumptions for logistic regression testing, assessment for potential Type I or Type II errors, and various tests designed to address the research questions and hypotheses, accompanied by tables and figures illustrating the outcomes (Creswell & Creswell, 2023).

The variables I identified cross-referenced with the research questions and survey items. The outcome variables are the degree of preparedness (prepared/not prepared) and awareness of preparedness information (Yes/No). The predictor variables are rurality (rural/urban) and socioeconomic status (advantaged/disadvantaged) (FEMA, 2023e). I used IBM SPSS Statistics v 30.0.0 for statistical analysis, which is the latest version of the application. Before computing inferential statistics, I evaluated the data set to ensure the seven data assumptions necessary for logistic regression outcome validity were assessed. Wagner (2020) identified these seven logistic regression assumptions as:

1. The outcome variable should be measured on a dichotomous scale.

2. One or more predictor variables, which can be continuous or categorical (ordinal or nominal variable), are required.

3. The sample size must meet a minimum requirement, computed using an evidence-based computation method.

4. The outcome variable should have mutually exclusive and exhaustive categories and demonstrate independence of observations, illustrated by no significant correlations between predictor variables.

5. Use case-wise lists to examine whether the data shows significant outliers and then decide whether to remove them or keep them in the analysis.

6. Assess linearity with the Box-Tidwell procedure to determine linear relationships between any continuous predictor variable and the logit transformation of the outcome variable.

7. Evaluate for multicollinearity.

I evaluated the model assumptions for logistic regression before performing the test statistic. I assessed the statistical tests, interpreted the results for meaningfulness, and analyzed the results for implications for social change. Logistic regression tests were used to determine if rurality or socioeconomic status can predict the degree of preparedness of older adults in an emergency (Warner, 2013). It was used for categorical tests, for example, to examine the significant association between older adult population respondents in rural and urban areas and their degree of preparedness and awareness of preparedness information (FEMA, 2023e). Age was reported to ensure that the responses of older adults 60+ years of age in the state of Florida were the only selected participants.

Definitions

Awareness of Preparedness Information: FEMA (2023e) defined this term as "the effect after receiving the information that the respondents might have read, seen, or heard about disaster preparedness such as assemble or update supplies, document and insure property, getting involved in your community, know your evacuation routes, make a plan, make for a home safer, plan with neighbors, practice emergency drills or habits, safeguard documents, save for a rainy day, sign up for alerts and warnings, test family communication plan" (p. 3-4).

Binary Logistic Regression: A Statistical method that is employed to analyze whether it is possible to predict the likelihood of an event related to social behavior by examining the relationship between categorical and continuous variables. It necessitates the formulation of questions with responses that are 'yes' or 'no'. In other words, the variables selected must have dichotomous values, representing either the absence or presence of a condition, which can be numerically expressed as 0 and 1, where zero (0) indicates the absence of the condition and one (1) indicates its presence (Warner, 2013). It is also essential to understand the concepts related to categorical relationships necessary for describing the interactions between the variables tested through logistic regression.

Capacity Building: These are preparedness services available in some locations to support the residents. According to FEMA (2023e), these include four services: "community-based support services, youth preparedness, citizen responders, and financial resilience" (p. 10-14).

Coastal Flooding: FEMA (2023e) defined coastal flooding as "when water inundates or covers normally dry coastal land because of high or rising tides or storm surges" (p. 17).

Conditional Odds: A Type of odds that are used to predict the possibilities that a specific outcome might happen. They are calculated by dividing the number of times an event or outcome might happen by the number of times the same event or outcome might not happen (Warner, 2013). For instance, election forecasters observe the odds of parties' nominees winning elections and use this information to gauge possible trends for the next elections (Frankfort-Nachmias et al., 2020).

Conditional Probability: The probability of an event occurring given that another event has already occurred constitutes a conditional probability, which serves as a prerequisite for the occurrence of the latter (Bazett, 2017). For instance, among two groups of individuals who previously experienced a myocardial infarction, the subgroup of dog owners exhibited a higher conditional probability of survival compared to the non-dog owner group. The conditional probability pertains to surviving after the initial myocardial infarction, an event that all individuals within the groups experienced. Furthermore, the analysis demonstrated that individuals who owned dogs had a greater conditional probability of survival post-infarction than those who did not own dogs (Warner, 2013).

Degree of Preparedness: FEMA (2023e) defined this term (and variable) as how the respondents reported their preparedness at the moment of the survey. The options for selection were: “do not know, I am not prepared and do not intend to prepare, I am not prepared but intend to start to prepare in the next year, I am not prepared, but I intend to get prepared in the next six months, I have been prepared for less than a year, I have been prepared for more than a year” (p. 3).

Disability: FEMA (2023e) defined disability as a “health condition that might affect your capacity to respond to an emergency (a mobility, hearing, vision, cognitive, or intellectual disability or physical, mental, or health condition)” (p. 31).

Disaster: An Event that could threaten lives, disrupt public or emergency services like water and power, or damage property (FEMA, 2023e, p. 2).

Disaster Experience: According to FEMA (2023e), disaster experience is “the experience that the respondents can report of previous experiences with disasters” (p. 6).

Disaster Risk Perception: FEMA (2023e) defined this term (and variable) as “the respondent’s perception of the types of disasters that might happen with high impact where they live, such as active shooter, avalanche, biological attack, chemical attack, chemical emergency, cyberattack, dam failure, drought, earthquake, electromagnetic pulse (EMP), explosion, extreme heat, financial emergency, flood (flash, inland, coastal surge), food or water contamination, HAZMAT release, home fire, hurricane, landslide, nuclear explosion, pandemic, power outage, radiological attack, radiological emergency, space weather, thunderstorm, tornado, tsunami, typhoon, utility interruption, volcanic eruption, wildfire, winter storm" (p. 4-5).

Earthquake: FEMA (2023e) defined this term as "a shaking of the earth's surface by energy waves emitted by slowly moving tectonic plates overcoming friction with one another underneath the earth's surface." (p. 19).

Emergency Plan Aspects: FEMA (2023e) included the following elements of the emergency plan; "checking on your neighbors to make sure they are okay in the event of a disaster, information about how to leave your community for an evacuation, information about where to shelter or a safe place you can stay in the event of a disaster, prepare a communication plan for your household members to get in touch with each other if you are not together when the disaster happens" (p. 8).

Emergency Preparedness Actions: FEMA (2023e) defined this term as "the lists of actions that the respondents might have done to get prepared for emergencies or disasters such as assemble or update supplies, document and insure property, getting involved in your community, know your evacuation routes, make a plan, make for home safer, plan with neighbors, practice emergency drills or habits, safeguard documents, save for a rainy day, sign up for alerts and warnings, test family communication plan" (p. 3).

Financial Insurance Hazard: FEMA (2023e) has defined this term as types of separate hazard-specific insurance coverage, such as earthquake, fire/wildfire, flood (provided by the National Flood Insurance Program or a private insurance company), hurricane, tornado, or volcano (p. 14).

Financial Insurance Residence: FEMA (2023e) has defined this term as "respondent's homeowners' insurance or renters' insurance for their residence" (p. 14).

Financial Resilience: FEMA (2023e) has defined this term as the respondents' "financial actions taken to get prepare for disasters such as contacting a qualified financial counselor, creating a budget, creating an updated Emergency Plan for financial emergencies, documenting property via photo or video, invested in an emergency savings account, kept cash in a secure place, kept important records and receipts safe, learned how to claim financial disaster assistance or aid, reviewed credit score, reviewed insurance coverage, avoided scams and hacking to secure finances in cyberspace" (p. 14).

Hazard Oversamples: FEMA (2023e) defined this term as "the list of hazards that cause emergencies or disasters, such as coastal flooding, earthquake, hurricane, riverine flooding, radiological emergency, wildfire," which are the hazards that were included in the 2023 survey (p. 17).

Hurricane: FEMA (2023e) defined this term as "a tropical cyclone or localized low-pressure weather system that has organized thunderstorms but no front (a boundary separating two air masses of different densities) and maximum sustained winds of at least 74 mph." (p. 21).

Logistic Regression Analysis (also known as Logit Regression) uses a dichotomous outcome or predictor variable to predict a future event, along with one or more dichotomous predictor variables. For instance, to predict whether teachers at the charter schools will get a raise in 2024 – 2025 or whether the teachers at the charter school will get a raise in fiscal year 2024 -2025 at all (Wagner, 2020).

Odds Ratio: It compares the odds of an event between two different groups or conditions. Calculating the odds ratio helps determine the number of times a group condition, behavior, or event occurs more frequently compared to the other group, which has a different condition, behavior, or event. As illustrated in Warner's (2013) example, dog owners were approximately six times less likely to die sooner than individuals who did not own dogs.

Older Adults: According to Pena et al. (2021), in their literature review of EBSCO scholarly articles on the definition of older adults from the International Journal of Lifelong Education, the age range of older adults varies. Some studies identified older adults as people between the ages of 45 and 75, others between 60 and 80, while others between 55 and 88 years of age. Additionally, Pena et al. (2021) proposed the idea of defining older adulthood based on an individual's work status and parenting status. However, the idea of defining older adults based in work status sounds inappropriate. For instance, because there are younger adults who are not working and are not parenting, they might not necessarily be considered long-lived individuals to be called "older adults". Therefore, since I am using the FEMA (2023e) Survey data for this study, I will select only households with older adults who are 60 years of age or older, as defined in their survey variable "Sixty Plus" (FEMA, 2023d).

Pandemic: FEMA (2023e) defined this term as “a disease outbreak that spans several countries and affects a large number of people. Pandemics are most often caused by viruses, like COVID-19, which can easily spread from person to person.” (p. 14).

Perceived Preparedness: This is the individual's actual preparedness during the survey. It responds to the respondents' degree of preparedness and is a re-coded calculated field performed by FEMA (2023c) to facilitate their analysis. The options were unprepared individual, prepared individual, and unknown (p. 13).

Radiological Emergency: FEMA (2023e) defines this as “a type of radiological incident that poses an actual or potential hazard to public health or safety or loss of property. This hazard occurs through direct radiation exposure and/or indirectly through the spread of radioactive material that emits radiation. This could be an unintentional incident, such as a nuclear power plant accident or a transportation or occupational accident involving the spread of radioactive material. This could also be an intentional attack from a hidden radiological exposure device, a radiological dispersal device (dirty bomb), or a nuclear weapon.” (p. 25).

Relative Risk: It is a ratio of the probability of an event occurring in an exposed group in comparison with the probability of the event occurring in the non-exposed group. For instance, the relative risk of getting a virus infection (event) of hospital workers (exposed group) versus online instructors working from home (non-exposed group) would be possible by calculating the probability of developing a virus infection of hospital workers divided by the probability of developing a virus infection of online instructors working from home. This will provide information on the likelihood of the event in exposure versus non-exposure groups (Tenny & Hoffman, 2023).

Riverine Flooding: FEMA (2023e) has defined this term as “when streams and rivers exceed the capacity of their natural or constructed channels to accommodate water flow, and water overflows the banks, spilling out into adjacent low-lying, dry land (p. 23).

Rurality: Location area (rural or urban) of respondents' homes (FEMA, 2023c, p. 14).

Sixty-plus: Respondents of sixty or more years of age. Variable on FEMA dataset (FEMA, 2023d).

Slopes: The observed inclination that shows the trend of the behavior of the data in a scatterplot. In a regression, it provides information on how much change in Y the researcher might expect to find as a result of an increase in X (Khan Academy.org, 2024).

Wildfire: FEMA (2023e) has defined this term as “an unplanned fire burning in natural or wildland areas such as forests, shrublands, grasslands, or prairies.” (FEMA 2023e, p. 28).

Assumptions

Since 2013, FEMA (2023b) has annually conducted the National Household Survey on Disaster Preparedness as part of its initiative to enhance emergency and disaster readiness among the United States population. Consequently, there is an implicit assumption that this initiative has been effective as a preventative measure against disaster emergencies. The survey was utilized to collect responses from the national population regarding their preparedness measures for emergencies and disasters (FEMA, 2023e). The purpose of this study was to explore the relationship between the respondents' level of preparedness among the rural and urban older adult populations in the state of Florida and various socioeconomic factors. The sample of older adults in Florida accounts for 33% of the respondents in Florida for the 2023 FEMA National Household Survey.

Scope and Delimitations

For this quantitative correlational study, the dataset employed was the 2023 National Household Survey on Disaster Preparedness (FEMA, 2023d). This dataset facilitated the examination of the responses from the national population regarding their preparedness for emergencies and disasters. The respondents comprised civilian, non-institutionalized adults residing within the United States, aged 18 years or older, with internet access. This included residents of the United States as well as U.S. territories such as American Samoa, the Commonwealth of Northern Mariana Islands, Guam, Puerto Rico, and the U.S. Virgin Islands. From this larger sample, only individuals aged 60 years or older and residents of Florida were selected (FEMA, 2023c).

The survey instrument encompassed fundamental questions pertaining to disaster preparedness, alongside additional survey items such as demographics and various emergency-related incident types or hazard categories that individuals might encounter within the nation. These include coastal flooding, earthquakes, hurricanes, riverine flooding, radiological emergencies, wildfires, and pandemic-related disasters (FEMA, 2023d). This study was restricted to respondents identified as older adults, excluding individuals residing in nursing homes. The data were derived from the operational dataset of the 2023 FEMA National Household Survey on Disaster Preparedness. They did not incorporate data from previous years or 2024, thereby providing a snapshot of the preparedness level among older adults solely for the year 2023. At the time of approval of this study's proposal, this dataset was the most current published by FEMA regarding disaster preparedness (FEMA, 2023d).

Notwithstanding the ongoing transition experienced by government agencies, including FEMA, I wish to clarify that the scope of this study does not encompass auditing the data collection processes or activities undertaken by FEMA in their efforts to disseminate the Emergency Preparedness (EP) message and address the needs of disaster victims. Consequently, I wish to emphasize that the purpose of this study is to remain focused on examining how FEMA policies regarding EP are related to the rural and urban older adult populations within the state of Florida, particularly concerning their reported levels of preparedness and awareness of preparedness information in 2023. Additionally, I investigated whether differences in socioeconomic status influence the degree of preparedness among older adults.

Limitations

I utilized a publicly available operational dataset generated by FEMA in 2023. As a legal prerequisite for safeguarding respondents' identities, FEMA curated this dataset prior to public access. An initial consultation was conducted with the Walden University IRB during the development of the prospectus, during which it was clarified that, for this dataset, it is not necessary to obtain a special permit to analyze the public data to identify and locate the population and relevant variables. Nonetheless, since my analysis was restricted to responses to the 2023 FEMA survey questions, I was only able to examine cases with valid responses to determine potential correlations between outcome and predictor variables. A limitation inherent to this quantitative correlation design is that it does not facilitate causal analysis (Creswell & Creswell, 2023), thus preventing the examination of causal relationships. Conversely, this correlational design examines the relationships among variables, regardless of whether these relationships are present or absent (Creswell & Creswell, 2023). Specifically, it assesses the likelihood that variables such as rurality (rural/urban) and socioeconomic status (advantaged/disadvantaged) (independent variables) can predict the older adult's level of preparedness (prepared/not prepared) and awareness of preparedness information (Yes/No) (dependent variables).

Significance

This study examined vulnerable populations, specifically the older adult demographic, and their preparedness for emergency incidents in accordance with FEMA policies (FEMA, 2023e). It particularly focused on how they reported their degree of preparedness and their awareness of preparedness information, taking into account their rural or urban location and socioeconomic status. The research aimed to determine whether there is a relationship between their degree of preparedness and awareness of preparedness information, and whether these could be predicted based on their residency location (rurality) or socioeconomic background. The findings have implications for social change, contributing to the existing literature on preparedness within social and behavioral frameworks or theories. Furthermore, they may demonstrate that, depending on whether older adults reside in rural or urban areas and their socioeconomic status, it is possible to predict their level of preparedness and awareness of emergency preparedness information. This underscores the importance of disaster preparedness, which encompasses HRM strategies within EP procedures and protocols.

These strategies include providing financial assistance, preventive measures such as private or public insurance, effective ER measures, access to community and government emergency services, and temporary shelters. The research outcomes may also be utilized to enhance the quality of responses, related services, and logistical planning necessary to deliver essential aid and resources efficiently to individuals and households during crises. The results of the statistical test may either predict or not predict outcomes, contingent upon the magnitude of the effect on the level of preparedness and awareness of preparedness information among the older adult population. This variation might be influenced by the proportion of older adults who could face difficulties, depending on whether they reside in rural or urban areas, or based on their socioeconomic status.

Summary

Older adults continue to constitute a highly vulnerable and high-risk population, frequently lacking adequate emergency or disaster preparedness plans (Gilmartin et al., 2019). Consequently, it was imperative to determine whether significant differences exist in the reported levels of preparedness and awareness of preparedness information between older adults residing in rural areas and those in urban settings. Furthermore, it was essential to assess whether notable disparities are present in these metrics among individuals with an advantaged socioeconomic status compared to those with a disadvantaged socioeconomic status.

The 2023 FEMA survey examined the preparedness of a representative sample from the national population, specifically identifying whether individuals were prepared, unprepared, or planning to prepare in the future, as well as their intended timeline (FEMA, 2023e). A quantitative correlational research design was employed, utilizing logistic regression analysis to explore the potential predictive relationship between the socioeconomic status of Florida's urban and rural older adults and their respective emergency preparedness (EP) policies, in accordance with FEMA's Emergency Preparedness (EP) policy (FEMA, 2023e). Chapter 2 outlines the literature search methodology, presents the theoretical framework, and provides a review of current peer-reviewed research relevant to the problem statement, research questions, hypotheses, and key variables and concepts.

Chapter 2: Literature Review

Emergencies and risks of catastrophic consequences have significantly increased in recent years, causing deaths and displacement to many Americans, including older adults who are among the most vulnerable populations (Fazeli et al., 2024). Whether they reside in independent households or nursing facilities, they require additional support to prepare, respond to, and recover from emergencies or disasters. Furthermore, it is also possible these risks are higher for these populations due to rurality or socioeconomic status. Therefore, knowing if and how older adults prepare for emergencies is essential to identify if their degree of preparedness is sufficient to mitigate dangers and protect them in case they are at risk of experiencing hazardous emergency incidents.

Consequently, it is imperative to investigate the extent of engagement between senior populations and various government bodies, agencies, and nonprofit organizations that address their needs during emergencies. I conducted a review of scholarly literature concerning EP among older adults and analyzed the influence of FEMA policies on this vulnerable demographic. I focused on older adults residing in both rural and urban regions of Florida with an emphasis on examining whether their socioeconomic status correlated with their level of preparedness. Furthermore, this scholarly literature review identified practical solutions applicable to EP and DP for older adults both in Florida and across the United States and its territories. I developed a research strategy to thoroughly review existing scholarly literature on variables and key concepts related to this topic.

Literature Search Strategy

I utilized scholarly resources from the Walden University Library and Google Scholar to conduct an extensive review of current literature, focusing on specified key terms and concepts associated with the subject of this study. Initially, I selected peer-reviewed articles that were published between 2019 and 2025 (see Table 1). Finally, I curated the list by eliminating duplicates, thereby significantly narrowing the total number of articles to those that were most pertinent.

Table 1

Keywords and Concepts

Keywords and Concepts
FEMA Public Policy 2023 and elderly, and emergency preparedness.
FEMA Public Policy and Elderly
FEMA Public Policy and elderly and rurality
FEMA Emergency Preparedness
FEMA's Public Policy and Emergency Preparedness, Urban or Rural areas, and elderly, and Florida.
Emergency preparedness, emergency planning and disaster preparedness and elderly and Florida
Emergency preparedness and elders and Florida
Emergency preparedness and rural or urban areas
Emergency preparedness and elderly, Florida
Elderly and emergency preparedness and socioeconomic status
Elderly and Emergency Preparedness and language barriers
FEMA policies and elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior and emergency preparedness or emergency planning or disaster response and Florida
FEMA policies and elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior emergency preparedness or emergency planning
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior emergency preparedness or emergency planning or disaster response and language barriers
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior Florida socioeconomic status or poverty or low income and rurality
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior and emergency preparedness or emergency planning or disaster response socioeconomic status or poverty or low income
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior and emergency preparedness or emergency planning disaster preparedness Florida
Elderly or aged or older or geriatric or elderly people or elderly people or old people or old people or senior and Florida and socioeconomic status or poverty or low-income primary language
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior and Florida disaster preparedness or disaster response or disaster management language or language barriers or language proficiency
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior older or elder or geriatric or elderly people or old people or old people or senior and Florida and Disaster preparedness o disaster response and Socio-economic status
Elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior and Socio-economic status and Florida and emergency preparedness or emergency planning or disaster response.
FEMA policy elderly or aged or older or elder or geriatric or elderly people or old people or old people or senior emergency preparedness or emergency planning or disaster response

Theoretical Foundation

I examined the influence of FEMA's public policies on EP of both rural and urban older adults within Florida. Institutional theory involves addressing the early stages of government formation, including the establishment of social groups and consensus on principles, daily needs, and behavioral norms (Scott, 2014). Populations establish constitutional principles and laws that direct all government institutions and agencies to formulate public policies aimed at addressing the fundamental needs of their constituents (Scott, 2014). In the following sections of this Chapter, I analyzed institutional theory and constitutional provisions, including Article I, Section 8 of the U.S. Constitution, as well as the Presidential Policy Directive for National Preparedness policy. I synthesized themes, key terms, and concepts from this literature review.

Constitutional Provisions Available to Protect the American People

Regarding the challenges individuals may encounter during emergencies and disasters, there exists a constitutional provision that obligates the United States government to support American populations in developing the necessary resilience to reinforce their societies. The founding fathers articulated in the Preamble of the Constitution, which constitutes the supreme law of the United States, the commitment to safeguarding the general welfare of Americans to ensure the safety and health within the United States and its territories (U.S. Const. art. I, § 8). Subsequent paragraphs briefly outline how historically the U.S. government has enacted laws and policies in the context of EM in accordance with the constitutional mandate (see Figure 1).

Figure 1

Institutional Theory Emergency Preparedness Framework

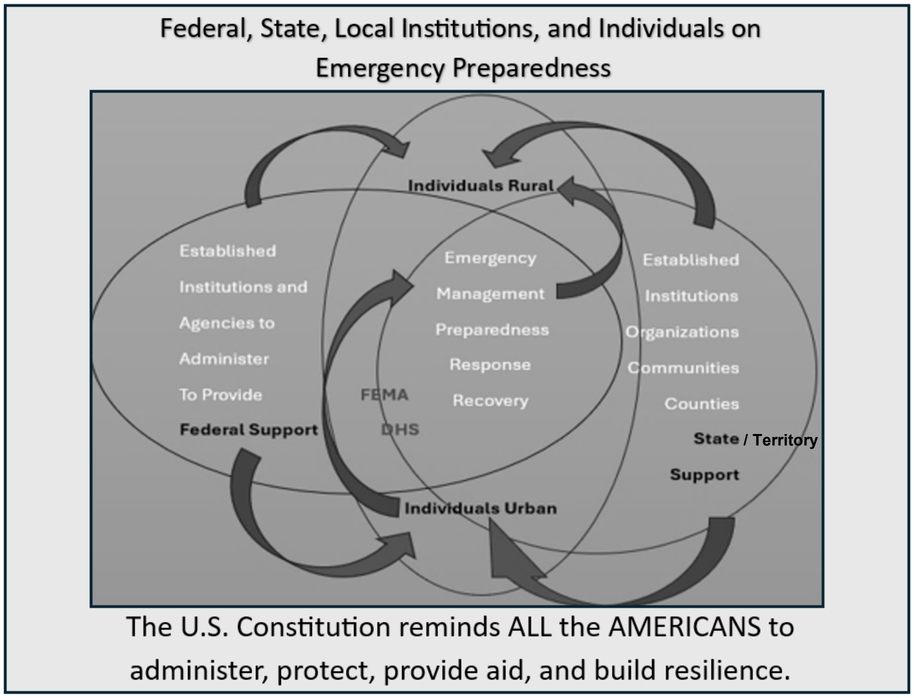


Figure 1 illustrates the theoretical foundation of this study, where individuals residing in urban and rural areas are the central focus. Federal, state, territorial, county, municipal, and local governments, alongside various public, nonprofit, for-profit, and community organizations, function as public servant leaders dedicated to serving each American citizen.

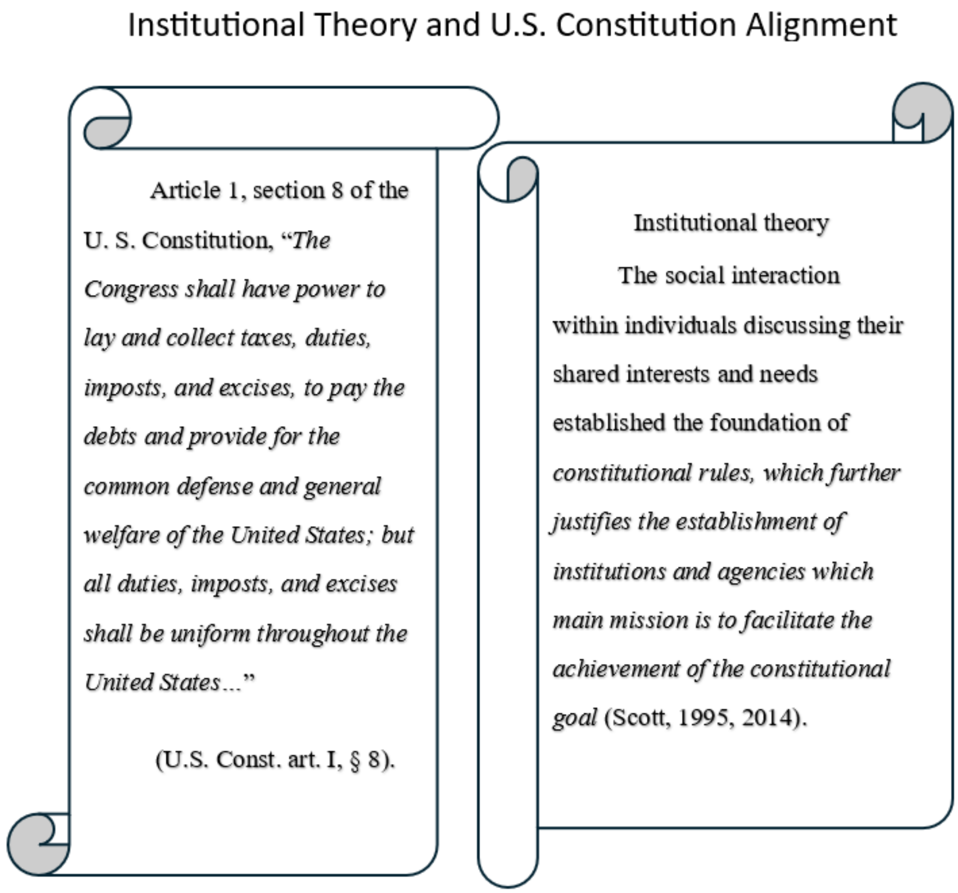
Article 1, Section 8, Constitution of the United States of America

In response to the fundamental needs of the American people, the United States Constitution outlines directives for elected representatives of the federal government to ensure the safety, welfare, and health of the general population (U.S. Const. art. I, § 8). This mandate may be interpreted as requiring provisions that assure education and emergency assistance in terms of preparedness, response, and recovery efforts. Several presidents of the United States have maintained the constitutional vision and mission of effectively and efficiently safeguarding the defense, safety, and welfare needs of Americans (U.S. Const. art. I, § 8) by enacting laws and establishing institutions in order to fulfill this constitutional mandate.

In accordance with Article I, Section 8 of the United States Constitution, "The Congress shall have power to lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defense and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States…" (U.S. Const. art. I, § 8). Therefore, the federal government has enacted relevant legislation and established institutions and agencies dedicated to these objectives. In 1974, in pursuit of the Constitutional mandate to promote the "general welfare," the Congress of the United States enacted the Disaster Relief Act. This was subsequently amended in 1988 to become the Robert T. Stafford Disaster Relief and Emergency Assistance Act, which constitutes the federal legislation supporting the efforts of the U.S. Department of Homeland Security (DHS) and established FEMA (2023, June 6) (DHS.gov, 2011) to serve and support the American population through essential preventative tasks of Emergency Management (EM), including Emergency Preparedness (EP), Emergency Response (ER), and Disaster Recovery (DR) (FEMA, 2024b). Refer to Figure 2 for an illustration of how the institutional theory aligns with the U.S. Constitution.

Figure 2

Institutional Theory and U.S. Constitution Alignment



Presidential Policy Directive on National Preparedness Policy

Considering that EP constitutes a pivotal support area within the EM discipline, an essential facet of disaster prevention that necessitates the implementation of effective and efficient preparedness policies and measures to mitigate and respond to emergency incidents successfully, the Department of Homeland Security (DHS) and FEMA have formulated policies accompanied by recommendations for individuals and households to enhance their preparedness for emergencies and disasters (FEMA, 2024a,b). Specifically, the Presidential Policy Directive on National Preparedness, which encompasses the presidential mandate for the government to systematically prepare the national population against potential threats and risks, including acts of terrorism, cyber-attacks, pandemics, and catastrophic natural disasters (DHS.gov, 2011, March 30).

Literature Review Related to Key Variables and/or Concepts

This section provides a comprehensive synthesis of scholarly literature pertinent to the topic. An increase in descriptive research concerning Emergency Management (EM) is noted. However, a notable gap exists in prescriptive studies on Emergency Preparedness (EP) within vulnerable populations (Fazeli et al., 2024). While some studies focus on Emergency Response (ER), Disaster Recovery (DR), Emergency Preparedness (EP), or specific geographic regions, populations, or hazards, others target particular populations and additional factors. The current literature addressing FEMA policies on EP, specifically in relation to Florida's urban and rural older adult populations and their socioeconomic status, needed to be explored. Consequently, a strategic approach was employed in searching available database resources, targeting key themes, terms, and relevant concepts related to the topic. This facilitated a comprehensive synthesis of the literature, progressing from broad conceptual frameworks to specific key terms, variables, and resource combinations most pertinent to the subject.

FEMA Public Policy Impact on EP in Florida

This study focused on the older adult population of the state of Florida; however, it was essential to at least include some of the current literature about the older adults or general population outside Florida, as it revealed potential prescriptive solutions that might improve older adults' disaster preparedness in Florida as well as the rest of the U.S. mainland and its U.S. territories. The following sections include the current literature regarding the main themes: FEMA policies on EM impact, including HRM strategies for preparedness, response, and recovery, of both the state of Florida and the U.S. mainland, as well as literature from other states, territories, or countries with relevant information on the topic.

Role of the U.S. Government in EP

All levels of government are mandated by the U.S. Constitution (U.S. Const. art. I, § 8) to enhance resilience within the population through the development and implementation of effective, efficient, equitable, and economical EM policies. Such policies must ensure the safety and welfare of citizens, when necessary, as illustrated in Figure 1. Consequently, partnerships among local, state/territory, and federal agencies, alongside community organizations, are essential for achieving comprehensive community resilience (Davis et al., 2021). The combined economic and financial contributions of all governmental levels establish a balanced framework, harmonizing the uniformity of contributions from the residents of each state with those from the Federal Government, as well as the contributions of residents to their respective states. This dual-level contribution system promotes both uniformity and proportional assistance based on the population size of each affected state. As a result, states with limited revenue can still receive aid during disasters. The inclusion of the constitutional principle of uniformity thus aims to generate substantial economic resources, ensuring the development of safer infrastructure, enhanced national security, and the delivery of effective and efficient welfare services—including emergency and disaster HRM (preparedness, response, and recovery), quality education, and excellent healthcare services—benefiting all residents of the United States and its territories.

Considering that the U.S. Constitution has designated the right, power, and responsibility of electing prominent representatives at all levels of government to the entire American population, it follows that all citizens share a responsibility with the government in everyday matters, including the preparation of safety plans with the assistance, guidance, and support of governmental agencies at all levels. Therefore, American individuals, in their capacity as responsible citizens, are committed to participating in efforts to mitigate emergencies by assuming ownership of their preparedness plans (see Figure 1). This participation helps reduce the impact of disasters and contributes to lowering the national, state, territory, and local costs associated with emergency and disaster management. Furthermore, all levels of government, along with public and private organizations, businesses, corporations, communication media, the press, and trading partners, share a collective ethical responsibility to educate households by efficiently disseminating quality information on emergency preparedness. Special attention should be given to the most vulnerable populations, who may require additional support from community networks, government authorities, and other relevant organizations (Sylves, 2020).

Disaster Preparedness at the Federal Level (DHS and FEMA)

In accordance with the United States Constitution, the United States Congress, through the Executive branch, established FEMA (2023, June 6) with the primary aim of supporting and safeguarding all the American citizens of the United States and its territories by efficiently administering financial resources and overseeing activities related to providing EM support during disaster-related emergencies. Part of their mandate also includes collaborating with local governments, states, and territories to educate their populations on how to better prepare for emergencies and disasters (FEMA, 2024a,b). According to Scott (2014), various government sectors share responsibilities for implementing and enforcing constitutional law and have established policies, institutions, and agencies designated to protect and assist the constituents. Therefore, the government supports the development of mitigation strategies, including the efficient development of preparedness plans, effective response, and facilitating recovery, as illustrated in Figure 1. Consequently, the Department of Homeland Security (DHS) and FEMA share the mission of HRM by protecting and supporting the citizens of the United States and its territories while providing EM support before, during, and after emergency incidents—namely, preparedness, response, and recovery (FEMA, 2024b; DHS.gov, 2011).

Annually, the United States Congress revises the projected budget allocated for Emergency Management (EM) to ensure alignment with policies and directives for national preparedness. This includes consideration of FEMA's detailed fund requirements based on hazard incident estimates and associated costs from preceding years. The Congress approves an estimated operating budget and, as necessary, a disaster relief fund request to cover the expenses and efforts required to fulfill its mission for the upcoming fiscal year (Congressional Research Service, 2025). Nevertheless, each year, the increasing frequency of disaster fluctuations influences the available funds for disaster prevention and HRM. Effective planning and response to emergencies are crucial for safeguarding vulnerable populations residing in high-risk geographic areas. One such high-risk region is the state of Florida, which, due to its geographic location, faces numerous hazards annually, thereby endangering the entire population, particularly older adults, who are among the most vulnerable demographics.

FEMA has dedicated its efforts to executing its mission of providing Emergency Management (EM) support prior to, during, and following emergency incidents. Nevertheless, the annual expenditure on EM varies considerably due to factors such as disparities in incident hazard zones, the size of the affected population residing in high-risk areas, the extent of damage inflicted on public structures and infrastructure, the severity of incidents, economic inflation influencing the costs of materials and contracted services, and other administrative EM expenses (FEMA, 2024a,b). For example, the average yearly expenditure on managing emergency disasters prior to the pandemic was approximately $12.5 billion. However, since the onset of the pandemic in 2019, this figure surged sharply, reaching $24 billion, and further escalating to $47 billion in 2020 (Congressional Budget Office, 2022, November).

Furthermore, in 2021 and 2022, FEMA incurred approximately $26.4 billion and $28.7 billion, respectively. Additionally, in 2023, FEMA allocated $29.4 billion for national assistance, of which more than $1.3 billion was expended to provide Emergency Management support to the state of Florida. As of October 2024, FEMA had committed over $1 billion solely for Public Assistance to Florida, a state significantly affected by high-risk events (FEMA, 2024a,b). Given the substantial fluctuations in recovery expenses, FEMA annually responds to the Presidential Policy Directive for National Preparedness (DHS.gov, 2011, March 30) and undertakes initiatives to educate the general public on disaster preparedness. Furthermore, FEMA developed a survey instrument aligned with this policy to collect public feedback on disaster readiness.

Additionally, according to U.S. constitutional law (U.S. Const. art. I, § 8), the government is required to find a means to provide aid despite the increasing frequency and severity of hazards that result in disaster incidents impacting more densely populated areas each year. This leads to disproportionate increases in deaths and losses, while depleting the estimated available funds and disaster insurance support necessary for managing disaster response and recovery efforts in these high-incidence communities (National Centers for Environmental Information, 2025). Therefore, in accordance with the fundamental mandates of constitutional law, if the annual budget estimate for the current year proves insufficient for EM due to unpredictable hazard-related factors—such as sudden emergencies involving infrastructure damage, chemical or radioactive contamination, or the unpredictable escalation of natural disasters—and other potential threats, then the United States Congress shall allocate additional supplemental funds to ensure that EM support is provided in compliance with the requirements of the U.S. Constitution (Congressional Budget Office, 2022; FEMA, 2023).

Therefore, at the federal level, part of the responsibility involves effectively determining the operational budget by employing models that forecast potential hazard risks for forthcoming years and identifying necessary infrastructure improvements to mitigate disasters. Once the provisions are approved and funds allocated, proper administrative procedures must be followed by distributing the resources according to their justified purpose, in a manner that is effective, diligent, and efficient, without unnecessary delays that could endanger the health and lives of disaster victims. HRM mitigation efforts shall include educating the public on the importance of emergency preparedness to substantially reduce the risk of loss of life during disasters, while also assisting individuals in building resilience through efficient monitoring and support of their recovery efforts (Sylves, 2020).

Another aspect of federal responsibility involves collaboration with localities, states, and territories to identify new opportunities and design projects aimed at HRM through the utilization of appropriate resources or measures to safeguard individuals. This includes options such as assisting in the reconstruction of homes or permanently relocating residents to safer regions when the damage in their area is irreparable due to the catastrophic consequences of a disaster. FEMA (2023d) has communicated the importance of enhancing public preparedness for hazardous emergencies and disaster events. Since 2013, FEMA has conducted surveys of the American public to collect data on their preparedness for emergencies and disasters. The 2023 National Household Survey, conducted online and limited to participants proficient in English and Spanish, was utilized for this study. Chapter 3 provides comprehensive details concerning the methodologies and procedures employed in collecting data through the 2023 NHS on Disaster Preparedness.

Disaster Preparedness at the State Level

Peterson et al. (2022) evaluated disaster preparedness policies for older adults across ten states. They identified considerable discrepancies, which reveal a lack of alignment between federal and state procedures and protections afforded to older adults receiving care services at home. Given the disparities observed by Peterson et al. (2022), it is imperative for subsequent research to examine the FEMA policy on Disaster Preparedness to determine if there are specific exceptions based on Medicare or non-Medicare access, thereby comprehending the relationship and expectations regarding the integration of Medicare into FEMA policies for disaster preparedness tailored to older adults.

Emergency Management Agency of the state of Florida.

The State of Florida maintains an Emergency Management (EM) division with a portal of information known as FloridaDisaster.org, an entity dedicated to educating stakeholders on news and forecast updates related to potential emergencies. It provides information on local and state HRM strategies, mitigation assistance programs, grant opportunities, training, individual assistance for recovery, response infrastructure, logistics and operations, planning and preparedness guidelines, flood insurance, evacuation planning, generator safety, and a multitude of additional resources for EM (Florida Division of Emergency Management, 2025). The subsequent section presents geographical, historical, and contemporary demographic data, including information on the aging population, as well as descriptions of rural and urban areas by county (Florida Department of State, 2025).

State of Florida.

Florida is the 27th state of the United States of America, situated in the southeastern region of the nation. According to the Florida Department of State (2025), the state encompasses a total area of 65,758 square miles, comprising 53,625 square miles of land and 12,133 square miles of water. It borders the Gulf of Mexico, the Atlantic Ocean, Alabama, and Georgia.

Population of Florida.

As of 2020, Florida's population is estimated to be approximately 21.5 million, ranking third in the nation, according to the United States Census Bureau (U.S. Census Bureau, 2025). The state is also home to more than 5.5 million residents aged 60 and above (Elder Affairs.org, 2025). The demographic of older adults is experiencing rapid growth, accompanied by associated health challenges related to aging (Wolfe et al., 2021). Additionally, numerous organizations within Florida are dedicated to enhancing the quality of life for older adults, including efforts to ensure that emergency preparedness plans incorporate considerations for this demographic. Wolfe et al. (2021) examined the initiative undertaken by one such organization, the Age-Friendly Public Health Systems (AFPHS), which was established to provide support and educational resources aimed at increasing the capacity to deliver healthcare services to this expanding population.

Rural and Urban Areas.

According to the 2024 Florida Statutes, Section 288.0656 (1)(e), a county in Florida with a population of 75,000 or less, or a county with a population of up to

125,000 or less, that is contiguous to a county with a population of 75,000 or less, is classified as a rural area. Consequently, as of the year 2023, out of Florida's 67 counties, 33 are designated as rural, while 34 are categorized as urban (Floridahealth.gov, 2023) (The 2024 Florida Statuses, 2024).

Literature on Older Adults' Emergency and Disaster Experiences

The subsequent sections provide a comprehensive review of the literature on emergency hazard risk mitigation (HRM), with each section dedicated to one of the three EM stages: emergency preparedness, emergency response, and disaster recovery.

Emergency Preparedness (EP)

Previous research has highlighted the necessity for additional investigations into how vulnerable populations manage their emergency preparedness (EP). Fazeli et al. (2024) authored a comprehensive literature review encompassing 222 scholarly publications pertinent to individual disaster preparedness and training. They systematically identified all relevant areas, aspects, and approaches associated with disaster preparedness and natural hazards, categorizing the reviewed studies and analyzing their research methodologies to classify each as either descriptive or prescriptive. Their findings indicate that the bulk of existing literature is predominantly descriptive, thereby revealing a substantial knowledge deficiency concerning prescriptive approaches. This underscores the imperative for further research to examine the preparedness of vulnerable populations, including children and older adults.

Recent studies have compared older adults with younger adults but have not explored key factors within the older adult population (Fazeli et al., 2024). Consequently, there is a lack of research examining differences in emergency preparedness (EP) between older adults residing in rural and urban areas. Rivera (2020) investigated the factors influencing individuals' efficacy in preparedness activities and how previous exposure to disasters and access to preparedness information positively influence the likelihood of households developing emergency plans. Rivera (2020) found that individuals' efficacy in preparedness activities, prior disaster exposure, and access to preparedness information positively influence their motivation to develop household emergency plans.

Furthermore, Rivera (2020) found that Asian Americans who share Hispanic or Latino ethnic or cultural heritage and are renters are less motivated to formulate such plans. This study highlighted a demographic group that is less inclined to prepare themselves with an emergency plan and who need to be more exposed to EP information, which might decrease their disaster risk. Bukvic and Borate (2023) examined the challenges faced by older adults residing in Miami-Dade, Florida, employing geospatial analysis to assess their spatial distribution and socioeconomic characteristics. They found that 20% or more were homeowner residents 65 or older, many of them living alone, and who live in high-risk flood-prone areas. However, Bukvic and Borate (2023) did not consider rurality in their analysis. Additionally, Kleier et al. (2018) conducted descriptive research on preparedness factors for hurricane hazards within a sample of older adults in South Florida. They identified the main EP factors, such as the lack of cooperation from others and the cost of EP. Similar to previous studies, this research was confined to South Florida and did not include variables related to rural or urban areas. Rao et al. (2024) and

Peterson et al. (2022) evaluated emergency preparedness among older adult populations in other states. Rao et al. (2024) studied EP across eight counties in Ohio and found that older adult vulnerabilities were associated with socioeconomic disadvantages and high-hazard incident locations. Likewise, Peterson et al. (2022) studied EP across 10 states, and their research is also relevant as it relates to how organizations, such as the Centers for Medicare and Medicaid Services (CMS), have established emergency preparedness requirements for their participating providers and suppliers. This exemplifies how an organization can develop policies to promote emergency preparedness in accordance with constitutional law, as discussed by Scott (2014).

Paton (2019) examined the influence of hazard characteristics and psychosocial constructs on individuals' capacity to anticipate uncertain future events, as well as how psychological theories can inform the understanding of preparedness for probable and current hazard events. Paton (2019) articulated the application of these concepts and theories to understand how to prepare for existing disasters or hazard events from a social and behavioral science perspective. Consequently, given the imminent risks faced by families and individuals during and following their experiences as disaster victims, it is essential to recognize the potential for emotional trauma and the consequent necessity for psychological preventative measures. These measures should be designed to effectively equip individuals and families to mitigate the adverse mental health effects associated with disasters. For instance, one of the theories mentioned by Paton, the Protection Motivation Theory, posits that changes in attitude are predicted by cognitive processes that address fear and anxiety. Such processes transmit information regarding threats, the likelihood of an event occurring, the probable response from authorities, and potential adverse outcomes associated with emergency incidents. These factors may prompt a response aimed at engaging in specific behaviors or taking action, decisions which may or may not be related to preparedness. While the theory emphasizes individual reactions to threats, it is equally vital to comprehend how older adults cognitively process these emotional responses to environmental stimuli and develop coping strategies that facilitate adaptation to the situation, potentially reducing the impact of the threat. This theoretical framework elucidates the necessity for individuals to adapt to critical circumstances by seeking mitigating solutions, a concept reflected in my research by the degree of preparedness of older adults.

Furthermore, Brown and Easterday (2016) provided valuable insights concerning the advantages of establishing DR plans for individuals, facilitated by Certified Public Accountants (CPAs). They proposed a service specifically aimed at developing personalized DR plans. This information could be incorporated into the EP plan section on preventive tools that individuals may use to mitigate the adverse effects of disasters should they face such experiences. Emergency planning is essential for mitigating the risks and adverse effects associated with emergencies and disasters. Consequently, instructions concerning relocation and evacuation hold significant importance and must be explicitly incorporated into Emergency Plans (EPs) to ensure the protection of life during disaster response. Similarly, it is imperative to include specific guidelines regarding the timing and methods for determining the optimal moment to evacuate the premises, rather than waiting until it is too late to depart.

Karaye et al. (2019) analyzed responses (*N* = 3030) from residents of the U.S. Gulf Coast regarding the decision-making process for evacuation in the face of an impending hurricane. The study revealed that one-third of respondents had evacuated during a previous hurricane, with their evacuation decisions influenced by various factors that could inform the development of EPs, including recommendations on the most appropriate timing to evacuate to safeguard lives (Karaye et al., 2019; Rodriguez et al., 2022). Additionally, Rodriguez et al. (2022) evaluated residents' disaster preparedness and experiences during Hurricane Michael in 2018, identifying a need for improved education, communication resources, emergency supply kits, safe utilization of equipment, and a better understanding of response procedures, particularly regarding the timing of evacuation.

Davis et al. (2021) explored the experiences of older adults in emergency and disaster management within rural settings and low-income areas who encountered greater challenges in response to and recovery from disasters compared to their urban counterparts. Rural residents preferred community-based support and assistance from non-governmental organizations (NGOs) over services provided by FEMA. Their findings underscore the importance of effective social connection between rural residents and emergency response agencies and organizations (Davis et al., 2021).

Although the population of my study is a sample of Florida’s older adults who are not residents of nursing homes or assisted homes, nursing home residents remain at risk during hazardous incidents, particularly if the facilities are inadequately prepared to respond to emergencies. This literature review encompasses several articles that offer recommendations for disaster preparedness, which may apply to healthcare providers caring for older adult residents in these facilities. Hua et al. (2024) investigated the correlation between evacuation and healthcare outcomes among Florida residents in assisted living facilities (N=25,130) during and after Hurricane Irma. Their findings indicate that the stress experienced by individuals who evacuated led to a notable increase in emergency department visits within 30 days of Hurricane Irma's landfall, compared to residents who remained sheltered in place. Accordingly, they proposed that, in emergency planning and response efforts, administrators and first responders should evaluate and consider the risks and impacts associated with the psychological stress of sheltering in place versus evacuation to enhance the protection of these residents.

Dosa et al. (2020) investigated the relationship between disaster risks in nursing homes or assisted living facilities and the exposure to Hurricane Irma, along with the subsequent mortality among older adults. The study population consisted of 61,564 residents of nursing home facilities during Hurricane Irma. The findings showed an increase in nursing home deaths in the group of residents who experienced Hurricane Irma in comparison with the control group, suggesting that the residents of nursing homes who experienced hurricanes were at a higher risk of death than those who had no hurricane experience. Similarly, Hua et al. (2024) investigated evacuation and healthcare outcomes after Hurricane Irma among assisted living residents. The findings indicated a significant mortality risk among older adult residents in nursing facilities during such a hazardous disaster event. The stress and disruption caused by the hurricane could be a crucial factor that needs to be considered when preparing facilities for atmospheric hazardous events. If the facility is not built in a flood-prone area, securing windows, roofs, and maintaining the facilities in sound condition while keeping a calm indoor environment may make a difference in the mental health of older individuals. Suppose the facility is located in a flood-prone area. In that case, evacuation procedures must be coordinated as soon as possible, taking into account medical and clinical care advice to ensure continuity of medical treatment and preventing negative stressors from affecting residents.

Emergency Response (ER)

Economic and financial resources must be considered when preparing emergency plans, as emergency response and disaster recovery require monetary resources to cover the ER and DR rebuild expenses. Zhao et al. (2020) introduced a quantitative framework that demonstrates the efficacy of catastrophe insurance in disaster risk management for community-level recovery. The framework enables the comparison of various pre-disaster and post-disaster risk management strategies, thereby providing the necessary visibility for accurate fund estimation during budgeting processes. Furthermore, Zhao et al. (2020) furnished policymakers with a quantitative tool that proved instrumental in measuring and allocating limited ER funds, while also evaluating the relative effectiveness of insurance in comparison with other pre- and post-disaster HRM strategies.

Emergency response sometimes involves making difficult decisions, such as knowing when to evacuate homes, particularly when there is a high potential risk of injury or death. These decisions might be related to the time it will take to recover. Rivera

(2020) examined the relationship between individuals' decisions to evacuate and their effects on the individuals' DR. After reviewing a sample of Hurricane Harvey victims residing in Texas, they discovered that making an earlier decision to evacuate adversely affected the duration of their recovery process. Furthermore, among those who evacuated prior to the disaster, many experienced difficulties in short-term recovery. Nonetheless, except for Hispanic individuals, who recovered better in the short term, in comparison to other demographic groups. These findings are crucial for understanding why Hispanic populations exhibited greater resilience during the recovery process relative to other groups (Rivera, 2020). Although Rivera did not explain why this group was more resilient, it is essential to explore and understand why this demographic demonstrated greater resilience during the disaster recovery process. Information that may be useful for educating the general population to increase resilience.

When evacuation becomes imminent, pre-planning for shelter locations is essential prior to the onset of hurricane or hazardous incident seasons. Ghorbanzadeh et al. (2021) investigated the utilization of libraries in northwest rural Florida. They employed geographical information systems (GIS) to assess how public libraries support evacuation efforts among vulnerable rural populations and to identify transportation-related challenges faced by residents. Recommendations were made to enhance disaster preparedness plans for public libraries to optimize their services and support during emergencies and disasters (Ghorbanzadeh et al., 2021).

Emergency response presents its own challenges that can impact other health aspects, depending on the type of hazard and the location of the residents. For instance, lockdown during epidemics and pandemics requires isolation as a precaution to prevent virus infection spreading. Likewise evacuating to a crowded shelter might affect the mental health of individuals, especially older adults or individuals with disabilities or special needs. Dias et al. (2024) highlighted the associated risks of social isolation. They outlined how community paramedics and first responders can support these vulnerable populations by connecting them with public health services and essential information during hazardous emergencies or disasters. Disasters have also affected older adult veterans and individuals with chronic conditions such as type 2 diabetes, as studied by Haltom et al. (2023), particularly during the COVID-19 pandemic. Social isolation considerably exacerbates health challenges within this demographic. Consequently, ongoing social engagement and monitoring through technological means have contributed to resilience among these populations (Haltom et al., 2023). Therefore, guidance on maintaining secure, effective, and efficient technological connections with community support groups, as well as family and friends, should be incorporated into Emergency Preparedness (EP) plans.

Disaster Recovery (DR)

Soon after experiencing hazard events, individuals are still processing how to start recovering and rebuilding their lives from the disaster. Terumoto et al. (2021) examined the recovery process from the perspective of varying victim conditions, which may differ and should be considered as influencing factors in the long-term recovery trajectory. They concentrated on several populations from other sites in Japan affected by the catastrophic Great East Japan Earthquake. Their findings revealed a distortion in recovery perception, which they attributed to the lack of income and adequate communication. Additionally, Terumoto et al. (2021) identified five stages in the individual recovery process: securing bare subsistence, accessing public services, ensuring and improving stable housing, re-shaping economic and social activities, and re-establishing communication activities. These stages can be used to assess the recovery level of individuals following disaster events in relation to their socioeconomic status.

Disaster recovery requires that individuals use their emotional intelligence as an empowerment and resilience tool for moving towards recovery. Sun and Yan (2019) investigated the influential factors affecting the “feelings of happiness” and mental health of individuals negatively impacted by disasters caused by nuclear accidents. Specifically, they analyzed a sample of residents in Fukushima City following the 2011 Tohoku Earthquake Tsunami in Japan. The findings indicated that females exhibited greater neighborhood connection than males and experienced less property loss, alongside better mental and physical health. Positive neighborhood connection was found to be significantly correlated with individuals' perceived happiness. This research demonstrates that positive social and community relationships, both during and after disaster events, are associated with individual resilience and recovery (Sun & Yan, 2019).

Stamm (2017) presented a self-conducted narrative case study detailing her experience of losing her residence during a wildfire. She documented her experiences in an electronic journal, covering the period from the fire event through two years and three months thereafter. The findings align with the existing literature on DR up to the publication date of 2017 (Stamm, 2017). The narrative case research design facilitates a comprehensive understanding of how disaster victims experience catastrophic events in detail, from day to day. The author recorded her coping mechanisms and struggles throughout her DR process, providing crucial insights into whether the individual recovery factors she identified are encompassed within current theoretical and conceptual frameworks for future research.

Furthermore, Carbone et al. (2017) investigated the effects of dispositional optimism on the health and well-being of 3,216 individuals following the tornado outbreaks in Mississippi and Alabama in April 2011. They observed that individuals exhibiting dispositional optimism experienced a more favorable recovery compared to those lacking such optimism. These findings are particularly pertinent to the prescriptive solutions section, as they suggest that enhancing dispositional optimism may serve as a mitigating factor against adverse mental health outcomes that could develop into pathologies if not adequately addressed. Consequently, these results are relevant to this research, as they propose a positive intervention that can be incorporated into the support section for mental health considerations within EP.

Bhattarai et al. (2020) investigated the reasons why specific communities recover more rapidly than others following identical disasters. They aimed to identify the critical factors that facilitate optimal Disaster Recovery (DR) and those factors that contribute to suboptimal or ineffective DR. Their scholarly literature review identified fourteen DR factors, which were categorized into four major domains: social, physical/environmental, economic, and institutional/procedural. Bhattarai et al. (2020) proposed a conceptual framework related to the institutional procedural domain, which may be relevant to the subject of my research. However, the authors primarily focused on communities, treating individual perspectives separately, which could potentially lead to overgeneralizations. Conversely, their findings underscore the importance of considering community-specific factors when developing an Emergency Preparedness (EP) plan, as the individuals within a community often provide better support during emergencies—particularly when they share similarities. Additionally, the multicultural aspects of community members are factors that could influence resilience, a key element for EP and post-disaster recovery (DR).

Although the literature related to rurality and EM is limited. Several studies examined EM challenges in rural areas. Fletcher et al. (2022) found that rural older adults in Jackson County, Florida, who relied on social support from their communities and trusted government agencies were more effective in preparing for and recovering from adverse events. Marshall (2024) analyzed resilience opportunities for rural regions affected by Hurricane Michael in Florida and southwest Georgia. The study identified challenges faced by rural residents, who constitute 20% of the American population, in achieving long-term recovery. Additionally, it examined the role of institutions in either facilitating or obstructing access to resources on rural land through agriculture and silviculture, as well as the difficulties encountered in housing recovery.

Regarding the functioning of FEMA policies in Emergency Response (ER) and Disaster Recovery (DR), Sylves (2020), in his book “Disaster Policy and Politics: Emergency Management and Homeland Security,” discusses FEMA's response to significant incidents since the 2005 Hurricane Katrina, including the 2017 Hurricane

Maria incident affecting the U.S. territory of Puerto Rico. He contends that, in addition to the catastrophe caused by the hurricane, numerous administrative factors at the federal and territorial-state levels adversely impacted the logistics of aid delivery, thereby delaying disaster response and recovery efforts. These delays hindered the provision of essential supplies, including potable water, nutritious food, temporary shelters, and medical assistance, all of which are crucial for saving lives (Murray, 2019). Furthermore, the postponement of recovery activities, including repairing and rebuilding homes and infrastructure, particularly the power grid essential for saving lives during the crisis, hampered the provision of necessary support to the residents of Puerto Rico. Moreover, Garcia (2024) examined the ER and DR challenges faced by residents in rural areas of Puerto Rico during Hurricane Maria and proposed disaster preparedness strategies tailored to address the specific needs of rural populations.

Numerous disaster victims endure long-term consequences that necessitate ongoing medical intervention. Vulnerable populations, such as older adults, often face challenges in accessing services within their communities or localities. Quast et al. (2019) examined the long-term effects of disasters on seniors with diabetes by analyzing Medicare claims data across four states over ten years. The analysis of the sample (N = 170,328) of affected individuals disclosed that these individuals faced a 40% higher mortality risk in the first month following the disasters, with this effect diminishing to less than 6% by the conclusion of the study. Mortality risks associated with heart disease and nephritis increased immediately after the disasters. The mortality risk from all causes was elevated for those who evacuated to other counties, displaying a significant difference in comparison to individuals who did not evacuate to another county (Quast, 2019).

White et al. (2023) examined the literature concerning the impact of disasters on mental health among vulnerable populations worldwide, drawing from a review of articles focusing on vulnerable individuals, including Indigenous peoples, children, older adults, and climate migrants. The study identified that these populations are predominantly affected by mental health disorders and conditions such as solastalgia, suicidality, depression, anxiety/eco-anxiety, post-traumatic stress disorder (PTSD), substance use, insomnia, and behavioral disturbances. White et al. (2023) proposed that healthcare providers could implement strategies aimed at preventing and mitigating these effects through emergency preparedness, educational initiatives, and early intervention programs. Nevertheless, global authorities, governmental institutions, and relevant agencies of the affected regions must consider and establish policies with preventative measures, including the collaboration of the whole spectrum of first responders within each EM discipline.

Literature on Socioeconomic Status as a Preparedness Factor

Preparation for emergencies requires financial resilience to respond to and recover from disaster consequences effectively. Cong and Feng (2022) investigated financial preparedness for emergencies across different age groups. Utilizing the FEMA 2018 National Household Survey dataset and the social vulnerability index variable, they sampled (N = 2,179) from over 92 counties nationwide to analyze the reported financial behaviors of two age groups: adults aged 18 to 44 and those aged 65 to 74. Their findings indicated that the younger adult cohort demonstrated superior financial planning compared to their older counterparts, highlighting the importance of understanding the barriers that hinder older adults from achieving better financial preparedness for emergencies, as well as the socioeconomic factors that may influence this.

Freitag et al. (2024) conducted additional research on the challenges faced by older adults during emergencies and disasters, particularly in relation to their disadvantaged socioeconomic status. They examined the lessons learned from the COVID-19 pandemic and its impact on the food requirements of this demographic. Furthermore, Freitag et al. (2024) emphasized the importance of funding organizations that support these populations to ensure that older adults continue to have daily access to food during and after emergencies. The psychological and physical well-being of the survivors is profoundly impacted during disasters. According to Torres-Mendoza et al. (2019), the devastation caused by Hurricane Irma resulted in damage to 65% of residences, 17 fatalities, and 40 injuries, leading to an increase in the suicide rate from 25 to approximately 34 per 100,000 individuals. Older adults with low income, residing in urban environments, and experiencing disabilities, were among the most severely affected groups (Thornton, 2025).

Davis et al. (2021) identified strategies to support vulnerable populations during DR. They contended that, beyond educational efforts aimed at enhancing the preparedness of the adult population for emergencies or disasters, FEMA provides financial assistance that facilitates individual recovery but may also exacerbate inequalities by increasing household debt, potentially having adverse effects on individuals in the future. Furthermore, poverty and socioeconomic status appear to be correlated with rurality, particularly regarding the preparedness of older adults. Ahmadi et al. (2024) conducted a study examining resilience disparities between rural and urban groups in counties at risk of riverine flooding nationwide. Their findings indicate that the most vulnerable individuals reside in rural areas with a high likelihood of riverine flooding. The vulnerable groups identified included individuals living in poverty, those aged over 65 years, individuals with disabilities, residents of mobile homes, and persons without high school diplomas (Ahmadi et al., 2024).

An assessment of community-level support in EM was conducted by Asfaw et al. (2020). This study examined the experiences of indigenous elders during the 2011 wildfires at Sandy Lake First Nation. The findings indicated that the absence of emergency preparedness at the community level heightened the risk for the population. In addition to the stress induced by the emergency, this group experienced negative interactions with health services due to a lack of readiness to effectively address and accommodate Indigenous older adults, many of whom do not speak English. Furthermore, Asfaw (2020) recommended improved evacuation planning that accounts for the specific needs of older adults and language differences.

Prescriptive Literature on EP

The Florida Department of Health (FDOH), in its initiative to mitigate the suicide rate, evaluated the implementation of public health interventions as a preventative strategy. It was proposed that emergency preparedness plans incorporate pathways for connecting individuals and communities with mental health services after hurricanes, particularly during the recovery phase, to ensure they receive adequate support and foster resilience (Torres-Mendoza et al., 2019).

Social work professionals specializing in gerontological populations are endeavoring to understand their roles in emergency and disaster preparedness and response. Beltran et al. (2022) highlighted a gap in disaster social work practice research. They identified efforts that require formal delineation to ascertain the role of social workers and the training necessary for effective and efficient assistance to older adults. Miller et al. (2022) examined the experiences of nursing home social workers during the COVID-19 pandemic, revealing the necessity for disaster preparedness training for these vital professionals, who supported frontline efforts during the pandemic and must be better equipped for future disaster events.

Summary and Conclusion

An essential component of this dissertation involves providing evidence of a comprehensive review of literature related to the key terms and concepts pertinent to this research topic. This process ensures the authenticity and originality of the study, identifying a genuine gap in the existing body of knowledge. During the literature review, if similar studies or concepts are encountered, their authors should be ethically and adequately credited for their contributions, elucidating how their research relates to this study and how this new research advances the field. Consequently, the second chapter includes the strategy employed for the literature search and demonstrates the connection between the research question and the selected theoretical framework.

Furthermore, this chapter provides a concise overview of the relationship between our government's policies and the U.S. Constitution, as well as the establishment of institutions and agencies that embody the National EP mission. The literature review of themes, key terms, and concepts is presented as a narrative journey, beginning with the role of the U.S. Government in EP policy at both the federal and state levels. It includes a detailed description of the state of Florida, the residence of the population under discussion, along with an overview of its rural and urban areas, including the current count of counties as of 2023.

The sections presented studies that describe the experiences of older adults during emergencies and disasters in Florida, as well as studies from other regions, to identify potential similarities with the research questions, findings, and recommendations provided in each study. Subsequently, the literature was categorized into three primary components of hazard risk mitigation: emergency preparedness, emergency response, and disaster recovery. Additionally, the review examined supplementary factors relevant to older adults' preparedness, including socioeconomic status. Lastly, a section was included featuring a selection of literature concerning prescriptive solutions identified in the literature, which can be utilized to enhance the development of emergency plans for older adults, with particular emphasis on medical services, physical and mental health care, social work, HRM, and preventative strategies for EM. These elements are considered during the preparation of this final study manuscript, including revising the literature after data analysis and providing key HRM solutions for improving EM through EP, ER, and DR in Chapter 5.

Chapter 3 outlines the research design, rationale, research questions, and hypotheses that were scrutinized throughout the analysis process. Subsequently, a comprehensive description of the methodology employed for the chosen design is presented, encompassing data analysis, an examination of trustworthiness, and the ethical considerations involved.

Chapter 3: Research Method

In the United States, it is incumbent upon all individuals, as well as all government, public, and private institutions, agencies, organizations, and trading partners, to invest efforts in the prevention and mitigation of emergency risks. Nevertheless, due to the unpredictable variability in the impact of hazards associated with emergencies and disasters, accurately assessing the risks, frequency, impact, and associated costs of managing crises annually remains a formidable challenge for both populations and their representatives. The United States Constitution (U.S. Const. art. I, § 8) established a government whose primary obligation is to ensure the safety and welfare of the American people. This constitutional mandate directs government officials to support safety and welfare for all members of society, including individuals, public servants representing principal branches of government, and federal, state, and local agencies, as well as institutions and agencies serving them, alongside private sector members, business leaders, and employees.

Since the 20th century, the United States Congress, with the support of the President and under the oversight of the Supreme Court, has enacted and enforced legislation establishing institutions and agencies whose primary purpose is to ensure common defense, security, and welfare. These institutions include the DHS and FEMA. The mission of the DHS is to safeguard the nation against various threats, risks, and hazards, and to collaborate with FEMA to enhance national resilience by guiding prevention strategies and economic assistance during the preparation, response, and recovery stages of emergencies and disasters. FEMA promotes prevention and preparedness and conducts research to assess household disaster preparedness. Since 2013, FEMA has been distributing the National Household Survey on DP to collect responses from American households concerning their preparedness actions, attitudes, and motivations regarding disasters. This quantitative correlational study examined FEMA's 2023 policy on EP and reported levels of preparedness and awareness of preparedness information among older adults in Florida, in both urban and rural locations, across socioeconomic status. In Chapter 3, I address the research design, methodology, use of archival data, instrumentation, operationalization of constructs, data analysis plan, considerations of trustworthiness, and ethical procedures.

Research Design and Rationale

The research methodology employed a quantitative approach, utilizing a correlational design with logistic regression analysis. The correlational quantitative approach facilitates examination of relationships between groups or variables related to objective theories (Creswell & Creswell, 2023). Although most quantitative studies involve addressing causality, it was not feasible to determine or assume a cause-and-effect relationship between variables due to the nature of the secondary dataset. I investigated the relationships between the variables by performing logistic regression statistical tests using SPSS to determine whether it was possible to predict the likelihood of degree of preparedness among a sample of older adults in Florida, considering rural or urban location and socioeconomic status. Additionally, I analyzed the awareness of older adults regarding preparedness information related to this topic.

For this analysis, it was necessary to formulate questions whose answers were represented by simple yes or no answers. Variables were dichotomous, indicating either the absence or presence of a condition, which was numerically expressed as 0 and 1, respectively, where zero signified absence and one signified presence of the condition. It was also essential to understand concepts related to categorical relationships to describe interactions between variables that were tested using logistic regression. Consequently, I used conditional probability, conditional odds, odds ratio, relative risk, and slopes. Results of analyses are reported, including descriptive statistics involving sample size, descriptions of categorical variables, and frequency tables and percentages. Outcome variables were the degree of preparedness (unprepared or prepared) and awareness of preparedness information (yes or no). Predictor variables were rurality (rural and urban) and socioeconomic status (disadvantaged or advantaged).

Quantitative research involves employing measurable variables with numerical data that can be analyzed using statistical tools (Babbie, 2017; Creswell & Creswell, 2023). I used research questions and hypotheses to examine relationships between variables and determine whether associations existed. I applied institutional theory to examine the constitutional origins of the U.S. government, the establishment of institutions and agencies, and their respective responsibilities, which must be aligned to serve all individuals within American society. In particular, this included addressing how the dissemination of DP messages and aid support was directed towards vulnerable populations, such as the older adults residents of Florida.

Regarding the time and resource constraints, it was announced at the onset of 2025 that numerous government institutions would be impacted by a reorganization following the recent election of the new administration. Although, as of April 11, 2025, no specific official information was provided regarding the effects of this reorganization on the agency, the FEMA public web portal remained accessible, and datasets were available to the public. Since the initial stages of this dissertation, while working with the prospectus for viability assessment for this research, and with the permission of Walden University's Institutional Review Board (IRB), I downloaded a compressed file containing publicly available information, including the dataset related to the 2023 NHS on DP, which served as the survey instrument for this investigation. I aim to enhance the empirical understanding of socioeconomic behaviors among vulnerable populations related to disaster preparedness. Florida was chosen due to its status as one of the states that is most frequently affected by disasters each year.

Methodology

This section delineates the procedures employed in conducting the exploration. It encompasses a description of the population and sample size, the sampling methods and strategies, the operational archival data utilized, along with all associated procedures employing general terminology and concepts pertinent to the topic. This also includes detailed approaches or methodologies for data collection, the instruments used for testing and analysis, and the interpretation of the results (Creswell & Creswell, 2023). The research process requires that the researcher observes a social issue and formulates a research question that, if not previously investigated, addresses a gap in the existing literature. According to Creswell and Creswell (2023), research questions are formulated based on philosophical assumptions that the researcher must evaluate prior to determining the research design or inquiry process, as well as the methods for data collection, the statistical analysis to be applied, and the subsequent interpretation during the final study.

The research I proposed responds to a postpositivist epistemological perspective or empirical scientific worldview related to representative democratic ideals, which advocate principles of freedom and equal rights, among others. It is also associated with concepts of political authority and justice in the formation of a nation through a constitution that mandates the creation of institutions and agencies dedicated to ensuring the safety and welfare of its citizens. By directing research focus toward how government institutions serve vulnerable populations, we empower societal transformation, potentially fostering an improved society where research tools are utilized to assess the performance, attitudes, and tendencies of individuals. This enables informed decision-making based on empirical evidence and facilitates addressing potential changes, trends, and consequences, particularly in the context of emergency and disaster mitigation. Such information is essential for identifying critical intervention points to enhance current levels of preparedness. The institutional theory (Scott, 1995; Scott, 2014) was employed to underpin the relevant concepts in this study, as they closely align with its purpose.

I employed a quantitative methodology utilizing an inquiry instrument that has previously been utilized to produce an operational secondary dataset. Subsequently, I applied statistical analysis to determine whether a relationship exists between the variables. Following this, I analyzed the differences in levels of preparedness and awareness of preparedness information among respondents based on their rural or urban locations. Finally, I examined the potential role or correlation between their preparedness, awareness, and socioeconomic status. Statistical interpretation was used to report the outcomes, supported by additional analyses that assessed validity and verified reliability. The research findings are presented in accordance with the standards outlined by JARS and the Publication Manual of the American Psychological Association (APA, 2020).

Population

The population consists of older adults aged sixty and above (60+), residing in the state of Florida. The respondents were civilian, non-institutionalized individuals with internet access. The population of this study is a subgroup derived from the sample that participated in the 2023 National Household Survey on Disaster Preparedness. This sub-group represents a sample of the older adult population within Florida. During the SPSS analysis, as a requirement of the primary research question, this group was subdivided into two categories based on rurality: rural and urban areas. The variable 'rurality' is dichotomous, with values of 'rural' or 'urban'; thus, the binomial logistic regression analysis utilized these values to examine their relationship with the dependent variable. Prior to the development of the proposal, and without performing any statistical analysis in SPSS beyond data filtering, it was possible to select only respondents aged sixty and above from Florida. This selection defines the respondent sample size for individuals aged sixty or older, corresponding to the population of interest in this study—residents of Florida (FEMA, 2023e). However, since testing was not permitted before IRB approval, it was not feasible to verify the number of cases within each category of the dichotomous variables or to confirm that these categories contained sufficient cases to conduct the intended analyses.

Sampling and Sampling Procedures

Given the nature of this research design, data from the population that responded to the FEMA 2023 survey were utilized. Consequently, the sampling methodology involved clustering, which, according to Babbie (2017), is employed when it is challenging to access all elements of the population. Accordingly, I will be using the subgroup segment of the Florida population within the FEMA 2023 National Survey. It is noteworthy that, upon publication of this dataset by FEMA, it had been pre-cleaned and curated as an additional safeguard for the individuals within the national population. Therefore, the dataset utilized does not contain any personal information that could identify the respondents—the national sample aimed to collect approximately 4,000 responses, with an oversample of about 500 responses. As a result, the distribution of responses revealed 4,058 responses from the national population, accounting for 53.4% of the total sample. Additionally, response distribution based on hazard events ranged from 6.7% to 6.6% (3,029 responses), with the oversample representing 6.8% (517 responses). The total number of responses amounted to 7,604, representing 100% of the sample.

From the national sample, I exclusively selected respondents from Florida and a subgroup of older adults characterized by the variable 'sixty plus.' Consequently, the total number of respondents from Florida was 978, of whom 326 were identified as older adults (60+ years old). Therefore, older adults constituted approximately 33% of the respondents from Florida in the 2023 FEMA Survey, representing a significant segment of the state's population responding to the survey (FEMA, 2023e). Following the approval of the study, I proceeded to conduct assumption testing for the binary logistic regression to verify whether the groups of urban and rural respondents are homogeneous, consistent with the national representation within the dataset. I determined the minimum sample size utilizing Laerd's approach (Lund Research, 2020) for binary logistic regression, which is based on maximum likelihood estimation and the minimum case count per independent variable (IV). Univariate frequencies and contingency tables were generated to evaluate whether the distribution of rural and urban older adults, along with the predictor variables of rurality and socioeconomic status, is independent of each other. As Warner (2013) suggests, cross-tabulation of predictor variables indicates whether the design is balanced, ensuring that the proportions of rural and urban older adults across rurality groups are not confounded or exhibit significant multicollinearity. The results of the assumption testing for binary logistic regression and sampling verification are presented in Chapter 4.

The 2023 National Household Survey on Disaster Preparedness (FEMA, 2023e) dataset encompasses respondents' age data. For this study, I exclusively selected respondents who are residents of the State of Florida and further filtered those who are sixty years of age or older. The dataset already contains a variable labeled "Sixty Plus," which indicates respondents within that age group. Given the nature of this study, which employs an operational dataset from FEMA (2023d), the survey instrument inquired about the population's responses to disaster preparedness measures. Each variable corresponds to a specific question posed to the participants during the survey, with responses captured through predetermined categorical values. Some variables are the result of calculated fields, recoded by FEMA to facilitate analysis. These calculated fields were processed during the statistical analysis phase. Data about these fields is included within the dataset's variable set and is accessible for this study. Accordingly, I utilized the available variables and the recoded calculated fields provided within the dataset. For variables with dichotomous responses, I recoded their values to binary 1s and 0s to assign the requisite numerical values, thereby enabling the application of logistic regression analysis and facilitating a streamlined quantitative evaluation.

The variables I identified are cross-referenced with the research questions, hypotheses, and survey items. The outcome or outcome variables are the degree of preparedness (prepared/not prepared), which was already re-coded by FEMA as perceived preparedness in two categories (unprepared individual/prepared individual), and awareness of preparedness information (Yes/No). The predictor variables are rurality (rural/urban) and socioeconomic status (socioeconomically disadvantaged individual/socioeconomically advantaged individual) (FEMA, 2023c). I used SPSS (Wagner, 2020) for statistical analysis, employing inferential statistics (Warner, 2013). The following sections discuss power analysis for sample size, data collection, effect size, alpha level, and power level justification.

According to Creswell and Creswell (2023), power analysis is instrumental in determining an appropriate sample size for testing hypotheses. Additionally, assessing the statistical significance and practical importance of the results is crucial to determine whether the observed effect is sufficient to warrant rejecting the null hypothesis. Consequently, I calculated the number of cases required in each group or condition to identify a significant effect or relationship, based on the hypothesis or research question. The term "power level" pertains to the likelihood that a study will yield a positive result. It is utilized to evaluate the risk of Type II errors or false negatives (Burkholder et al., 2019).

To assess the sample size required for the logistic regression test statistic, Laerd Statistics (Lund Research, 2020) recommended having at least ten cases for each outcome type for every independent variable. However, the FEMA dataset has a limitation in that for variables not tested, there was no specific sample size requirement. Consequently, during the test execution, I verified the sample size per variable when running the model, with the results included in Chapter 4. In the research questions, all variables are dichotomous, meaning each case has two response options. Therefore, the minimum number of cases for each independent variable would be twenty. The binomial logistic regression analysis relies on maximum likelihood estimation (MLE) to minimize estimates of decline per predictor variable. The minimum sample size also depends on the conventional threshold established for the expected probability of error.

To accommodate two independent variables in each research question, I have computed my minimum sample size as $10 \times 4 \div .10 = 400$. Laerd Statistics (Lund Research, 2020) further supports extending the minimum number of cases to 15, computed as $15 \times 4 \div 0.10 = 600$. Given these two computational approaches, I sought a minimum dataset sample size within the range of 400 to 660 eligible and complete case entries from the FEMA dataset. However, the sample size (*N*) originally was 326, and after discounting the invalid answers, N was reduced to 275.

According to Burkholder et al. (2019), the effect size measures the magnitude and strength of a result. The documentation provided by FEMA (2023c) does not include a peer-reviewed empirical report that presents the effect size of the statistical analysis tests employed in their national disaster preparedness research. However, for this study, the configuration in SPSS involved the input of an estimated effect size related to the differences between groups concerning the variables of interest; specifically, I examined differences between older adults in rural and urban settings, as well as their levels of preparedness and awareness of preparedness information. Alpha (α) indicates the likelihood of erroneously concluding that a result is not due to chance, which corresponds to a Type I error or false positive (Burkholder et al., 2019, p. 70). The statistical significance of the logistic regression was assessed using a conventional alpha level of .05.

Archival Data Use

I utilized an operational secondary dataset, specifically, archival government data collected by FEMA in 2023. Their research was conducted as part of their annual initiative to gather feedback from the national population concerning disaster preparedness measures (FEMA, 2023d). The instrument consisted of questions related to disaster preparedness, demographic information, and hazard items, segmented by state (FEMA, 2023e).

The 2023 National Household Survey on Disaster Preparedness collected data from February 1, 2023, to March 14, 2023. The instrument was administered exclusively through an online web survey available in both English (FEMA, 2023e) and Spanish (FEMA, 2023f). FEMA received a total of 7,604 responses. The questionnaire encompassed topics related to general preparedness, disaster, and pandemic-related issues. For respondents who reported experiencing a higher risk of at least one hazard identified in the survey, additional inquiries were posed concerning the specific hazard. FEMA noted that demographic variables were used to adjust the responses, thereby facilitating comprehensive analysis.

The survey addressed the 2022-2026 FEMA strategic plan, which aims to embed equity as a fundamental element of Emergency Management (EM) and promote and sustain a "Ready FEMA and Prepared Nation." Consequently, the survey analyzed various demographic communities to comprehend patterns in preparedness actions and attitudes across diverse demographic groups, taking into account the multi-ethnic origins of the national population (FEMA, 2023c).

The datasets are in the public domain and published on the FEMA website. The specific page that contains the datasets is OpenFEMA. It has a menu that includes the following options: Changelog, Data Sets, Frequently Asked Questions, API Documentation, Working with Large Datasets, Developer Resources, Open Government, Other FEMA Data Sources, Terms and Conditions, Annual Reports, Data Visualizations, Disaster Relief Fund Reports, FEMA Guidance Documents, Glossary, and Resilience Analysis & Planning Tool. To select the datasets, select OpenFEMA by clicking (>)

Datasets. This page includes datasets on disaster information, EM, preparedness and alerts, Individual Assistance, Public Assistance, Hazard mitigation, and the National Flood Insurance Program, among others. Select > emergency management, preparedness, and alerts, and from there, select > National Household Survey to access the files. It will display the compressed file, which includes the dataset and related documents for the instrument.

The FEMA National Household Survey webpage provides a concise description of the survey, including information about the raw data. It indicates that dataset collection may include some raw data and recommends that users “should plan to clean the data as needed before analysis” (FEMA, 2025b). However, for the dataset used in this study, the researchers have already performed data cleaning. Consequently, no personally identifiable information of the respondents is present in any data fields or variables. FEMA also offers guidance regarding citation, stating that “users should cite the date the data was accessed or retrieved from fema.gov. In addition, users must clearly state that FEMA and the Federal Government cannot vouch for the data or analyses derived from these data after the data has been retrieved from the Agency’s website” (FEMA, 2025d). Accordingly, I ensured the inclusion of the necessary information on references and citations in this final manuscript of the study. Please refer to FEMA.gov for the Terms and Conditions published there (FEMA, 2025b) and FEMA’s policy concerning the retrieval of information from the FEMA website.

Instrumentation and Operationalization of Constructs

The following section summarizes the contents of the survey instrument used by FEMA, highlighting the variables related to the research questions.

2023 National Household Survey (NHS) on Disaster Preparedness

This section provides a summary of the methodology employed by FEMA (2023c) in their research concerning national disaster preparedness. The 2023 National Household Survey targeted the civilian, non-institutionalized adult population of the United States, aged 18 years or older, with internet access. The inclusive population consisted of individuals residing within the United States, including those living in U.S. territories such as American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and the U.S. Virgin Islands. Exclusions comprised adults residing in dormitories, barracks, or boarding houses. The online modality of the survey precluded participation by adults lacking internet access and those who did not comprehend English or Spanish (FEMA, 2023c). The survey incorporated core components addressing disaster preparedness, demographic profiling of respondents, and hazard-related items. FEMA's national assessment of disaster preparedness core metrics included race and ethnicity, stages of change, determinants of preparedness, preparedness activities, capacity development, citizen responder status, and financial resilience.

The hazard items include pandemics, coastal flooding, earthquakes, hurricanes, riverine flooding, radiological emergencies, and wildfires. FEMA employed calculated fields to facilitate data analysis. Among these calculated fields are variables such as preparedness actions and the factors influencing preparedness actions (preparedness influencers) for each of the eight hazard events or incidents. Refer to the 2023 National Household Survey for additional information regarding the methodology of the FEMA 2023 National Household instrument, survey administration, data cleansing, manipulation, imputation, data weighting, analytical approach, and limitations. FEMA surveyed in collaboration with Zogby Analytics, the contractor responsible for administering the 2023 National Household Survey on Disaster Preparedness (FEMA, 2023c).

This instrument dataset is appropriate for this study as it contains data relevant to the gap I intend to investigate. During their analysis and reporting, the authors obtained data from the general population of the nation. However, they did not analyze it to test the hypotheses I am formulating in relation to the research question. This question pertains to the literature gap concerning the degree of preparedness and awareness of preparedness information among rural and urban older adults in the state of Florida, across different socioeconomic statuses. I did not utilize or modify the FEMA survey instrument to collect a new dataset; therefore, the survey itself is used as data, duly cited and referenced in the final analysis. The dataset was employed solely to analyze responses to survey questions associated with the variables outlined in the research questions and hypotheses I formulated. Since the survey dataset was made publicly available in 2023 (FEMA, 2023d), and FEMA provided guidelines for proper citation, I used this dataset to perform specific statistical tests aimed at challenging the hypotheses related to the research questions, considering their archival dataset as secondary data.

Concerning the reliability and validity of FEMA values pertinent to their surveys, FEMA conducted a comparative analysis between the 2022 and 2023 surveys to elucidate methodological modifications. Refer to the 2023 National Household Survey on Disaster Preparedness Methodology Report, C: Methodological Changes from 2022 (FEMA, 2023c). The methodology report indicates that in 2022, the survey was administered through both telephone and internet modalities, whereas in 2023, it was exclusively conducted online.

The other modifications between the two surveys were related to oversamples, the number of survey instruments administered, survey items concerning the alphabetical order of items, and other adjustments associated with utilizing the telephone as a medium for recording responses. Importantly, these adjustments did not affect the primary questions of the surveys. Furthermore, the weighting process in 2022 differed from that in 2023, as the former employed a two-step weighting procedure, whereas the latter utilized a single-step approach. Concerning calculated fields, the rurality variable in 2022 encompassed three categories: urban, rural, and urban cluster. In 2023, rurality was categorized as either rural or urban. This change was made to align the rurality classification with that used by the U.S. Census Bureau. Regarding zip code validation, the 2022 survey did not include a validation check to verify the legitimacy of entered zip codes. Conversely, the 2023 survey assigned rural status based on respondents' counties rather than zip codes, thereby enhancing the validity of respondents' classifications (FEMA, 2023c).

Since 2013, FEMA has been collecting data as feedback from the public at the national level concerning their disaster preparedness through similar surveys. The data and reports from previous years are published and accessible on their official web portal (FEMA, 2025). An additional outcome variable was employed to enhance the validity of the primary outcome variable, which is the degree of preparedness. This supplementary outcome variable is “awareness" derived from the same dataset, used to verify differences in responses between this variable and the degree of preparedness, specifically relating to urban or rural older adults in Florida (the sub-sample of the national population utilized for this study; see Table 2).

Table 2

Outcome Variable Validity

Outcome variable	**Influence Preparedness Action**	**Perceived preparedness**	**Function**
Degree of preparedness (variable name: perceived preparedness: prepared/unprepared)	No	Yes	Positive: if individuals prepare outcome value.
Awareness of Preparedness Information (variable name: awareness: Yes/No)	Yes	No	Positive if respondents indicated that they had read, seen, or heard information in the past year about how to prepare for the event.

I chose to examine two outcome variables, both of which are dichotomous: the level of preparedness and awareness of preparedness information. The objective was to observe the extent to which individuals within rural and urban groups report being aware of and prepared for emergencies. It is of particular interest to assess both their reported awareness of preparedness information and their self-reported degree of preparedness, especially considering that these subjects are older adults. There is scholarly evidence indicating that cognition naturally declines with age (Gilmartin et al., 2019), which is a critical factor to consider when formulating policies aimed at supporting older adults in disaster preparedness. While it may be reasonable to hypothesize that greater awareness correlates with higher preparedness, the actual relationship remains uncertain until their responses regarding these two variables are analyzed in conjunction with factors such as rurality and socioeconomic status. This rationale underpins the inclusion of both outcome variables.

I also aimed to address a gap in prescriptive literature concerning EP. It specifically investigates the relationship between rural and urban older adults' levels of preparedness across socioeconomic statuses, in accordance with FEMA policies on EP. The state of Florida was selected for this study due to its high population density and frequent occurrence of hazards.

Reliability signifies the demonstration of response consistency over time (Burkholder et al., 2019). FEMA may conduct annual reliability assessments by comparing responses from the population across different years. This process evaluates whether the survey instrument remains valid for its initially intended purpose. Although FEMA surveys experienced several modifications to essential variables prior to 2023, for this study, which focused solely on the degree of preparedness and awareness regarding emergency preparedness information in 2023, I did not compare the 2023 outcomes with those of previous years. Furthermore, there is no evidence that the survey was administered in 2024, as the survey instrument and dataset for 2024 have been unavailable on the public website since February 17, 2025.

Criterion validity pertains to the comparison between instruments to evaluate their similarities (Burkholder et al., 2019). However, it was not possible to compare previous FEMA surveys due to the variable rurality in 2022 not being configured identically to that in 2023. Consequently, evidence for criterion validity regarding rurality cannot be provided. For this quantitative study, I utilized selected variables from the dataset generated by the survey instrument administered during the 2023 FEMA National Household Survey on Disaster Preparedness. No new data was generated; instead, I imported the relevant variables into Excel. The only recoding performed involved transforming selected dichotomous variables into 0s or 1s for the purpose of conducting logistic regression analysis, which does not alter the representation of the original variables or their values. After removing invalid cases, I imported the cleaned data from Excel into SPSS to commence statistical testing.

Operationalization

FEMA indicated that the questions of the survey were also inquired by each of the eight events: a disaster, pandemic, coastal flooding, earthquake, hurricane, radiological emergency, riverine flooding, and wildfire (FEMA, 2023c). The primary variable I used as the outcome variable is the degree of preparedness. The variable degree of preparedness was re-coded by FEMA as the variable perceived preparedness to group the original five answer options of the survey into two categories. Therefore, I used the variable Perceived Preparedness, which has two categories, referring to the degree of preparedness.

The original five answer options or categories of degree of preparedness are

- I am not prepared, and I do not intend to prepare in the next year
- I am not prepared, but I intend to start preparing in the next year
- I am not prepared, but I intend to get prepared in the next six months
- I have been prepared for less than a year
- I have been prepared for more than a year, and I continue preparing.

Therefore, the FEMA recoded variable that represents the original variable for degree of preparedness to be used is the variable 'perceived preparedness'. It has only two categories of nominal value: Unprepared individuals and Prepared individuals (FEMA, 2023c). For the second outcome variable, Awareness of Preparedness Information (variable name: Awareness, with values: Yes or No), the respondents responded to a yes-or-no question indicating whether they had read, seen, or heard information in the past year about how to prepare for the event. For rurality, the survey categorized participants as rural or urban based on the respondent's zip code, the zip code tabulation area, or their county. For socioeconomic status (socioeconomically), respondents were categorized as socioeconomically disadvantaged or not socioeconomically disadvantaged based on the following factors: number of people living in the household, income, and the state or territory.

Individuals and families below the poverty guideline for their household income, size, and state were categorized as socioeconomically disadvantaged. There was an option for those who did not know their income. Therefore, FEMA used various information to determine if a respondent was socioeconomically disadvantaged or socioeconomically advantaged. FEMA calculated the respondent's family or household size, household income, and state or territory location to determine above or below the poverty level. FEMA indicated that they matched those data points to the Health and Human Services Poverty Guidelines of 2021 and 2022. Those respondents who were below the poverty level were categorized as socioeconomically disadvantaged, and those respondents who were above the poverty level were categorized as socioeconomically advantaged.

Data Analysis Plan

The software I used for data analysis is the IBM SPSS software application to examine whether a significant relationship exists between the outcome variables — degree of preparedness and awareness of preparedness information —and the predictor variables of rurality and socioeconomic status. The dataset I used is an operational secondary dataset generated by FEMA through their 2023 National Household Survey on Disaster Preparedness. FEMA screened and cleaned the data and manipulated variables before conducting their research and publishing the results in the public domain. The unit of analysis is the individual older adults. The levels of measurement are dichotomous where outcome variables and predictor variables have nominal values that use dichotomous or binary data. The outcome variables are degree of preparedness (perceived preparedness), awareness of preparedness information; and the predictor variables are rurality, and socioeconomic status.

The research questions and hypotheses were:

RQ1: Based on FEMA's 2023 National Household Survey on Disaster Preparedness for Florida's older adults, what effects do rurality and socioeconomic status have on predicting the likelihood of degree of disaster preparedness?

$1H_0$: There are no significant effects between rurality and socioeconomic status on predicting the likelihood of degree of disaster preparedness on Florida's older adults.

$1H_a$: There are significant effects between rurality and socioeconomic status on predicting the likelihood of degree of disaster preparedness on Florida's older adults.

RQ2: Based on FEMA's 2023 National Household Survey on Disaster Preparedness for Florida's older adults, what effects do rurality and socioeconomic status have on predicting the likelihood of awareness of disaster preparedness information?

$2H_0$: There are no significant effects between rurality and socioeconomic status on predicting the likelihood of awareness of disaster preparedness information on Florida's older adults.

$2H_a$: There are significant effects between rurality and socioeconomic status on predicting the likelihood of awareness of disaster preparedness information on Florida's older adults.

Determination of Statistical Analysis Tests

According to Burkholder et al. (2019), the first step to choosing a proper statistical approach is to evaluate the attributes of each variable. The variables' degree of preparedness and awareness of preparedness information are the outcome variables, while rurality and socioeconomic status are the predictor variables. These four variables have dichotomous values. These values can easily be recoded as zero and one which are numerical values. Therefore, I used a correlational quantitative approach. The second step in choosing a proper statistical approach is to select the statistical analysis considering the properties of the variables. I used binary Logistic regression for statistical tests to analyze the relationship between the variables (Burkholder et al., 2019).

Binary Logistic Regression

Binary Logistic Regression is a statistical test used to predict the value of a nominal variable based on the values of two or more predictor variables (Burkholder et al., 2019). This test might be used with two or more variables of any type, such as nominal variable rurality (rural/urban), and socioeconomic status (socioeconomically advantaged / socioeconomically disadvantaged), and a dichotomous outcome variable, such as degree of preparedness (prepared individual/unprepared individual) and awareness of preparedness information (yes/no). For this study I have all categorical variables with dichotomous values, both outcome variables as well as dichotomous predictor variable to predict a future event.

Binary Logistic Regression Assumptions

According to Warner (2013), there are different assumptions for analyses that use a general linear model, such as multiple linear regression, where it is required to have a normal distribution for the scores, and for discriminant analysis, which requires homogeneity of elements for the variables of all groups. However, Warner (2013) stated that for a binary outcome variable in binary logistic regression, where Y cannot be normally distributed because it is dichotomous, such assumptions do not apply. The logistic regression assumptions are:

- The outcome variable should be measured on a dichotomous scale.
- There is a requirement of having one or more predictor variables, which can be continuous or categorical (ordinal or nominal variable).
- The sample size must meet the minimum requirement (verification of power analysis).
- The outcome variable should have mutually exclusive and exhaustive categories and demonstrate independence of observations, which means that there is no correlation between the predictor variables.
- Use a case-wise List to examine if the data shows significant outliers and then decide if it is appropriate to remove them or to keep them in the analysis.
- Assess linearity with the Box-Tidwell procedure, if there is a linear relationship between any continuous predictor variable and the logit transformation of the outcome variable. This assumption does not apply because all the predictor variables are categorical.
- Evaluate that there is no multicollinearity or that the predictor variables are not highly correlated (Warner, 2013).

Test Statistic

I used statistical analysis, including descriptive statistics, to present the dataset name, population sample size (*N*), variable descriptions, unit of analysis, levels of measurement, frequency tables, and percentages for each variable. I used descriptive analysis to illustrate the frequency of older adults residing in rural and urban areas. I evaluated the potential for Type I or Type II errors and the range of scores for the variables, as applicable (Wagner, 2020). I provided tables and/or figures to illustrate the outcomes (Creswell & Creswell, 2023). I used logistic regression to test the research questions, null, and alternative hypotheses (Warner, 2013; Babbie, 2017). Logistic regression can be used for categorical tests to determine if rurality and socioeconomic status can predict the degree of emergency preparedness or awareness of preparedness information among older adults.

The following paragraphs describe how I interpreted the results and reported statistical significance, confidence intervals, and effect size. This study is a non-experimental correlational quantitative design using an operational secondary survey dataset. As described by Creswell and Creswell (2023), this type of design utilizes a questionnaire from a population sample to make generalizations about the population that the sample represents. After analyzing the data, I interpreted the outcomes, reported the findings, and presented the conclusions. Research authors should prepare their research reports with clarity that demonstrates that the work was done with "scientific rigor and methodological integrity" (Journal Article Reporting Standards (JARS), APA, 2020, p. 71). Therefore, this research design is aligned with the JARS to produce a quality, comprehensive, and uniform research report that will ease the process of transfer of knowledge to the public policy and decision-maker audiences in their essential task by staying well-informed and up to date on the latest findings in the literature about government studies, public policy, and administration disciplines.

The interpretation of results included a discussion that presented the findings and demonstrated the outcomes of the tests. These outcomes included an extensive description, tests demonstrating statistical significance, key parameter estimates, confidence intervals, effect sizes, probability values, and odds ratios, among other results. Evaluating statistical significance and meaningfulness determines if, proportional to the sample size, the results are significant enough to prove or reject the hypothesis (Creswell & Creswell, 2023). The test produced a *p*-value aligned with the probability that the results are proper and related to the variables tested. It is considered a statistically significant *p*-value of .05 or .01. Due to the sample size, I was inclined to set the *p*-value to .05, the rejection limit that I established to determine that the result is statistically significant.

However, because the sample is significant, I evaluated if setting the *p*-value to 0.01 to compare the results in terms of significance was an option, considering that, due to the number of variables and the large sample size, there was a risk of having a small significant effect according to the Field (2018) method (Burkholder et al., 2019). I observed whether the finding had a statistically significant result proportional to the sample size, indicating meaningfulness and an accurate representation of the hypothesis it represents. According to Creswell and Creswell (2023), the confidence interval is an estimated range of upper and lower values that shows consistency with the actual mean of the population. With a 95% confidence level, I can be 95% certain that the mean is genuinely within the confidence interval range; therefore, the more significant the level of confidence, the larger the percentage of change, indicating that the mean is genuinely within the confidence interval range (Frankfort-Nachmias, 2020). However, due to the nature of the variables used in the analysis, where all variables are categorical with nominal values, so the mean was not used to determine the relationship among the variables. The strength of the outcome about group differences (rural or urban older adults) or the relationship between variables was expressed as an effect size (Creswell & Creswell, 2023).

Issues of Trustworthiness

Threats to External Validity

This investigation is non-experimental; however, if threats to external validity arise, one approach to mitigate them is to revisit existing empirical evidence and review studies relevant to the topic, thereby identifying potential gaps to be addressed during the research (Burkholder et al., 2019). This methodology was employed in this study, where the gap highlighted by Fazeli et al. (2024) pertains to the paucity of prescriptive studies focused on vulnerable populations, as well as the gap related to the primary research questions concerning the impact of FEMA policies on disaster preparedness and the relationship between rural and urban older adults' levels of preparedness across socioeconomic statuses. The findings of this research may enhance the FEMA National Household Survey on Disaster Preparedness instrument, which could be utilized annually by FEMA or designated EM organizations to gather feedback from older adult populations residing in rural and urban areas. This data collection would facilitate the assessment of their preparedness levels and inform the implementation of prescriptive solutions, as outlined in Chapter 5 of this study.

Threats to Internal Validity

Although this is a non-experimental study, there exists a risk of internal validity errors due to various reasons. Researcher bias may influence the research design, analysis, or interpretation of outcomes owing to the researchers' opinions or stereotypes concerning elements of the study. As the researcher, I conducted a self-assessment to identify potential biases that could compromise internal validity and affirm that I have not identified any biases or conflicts of interest that could jeopardize the study's integrity.

Another threat to internal validity encompasses issues related to statistical construction and construct validity (Burkholder et al., 2019). From the configuration of statistical analysis utilizing technological tools such as SPSS to the interpretation of findings, errors and inaccuracies may lead to negative implications, thereby impacting the quality of results and the plausibility of interpretations (Burkholder et al., 2019). Consequently, I meticulously reviewed the selection of statistical analysis parameters prior to executing the tests.

Another potential threat to internal validity is the selection of the sample groups. Some statistical analyses necessitate that the groups being compared represent a homogeneous sample. During the selection process, significant discrepancies in sample sizes may occur between the two groups. Although I intended to select a homogeneous sample, I was constrained to utilize the sample provided by FEMA (2023d), which did not exhibit homogeneity across all surveyed variables. Consequently, I exercised caution when conducting the assumptions for binary logistic regression tests, ensuring that the results did not indicate Type I or Type II errors that could influence the interpretation of the findings due to unequal sample proportions.

Ethical Considerations

I utilized secondary operational data from the 2023 FEMA National Household Survey on Disaster Preparedness Instrument. The authorities of the Agency curated this dataset prior to its publication on their official internet portal. I employed the dataset to analyze only the variables relevant to the hypotheses I formulated concerning the population sample. During the proposal, I clarified that the scope of this study does not include auditing the agency's data, inquiry instrument, methodology, or activities related to the dissemination of the EP message and the provision of services for the public and disaster victims in 2023. Therefore, the focus was directed towards examining how FEMA's 2023 emergency preparedness (EP) policies, as reflected through the survey instrument, influenced the collection of feedback from the constituents—specifically, the older adults—regarding their level of preparedness. This involved observing potential differences in their preparedness and awareness of disaster information based on rural or urban residence and socio-economic status.

According to Burkholder et al. (2019), U.S. federal regulation U.S. DHHS mandates that Institutional Review Boards (IRBs) at higher education institutions evaluate proposed research studies to ensure the protection of study participants and university researchers. Following the approval of the research proposal and a successful oral defense, I secured approval from Walden University's Institutional Review Board (IRB) for the methodological review and authorization to utilize the secondary data set source. The IRB approval number for this doctoral capstone and dissertation study is 05-05-25-0064428.

During the preparatory phase of my research, I engaged in an early consultation with Walden IRB concerning the use of the dataset, its parameters, and associated conditions. I was subsequently granted authorization to access FEMA’s federal agency website, where I located and downloaded an appropriate dataset. Additionally, the website provided a source file with data definitions, a description of the instrumentation—including information regarding validity and reliability—and privacy statements concerning FEMA’s study participants.

Summary

Most of the literature on EP is descriptive, creating a gap that can be addressed through a prescriptive approach concerning social issues related to the safety and well-being of vulnerable populations during EP, ER, and DR (Fazeli et al., 2024). Chapter 2 directed the audience to review the literature on EM, emphasizing emergency and disaster preparedness within the context of this study's purpose, which was to examine the relationship between FEMA's EP policies and the reported levels of preparedness among older adults in Florida’s urban and rural communities across various socioeconomic factors. Chapter 3 underscored the rationale and objectives of this study within the frameworks of Public Policy and Administration disciplines, including relevant theories and criteria. Additionally, it detailed the methodologies, procedures, data analysis plans, issues of trustworthiness, and ethical considerations undertaken for this research project.

This final manuscript of the dissertation delineates all stages of the research design. It surpasses mere practice by proactively guiding me from being a passive observer or bystander of social phenomena or social issues requiring scholarly investigation to engaging my intellect in scholarly pursuits, thereby identifying a meaningful research gap capable of yielding prescriptive solutions with positive implications for social change. The process begins with articulating a purposeful and meaningful research study, proceeds through an exhaustive review of the literature to seek answers—recognizing that responses may not always fully address the initial questions—and involves a curious pursuit of new questions when existing evidence appears insufficient. It encompasses the formulation of research questions, hypothesis development, evaluation of variables, and the selection of effective research design and tools to adequately address the research objectives.

The scholars of the discipline of Public Policy and Administration diligently examine the relationships between the fundamental statutes of the U.S. Constitution that govern the establishment of institutions and agencies with the primary mandate to develop, execute, and uphold policies that are effective, efficient, economical, and equitable, thereby ensuring the safety and well-being of the citizens of the United States of America. I examined FEMA policies concerning disaster preparedness and awareness of disaster preparedness resources available to older adults residing in Florida.

The rationale and research questions that I assert with the credible human scholar-practitioners within the empirical literature concerning emergency and disaster preparedness are as follows: Did older adult respondents residing in rural areas report a significantly different level of preparedness and awareness of preparedness information compared to those living in urban areas? Is there a significant relation between the socioeconomic status of older adults and their degree of emergency preparedness as well as their awareness of preparedness information? In order to address these research questions, I employed the following steps: Firstly, as delineated in Chapters 1 and 2, I utilized institutionality theory to frame the study's rationale regarding the relationship between institutions and agencies and their responsibilities in promoting effective and efficient policies concerning emergency and disaster preparedness.

Furthermore, as explained in Chapters 2 and 3, I employed a quantitative methodology to facilitate the examination of relationships between variables and groups or categories within variables, while conducting validity checks. Additionally, as delineated in Chapter 3, Section on Methodology, I adhered to specific research procedures regarding the inclusion and exclusion criteria of the population and utilized power analysis to determine the sample size, which is crucial for assessing the statistical significance and relevance of the findings prior to result interpretation. In the data collection section, I indicated that archival data and survey instruments were employed as inquiry methods to gather data. Specifically, selected an archival dataset that complies with IRB ethical requirements. I chose the dataset of the 2023 FEMA National Household Survey on Disaster Preparedness (FEMA, 2023d). Regarding data analysis, I utilized the statistical software SPSS for inferential statistical analysis to test hypotheses and followed standard procedures for interpreting results, including reporting on significance levels, and effect sizes. Finally, I addressed issues related to trustworthiness, including strategies to mitigate threats to external and internal validity, as well as ethical considerations to ensure the legitimacy of the procedures conducted during this research. Chapter 4 describes the data collection process, reports the results of statistical assumptions, presents the test statistics, and summarizes the responses to the research questions.

Chapter 4: Results

This quantitative study involved exploring the relationship between FEMA's 2023 policy on EP, reported degree of preparedness, and awareness of preparedness information among Florida older adults in terms of their socioeconomic status and rurality. This chapter includes descriptions of the data collection process, reports of results, descriptive statistics, statistical assumptions, statistical analysis, and hypotheses testing.

Using SPSS v. 30, I conducted logistic regression modeling to assess the predictive likelihood of rurality and socioeconomic status on degree of DP as well as awareness of DP information among older adults in Florida according to FEMA 2023 NHS on DP. Research questions and hypotheses were:

RQ1: Based on FEMA's 2023 National Household Survey on Disaster Preparedness for Florida's older adults, what effects do rurality and socioeconomic status have on predicting the likelihood of degree of disaster preparedness?

$1H_0$: There are no significant effects between rurality and socioeconomic status on predicting the likelihood of degree of disaster preparedness on Florida's older adults.

$1H_a$: There are significant effects between rurality and socioeconomic status on predicting the likelihood of degree of disaster preparedness on Florida's older adults.

RQ2: Based on FEMA's 2023 National Household Survey on Disaster Preparedness for Florida's older adults, what effects do rurality and socioeconomic status have on predicting the likelihood of awareness of disaster preparedness information?

$2H_0$: There are no significant effects between rurality and socioeconomic status on predicting the likelihood of awareness of disaster preparedness information on Florida's older adults.

$2H_a$: There are significant effects between rurality and socioeconomic status on predicting the likelihood of awareness of disaster preparedness information on Florida's older adults.

Data Collection

I used an operational secondary dataset gathered by FEMA in 2023. FEMA's dataset collection involved gathering feedback from the U.S. population regarding disaster preparedness actions. This included questions related to disaster preparedness, demographics, and hazard items specific to each state. Florida was the focus of my data analysis. The 2023 NHS on DP included data from February 1 to March 14, 2023. I used an Internet web survey format that was available in both English and Spanish. FEMA received 7,604 responses. Questions involved general preparedness, disaster, and pandemic issues. For respondents who identified having experienced a higher risk of at least one hazard, additional questions were asked regarding the indicated hazard. In the final dataset, demographic variables were adjusted by FEMA to facilitate analysis.

I focused on older adults, specifically those who were 60 or older according to the FEMA survey who resided in Florida. Participants were civilians, not institutionalized, and had access to the Internet. The sample set for my study was a subgroup of the wider population sample in the 2023 NHS on DP. Via filtering the master FEMA dataset, Florida had 978 response submissions, of which 326 (33%) identified as being 60 or older. Fifty-one participants had incomplete data and were excluded from the study, leaving a sample size of 275 for my inferential statistical analyses.

Results

Table 3 illustrates the sample (*n* = 275) from Florida who were 60+ years old, and four study variables: rurality (IV), socioeconomic status (IV), degree of preparedness (DV), defined as the variable perceived preparedness, and awareness of preparedness information (DV). Each of the variables is at the nominal level with dichotomous values; therefore, the mode serves as a measure of central tendency.

Table 3

Descriptive Statistics

		Florida	60+ years old	Rurality	Socioeconomically disadvantaged	Perceived preparedness	Awareness of preparedness information
N	Valid	275	275	275	275	275	275
	Missing	0	0	0	0	0	0
Mode				1	1	1	1

Table 4 illustrates distribution by rurality among 275 valid cases. Five participants (1.8%) identified as living in rural areas, whereas 270 (98.2%) identified as living in urban areas. Given underrepresentation of rural cases in the dataset, regression results should be interpreted with caution.

Table 4

Rurality

	Frequency	Percent	Valid percent	Cumulative percent

Valid	Rural	5	1.8	1.8	1.8
	Urban	270	98.2	98.2	100.0
	Total	275	100.0	100.0	

Table 5 illustrates distribution of socioeconomically disadvantaged individuals among 275 valid cases. Thirty participants (10.9%) identified as socioeconomically disadvantaged, whereas 245 participants (89.1%) identified as not socioeconomically disadvantaged.

Table 5

Socioeconomic Status

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Disadvantaged	30	10.9	10.9	10.9
	Not Disadvantaged	245	89.1	89.1	100.0
	Total	275	100.0	100.0	

Table 6 illustrates distribution of the degree of perceived preparedness among 275 valid cases. Fifty-seven participants (20.7%) identified as unprepared, whereas 218 participants (79.3%) identified as prepared.

Table 6

Perceived Preparedness

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Unprepared Individual	57	20.7	20.7	20.7
	Prepared Individual	218	79.3	79.3	100.0
	Total	275	100.0	100.0	

Table 7 illustrates the distribution of awareness of preparedness information among the 275 valid cases. Thirty-three participants (12%) identified as no, not being aware of any preparedness information, whereas 242 participants (88%) identified as yes, being aware of preparedness information.

Table 7

Awareness of Preparedness Information

		Frequency	Percent	Valid percent	Cumulative percent
Valid	No	33	12.0	12.0	12.0
	Yes	242	88.0	88.0	100.0
	Total	275	100.0	100.0	

Statistical Assumptions Testing

Moving from descriptive statistics to regression modeling, my data first underwent assumption testing to evaluate its suitability for logistic regression inferential testing. Logistic regression has four initial assumptions to be met: (a) a dichotomized DV, (b) one or more continuous or categorical IVs, (c) independence of observations, and (d) mutually exclusive categories of the dichotomized DV and the nominal IVs (Lund Research, 2020). These first four data assumptions are met. Next in the assumption testing is the evaluation for linearity and the presence of multicollinearity within independent variables (IVs). Neither assumption is applicable as my data are categorical only (Lund Research, 2020). The final assumption test is used to detect the presence of significant data outliers. Table 3 displays the variable modes, and inspection of the minimum and maximum responses found no outliers. This assumption was met (Lund Research, 2020). As described in Table 4, the attribute of rural, found in the rurality IV, received only five (1.8%) valid responses, which does not meet the minimum threshold of at least 15 cases per category (Lund Research, 2020), resulting in initial consideration of this IV not helping predict the likelihood of either DV.

Hypothesis Testing for RQ1

Having established and evaluated the required assumption testing for logistic regression, I began the regression model testing for RQ1's null hypothesis.

Binary Logistic Regression Model Outputs

Table 8 illustrates the frequency distribution of each categorical variable, along with its corresponding parameter coding.

Table 8

RQ1 Categorical Variables Coding

		Frequency	Parameter coding (1)
DV			
Perceived preparedness	Unprepared Individual	57	.000
	Prepared Individual	218	1.000
IVs			
Socioeconomically disadvantaged	Disadvantaged	30	.000
	Not Disadvantaged	245	1.000
Rurality	Rural	5	.000
	Urban	270	1.000

Table 9 illustrates the classification performance of the model using only the DV, excluding IVs. This indicates that the model is suitable for predicting the accuracy of the perceived preparedness level in the 60+ adult population. Prepared individuals are the most frequently expected outcome (n = 218). The classification table includes both the observed and predicted classifications. Overall, this model accurately classifies 79.3% of the cases.

The positive predictive value is the percentage of correctly predicted cases with the observed characteristics among all cases predicted as having the characteristic (Lund, 2020). The positive predictive value is 100 x (218 / (57 + 218)) = 79.27%. The negative predictive value is the percentage of correctly predicted cases without the observed characteristic compared to the total number of cases predicted as not having the characteristic (Lund, 2020). The negative predictive value is 100 x (0 / (0 + 0)) = 0%.

Table 9

RQ1 Classification Table [a,b]

			Predicted		
			Perceived preparedness		
	Observed		Unprepared individual	Prepared individual	Percentage correct
Step 0	Perceived preparedness	Unprepared individual	0	57	.0
		Prepared individual	0	218	100.0
	Overall percentage				79.3

a. Constant is included in the model.
b. The cut value is .500

Table 10 provides the overall statistical significance of the model, explaining how well the model predicts categories in the absence of IVs' effects. This model is statistically significant $X^2(2) = 7.904$, $p < .019$.

Table 10

RQ1 Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	7.904	2	.019
	Block	7.904	2	.019
	Model	7.904	2	.019

Table 11 presents the Hosmer and Lemeshow goodness-of-fit test as another measure of model adequacy. Lund Research (2020) discusses how model outputs with significant *p*-values indicate poor model fit. In comparison, when model output demonstrates a *p*-value greater than 0.05, a good model fit is indicated. While my model output is not significant, thus a good model fit, the perfect 1.00 value remains an area for cautious interpretation.

Table 11

RQ1 Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	.000	1	1.000

Table 12 illustrates the variation in the DV that the model can explain. Cox & Snell R^2 and Nagelkerke R^2 values are two methods of calculating the explained variation, and are sometimes referred to as pseudo R^2 values. The explained variation in the DV based on this model ranges from 2.8% to 4.4%. Accepting the Nagelkerke R^2 as the preferred reportable value (Lund Research, 2020), there remains 95.6% of unexplained variance in the regression model, indicating additional effects from IVs not tested in the overall model or not captured in the original FEMA dataset.

Table 12

RQ1 Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	272.772[a]	.028	.044

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Table 13 displays the full model of all variables in the equation. For RQ1, a binomial logistic regression was performed to ascertain the effects of rurality (rural or urban) and socioeconomic status (socioeconomically disadvantaged or not disadvantaged) on the likelihood of degree of preparedness (perceived preparedness) of older adult participants in Florida. Evaluating the Wald statistic to determine significance for each IV, only socioeconomically disadvantaged added significantly to the model, $X^2(2) = 0.006$, $p < .05$.

The *B* coefficients are used to evaluate the probability of an event occurring when one unit of change occurs in an IV, while all other IVs are kept constant (Lund Research, 2020). SPSS v. 30 simplifies model interpretation by providing odds ratio outputs for each IV. When evaluating the significant finding for socioeconomically disadvantaged individuals, a negative *B* coefficient value indicates a decreased odds of a one-unit increase in the IV. To simplify interpretation, I have used an inverted odds ratio (1/.327 = 3.06, 95% CI [0.730, .0147]). The odds of socioeconomically disadvantaged 60+ residents of Florida being unprepared for emergencies or disasters increase by a factor of 3.06. Therefore, I have rejected the null hypothesis for RQ1 in favor of the alternative with socioeconomically disadvantaged classifications and interpreted the nonsignificant model outputs for rurality with caution.

Table 13

RQ1 Variables in the Equation

								95% CI for Odds Ratio	
		B	S.E.	Wald	*df*	*p*	Odds Ratio	Lower	Upper
Step 1[a]	Rurality (1)	1.117	.928	1.447	1	.229	3.054	.495	18.838
	Socioeconomically disadvantaged (1)	-1.117	.409	7.455	1	.006	.327	.147	.730
	Constant	.405	.913	.197	1	.657	1.500		

a. Variable(s) entered on step 1: Rurality, socioeconomically disadvantaged.

Hypothesis Testing for RQ2

I conducted the logistic regression model testing for RQ2's null hypothesis.

Binary Logistic Regression Model Outputs

Descriptive statistics and assumption testing for RQ2 remain unchanged. Table 14 illustrates the frequency distribution of each categorical variable, along with its corresponding parameter coding.

Table 14

RQ2 Categorical Variables Coding

			Parameter coding
		Frequency	(1)
Dependent variable			
Awareness of preparedness information	No	33	.000
	Yes	242	1.000
Independent variables			
Socioeconomically disadvantaged			
	Disadvantaged	30	.000
	Not Disadvantaged	245	1.000
Rurality	Rural	5	.000
	Urban	270	1.000

Table 15 illustrates the classification performance of a model with only the DV, excluding IVs. This indicates that the model is suitable for predicting the accuracy of awareness of disaster preparedness information in the 60+ adult population. The classification table includes both the observed and predicted classifications. Overall, this model accurately classifies 88% of the cases.

Table 15

RQ2 Classification Table[a,b]

	Observed		Predicted: Awareness of preparedness information: No	Predicted: Awareness of preparedness information: Yes	Predicted: Percentage Correct
Step 0	Awareness of Preparedness Information	No	0	57	.0
		Yes	0	218	100.0
	Overall Percentage				88.0

a. Constant is included in the model. b. The cut value is .500

Table 16 provides the overall statistical significance of the model, explaining how well the model predicts categories compared in the absence of IV's effects. This model is not statistically significant (p = .260), offering a preliminary indication of nonsignificant findings in the logistic regression model outputs.

Table 16

RQ2 Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	2.697	2	.260
	Block	2.697	2	.260
	Model	2.697	2	.260

Table 17 illustrates the variation in the DV that the model can explain. Cox & Snell R^2 and Nagelkerke R^2 values are two methods of calculating the explained variation and are sometimes referred to as pseudo R^2 values. The explained variation in the DV based on this model ranges from 1.0% to 1.9%. Accepting the Nagelkerke R^2 as the preferred reportable value (Lund Research, 2020), there remains 98.1% of unexplained variance in the regression model, indicating additional effects from IVs not tested in the overall model or not captured in the original FEMA dataset.

Table 17

RQ2 Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	272.772[a]	.010	.019

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Table 18 displays the whole model of all variables in the equation. For RQ2, a binomial logistic regression was performed to ascertain the effects of rurality (rural or urban) and socioeconomic status (socioeconomically disadvantaged or not disadvantaged) on the likelihood of awareness of preparedness information (yes or not aware) of older adult participants in Florida. Evaluating the Wald statistic to determine significance for each IV, neither displayed model significance. Therefore, I have retained the null hypothesis for RQ2.

Table 18

RQ2 Variables in the Equation

								95% CI for Odds Ratio	
		B	S.E.	Wald	*df*	*p*	Odds Ratio	Lower	Upper
Step 1[a]	Rurality(1)	1.660	.935	3.149	1	.076	5.259	.841	32.899
	Socioeconomically disadvantaged(1)	-.194	.575	.114	1	.736	.824	.267	2.541
	Constant	.405	.913	.197	1	.657	1.500		

a. Variable(s) entered on step 1: Rurality, Socioeconomically disadvantaged.

Summary

This study was conducted to evaluate the predictive effects of rurality and socioeconomically disadvantaged status on the degree of perceived preparedness, as well as the predictive effects of rurality and socioeconomically disadvantaged status on awareness of disaster preparedness information. For RQ1, a binomial logistic regression was performed to ascertain the effects of rurality and socioeconomic status on the likelihood of degree of disaster preparedness in Florida's older adults. The logistic regression model was statistically significant for RQ1, $X^2(2) = 7.90$, $p < .019$. The model explained 4.4% (Nagelkerke R^2) of the variance in degree of disaster preparedness and correctly classified 79.3% of cases. While the whole model was statistically significant, the coefficient of rurality ($p = .229$) was not statistically significant. In contrast, socioeconomic status predicted perceived preparedness, X^2 (2) = 0.006, $p < .05$. Older adults who self-reported as socioeconomically disadvantaged had 3.06 times higher odds of being unprepared for disasters than those who reported not being socioeconomically disadvantaged.

For RQ2, a binomial logistic regression was performed to ascertain the effects of rural or urban location, and socioeconomic status on the likelihood of awareness of disaster preparedness information among Florida's 60+ year old adults. The logistic regression model for RQ2 was not statistically significant, $X^2(2) = 2.697$, $p = .260$, for either IV. Therefore, I retained the null hypothesis. In both models, the underrepresentation of rural areas likely impacted model expressions and is an area that requires improvement for FEMA to better include these underrepresented citizens in future data collection efforts.

Chapter 5 synthesizes the findings, describes the limitations, and offers potential prescriptive solutions, and recommendations for future research, practice, and policy regarding older adult disaster preparedness.

Chapter 5: Discussion, Conclusions, and Recommendations

I examined the impact of 2023 FEMA EP policies on EP of older adults in Florida. This study was conducted to demonstrate how these policies led to feedback on this population regarding their EP. I employed a quantitative methodology, analyzing secondary data collected by FEMA in 2023 through the NHS on DP. Data analysis was performed using SPSS, and I employed logistic regression to obtain statistics. I aimed to determine whether a significant relationship existed between DVs and IVs. DVs were the level of preparedness (prepared or unprepared) and awareness of preparedness information (yes or no). IVs were rurality (rural or urban) and socioeconomic status (socioeconomically disadvantaged or socioeconomically not disadvantaged).

During data analysis, the model for rurality lacked a sufficient number of cases to adequately represent rural older adults in comparison to urban older adults. This resulted in an inadequate sample size to derive a valid conclusion regarding this impact. Nonetheless, the RQ1 model about socioeconomic status and level of preparedness demonstrated a significant correlation between socioeconomic status and degree of preparedness among older adults in Florida. Furthermore, the outcome did not exhibit a statistically significant result within the model for RQ2; consequently, the null hypothesis for RQ2 was retained.

Interpretation of the Findings

In this section, I interpreted the findings by analyzing data and using test statistics to evaluate the hypotheses. Subsequently, I examined the relationship between these findings and existing pertinent literature. I then elucidate how these results either corroborate, refute, or extend current knowledge involving emergency mitigation, preparedness, response, and recovery. Additionally, I analyzed findings using Scott's institutional theory. Next, I outlined the limitations of the study, offered potential prescriptive solutions, and provided recommendations for future research. Finally, I discussed the implications of the findings and their potential to foster positive social change while addressing risks to vulnerable populations, particularly older adults.

The outcomes derived from the analysis of the two research questions exhibited varying results, some of which may be attributable to statistical significance. In contrast, others could stem from the methodology and sampling procedures employed by FEMA during data collection in 2023. The primary research inquiry focused on the influence of rurality and socioeconomic status on predicting emergency preparedness levels. For RQ1, the logistic regression model was statistically significant, with $X^2(2) = 7.90$ and $p < .019$. The model accounted for 4.4% (Nagelkerke R^2) of the variance in DP levels and accurately classified 79.3% of cases. Among predictor variables, only socioeconomic status (specifically, being socioeconomically disadvantaged) demonstrated statistical significance, with X^2 (2) = 0.006 and $p < .05$.

During the assumption testing phase, the number of rural cases ($n = 5$) was markedly lower in comparison to the urban population ($n = 270$). According to the logistic regression analysis, rurality, when examined as a predictor of the degree of DP, was not found to be statistically significant ($p = 0.229$). Therefore, due to the underrepresentation of rural cases, it was not possible to definitively confirm or refute hypotheses related to RQ1 concerning the impact of rural or urban residence on preparedness levels. Consequently, the research gap regarding Florida's older adults emergency preparedness across rurality remains unresolved and warrants further investigation.

RQ2 involves the influence of rurality and socioeconomic status on awareness of preparedness information. The logistic regression model did not reach statistical significance, with X^2 (2) = 2.69 and $p < 0.26$ for either predictor variable; consequently, the null hypothesis was retained.

According to FEMA's 2023 National Household Survey on Disaster Preparedness (FEMA, 2023d), socioeconomic status markedly influences the likelihood of EP among older adults in Florida. It serves as a predictor of preparedness levels within this demographic ($p = 0.006$). Elderly individuals who identify as socioeconomically disadvantaged exhibit three times higher odds of being unprepared for disasters compared to their counterparts who do not perceive themselves as disadvantaged. These insights enrich the existing body of research on vulnerable populations and EPs. Furthermore, policy implications can underpin initiatives and programs that are designed to promote positive social change, thereby benefiting not only Florida's older adult populations but also older adults nationwide.

Impact on Current EP Knowledge Involving Public Policy and Administration

Older adults who are socioeconomically disadvantaged are more likely to be unprepared for emergencies or disasters compared to those who are socioeconomically advantaged. Martins et al. (2019) found that mothers, low-income households, and households with seniors were less likely to prepare. This demands attention from all levels of government. The federal government must recognize the risks this poses to populations if aid is not provided to socioeconomically disadvantaged individuals. According to Hertelendy and Ciottone (2025), the federal administration plans to reduce funding for EM significantly. It has announced intentions to either permanently shut down FEMA by reassigning its role to the states or drastically transform how FEMA operates. The closure of FEMA is predicted to be risky. However, it may also present an opportunity to create new changes for improvement, potentially benefiting and enhancing the well-being of American society by addressing critical gaps that have affected vulnerable populations for decades. Therefore, compiling research recommendations on emergency mitigation, preparedness, response, and recovery is essential for developing effective DP strategies and risk reduction concepts. I integrated the work of previous researchers regarding factors that influenced older adults' EP.

Factors Affecting Older Adults' EP

Disabilities and Lack of Social Support.

Peterson et al. (2022) found that disaster preparedness among older adults remains low, particularly for those who live alone, have disabilities, and lack social support. Therefore, it is essential to identify older adults who are more vulnerable due to disabilities and a lack of social support and connect them with community-based service agencies that can help them prepare for and receive alerts and support in the event of evacuations.

Lack of Education and Training Resources for Older Adults

The deficiency of educational and training resources for the senior population has been examined by Wolfe et al. (2021), demonstrating how an organization can deliver health services that enhance the well-being of adults. The organization, known as the Age-Friendly Public Health Systems (AFPHS), effectively accomplishes its mission to provide assistance and educational resources to older adults. These individuals participate monthly in health-related educational activities, which also serve research purposes. This initiative highlights the importance of interagency collaboration in achieving shared objectives. Such an approach could be adopted on a national scale to improve the quality of life for this expanding demographic.

Dissemination of EP Message Failing to Reach the Older Adult Population.

Rivera (2020) examined the 2018 FEMA policies on preparedness and households with an emergency plan. Interestingly, he tested the variable "exposed to preparedness information" (No is referenced), which had Yes (meaning exposed to preparedness information) and No (not exposed to preparedness information). This variable corresponds to the 2023 FEMA survey variable "awareness of disaster information." His findings revealed that in 2018, the national population was more "exposed to preparedness information" ($p < 0.001$), while this study showed that Florida's older adults were not significantly aware of preparedness information. It would be interesting to conduct future research using these same variables, not only for Florida's older adult population but also for the general population, to see if there is a significant increase in awareness of disaster information after 2023.

Socioeconomically disadvantaged individuals are at significantly high risk.

Regarding the impact of socioeconomic status on older adults in Florida, Bukvic and Borate (2023) employed geospatial analysis to examine the distribution of older adults and their socioeconomic characteristics in Miami-Dade County. They used logistic regression to identify block groups where 20% or more of the residents are aged 65 or older and live in areas at 3 feet of sea level rise, which poses a high risk to their lives. Similar studies could be conducted to identify clusters of older adults living in high-risk areas, and policymakers could use this information to enhance emergency preparedness for these populations.

Preparation Cost and Lack of Cooperation.

Kleier et al. (2018) delineated the factors influencing hurricane preparedness decisions among 188 elderly individuals residing in a high-risk region of South Florida. Kleier et al. (2018) observed that the necessity for cooperation and the financial implications of preparation were associated with a deficiency in readiness; moreover, the majority of the older adults were not equipped to evacuate if their residences were at significant risk of storm damage.

Lack of healthcare professionals supporting EP plans for older adults.

Given the potential risks of emotional trauma and detrimental mental health consequences resulting from experiencing a catastrophic disaster, the presence of emergency personnel, including social workers (Beltran et al. 2022), psychologists, and counselors at disaster sites to offer mental health services, can serve as a preventative measure against further emotional harm among those impacted. Although preventable, economically disadvantaged groups may suffer from mental health disorders, which could subsequently lead to increased mortality and criminal activity, thereby potentially imperiling the alignment between constitutional principles and the American citizenry. Researchers have identified these risks; for instance, the suicide rate increased markedly following the devastation caused by Hurricane Irma (Torres-Mendoza et al., 2019). Accordingly, it has been proposed that the Emergency Plan (EP) for households incorporate information that more effectively links individuals with their community's mental health service providers (White et al., 2023). These professionals possess expertise in clinical psychology, counseling, and mental health coaching, and are prepared to assist individuals in need.

Lack of Real-Time Information for Decision Makers and First Responders.

The reporting of capacity, resources, and preparedness levels, utilizing statistics derived from real-time data for each locality, county, municipality, and state or territory, will inform decision-makers regarding the current status of population readiness. This approach will also facilitate more precise predictions of potential gaps in areas requiring additional preventive measures. Additionally, mitigation involves the effective coordination of first responders, who must be supplied with real-time information, including plans for relocation and evacuation, as well as the availability and readiness of shelters to accommodate individuals in high-risk zones and to ensure safety prior to the deterioration of conditions (Farhadi et al., 2024; Guo et al., 2025; Jiang, 2024; Zhong et al., 2023).

First Responders and Community Disconnection Affecting Evacuations.

According to Karaye et al. (2019), people often prefer to stay home because they fear leaving their properties unattended. First responders can lead as community trainers during off-peak seasons which might help reduce these fears. This can strengthen relationships between first responders and the communities they serve. It also helps spread the EP message, build community resilience, and increase individuals' self-efficacy, while emphasizing that their most important asset during an emergency is their own life (Karaye et al., 2019). During Hurricane Katrina in 2005, nearly 2,000 people died in low-income communities (Roessing-Anderson, 2023). The qualitative study included interviews with 15 participants who defied evacuation orders (Roessing-Anderson, 2023). They reported feeling safer at home because the evacuation process was frightening, they distrusted the process, and felt insecure without resources. Information dissemination was the only factor that encouraged evacuation. Improving the connection between first responders and the communities they serve will gradually reduce these fears and boost everyone's sense of self-efficacy.

Transportation Issues, Shelters, and Real-Time Technology.

Shaharier and Hu (2025) examined the utilization of GPS data to evaluate mobility disruption and recovery in southwest Florida amidst Hurricane Ian. They identified key factors, including socioeconomic and geographic elements, that influence mobility disruptions. Additionally, Ghorbanzadeh et al. (2021) proposed recommendations for community shelter options, advocating for the integration of libraries into preparedness plans for residents in rural regions of Northwest Florida. Their study employed GIS to analyze evacuation efforts for vulnerable populations and associated transportation challenges.

Lack of Management and Monitoring of Key Disaster Recovery Factors.

Bhattarai et al. (2020) posited that the impact of hazardous events can be mitigated through the evaluation of planning and preparedness measures. Their research delineated fourteen interconnected DR factors that influence community life. These factors are categorized into four primary domains that decision-makers and administrators can use to monitor and facilitate community recovery and resilience. The domains include (a) social, (b) physical and environmental, (c) economic, and (d) institutional and procedural. Each domain is further subdivided into specific factors, supported by empirical studies, serving as a framework to enhance disaster and hazard mitigation and preparedness. The social domain encompasses factors such as social capital, social vulnerability, community resilience, and household characteristics. The physical and environmental domain includes the disaster's impact, geographical vulnerability, and local infrastructure. The economic domain considers household economic status and regional economic development. The institutional and procedural domain encompasses policy, governance, disaster management, politics, leadership, access to aid, and aid organizations (Bhattarai et al., 2020). These factors might be considered when preparing disaster mitigation plans for Localities, Counties, Municipalities, Cities, Towns, within States or Territories.

Limitations of the Study

Using a published operational dataset generated by FEMA in 2023 had its limitations. Although FEMA had already curated it before making it accessible to the public, I was only able to explore cases of valid responses to assess whether there was a significant effect between the dependent and independent variables. This type of research design did not allow for analysis and examination of a causal relationship (Cresswell & Cresswell, 2023).

Furthermore, prior to receiving IRB approval, the verification was limited exclusively to the methodology documentation, database fields, variable names, and their respective values. Nonetheless, sampling verification to assess a critical assumption of binary logistic regression was not permitted. As a result, subsequent data analysis revealed that this assumption did not meet sampling minimum requirements for the independent variable 'rurality,' which was essential for testing the null hypothesis for both research questions concerning the impact of rurality on the emergency preparedness of older adults in Florida.

However, during data analysis, it was observed that the socioeconomic status of older adults influences their level of emergency preparedness. Specifically, socioeconomically disadvantaged individuals are more likely to be inadequately prepared for emergencies compared to their more advantaged counterparts. In Chapter 1, I articulated that the findings of this policy exploration research could potentially enhance the FEMA National Household Survey on Disaster Preparedness, which may be employed annually to assess the country's emergency preparedness performance.

However, at the time of conducting the data analysis, it was officially confirmed that FEMA's allocated funds, which had previously been approved for the EM, had been reallocated. As FEMA experiences a reduction in operational resources and confronts administrative challenges, it presents a concern for the American population, who will face increased risks during this transitional period, as states and territories are compelled to determine how to independently supply their emergency management resources.

Nevertheless, the research yielded significant findings that any public institution, agency, or nonprofit organization may utilize to formulate more effective emergency preparedness policies aimed at assisting disadvantaged older adults. Suppose the data is collected on an annual basis. In that case, this study can be replicated each year to monitor the performance of the variables, thereby enhancing both the validity and reliability of the instruments and data analysis methods. Furthermore, recommendations are offered to federal, state, territorial, and local decision-makers to promote and support the establishment of new, innovative institutions dedicated to providing improved resources for the safety and well-being of citizens in emergency mitigation and prevention.

Recommendations

This section encompasses recommendations derived from empirical literature, including valuable guidance offered by FEMA to advance the EP message. The recommendations are systematically organized by levels, as depicted in Figure 3. These levels commence with the individual, extend to the community, localities, state or territorial, and federal tiers, encompassing the three branches of government, their respective agencies, organizations, and institutions. This structure elucidates the interrelations among these entities in endeavors to secure societal safety and well-being. The society in question comprises the American population of the United States and those residing in its territories. The focus initially centers on the most vulnerable individuals, such as those experiencing homelessness for various reasons. Subsequently, it considers families or individuals cohabiting, which may include persons of different ages. Next, it addresses individuals residing outside traditional households, such as those in institutions or nursing homes. It also highlights the roles of education, media, press, and U.S. domestic and international trading partners concerning emergency preparedness (EP). Ultimately, it provides recommendations for assessing the effectiveness of new policies in enhancing ER, mitigating disaster risks, and implementing innovative EP strategies aimed at reducing losses from recurrent disasters.

Individuals

Vulnerable People in American Society

The most vulnerable populations in the United States include children, individuals with disabilities, people experiencing homelessness, older adults, and other at-risk groups, such as those socioeconomically disadvantaged due to unemployment or a lack of household resources. Vulnerable groups also encompass residents in areas with limited access to essential resources, neglected communities, or regions impacted by unresolved disasters. These individuals often depend significantly on external support because they are unable to sustain themselves economically for various reasons. Even individuals with financial stability may require assistance due to disabilities. Benevolenza and DeRigne

(2019) conducted a comprehensive literature review covering twelve years of disaster-related experiences among vulnerable populations exposed to weather hazards. They emphasized the importance of implementing preventive policies to support these high-risk groups during emergencies or disasters.

Homeless Individuals

Individuals experiencing homelessness are those who have not fully recovered from disastrous circumstances and still live without secure housing and basic elements necessary for survival. Therefore, they are considered among the most vulnerable and high-risk populations (Gin et al., 2022). They face environmental health risks and social stigma that affect their overall well-being (O'Clair, 2024), and preparing for daily life creates additional challenges that often require exceptional support from others. For various reasons, they have not recovered enough to independently sustain themselves or consistently receive support from family or friends for their basic needs (Glassman, 2024). The number of people experiencing homelessness in the United States and its territories as of 2024 reached over 771,480 (De Sousa & Henry, 2024).

EP Actions to Protect Individuals Experiencing Homelessness

According to the United States Constitution, it is incumbent upon our government to ensure the welfare of all citizens. Consequently, individuals experiencing homelessness merit the attention of all organizations nationwide to facilitate the development and implementation of innovative programs that support their recovery and that of their families (Gin et al., 2022; Vega et al., 2024). Recovery from homelessness entails residing in a household within a nurturing environment that fosters social interaction and community integration. This includes opportunities such as returning to educational institutions to acquire essential skills, attending religious or social gatherings for spiritual support if desired, and accessing affordable healthcare services—including physical and mental health care—as well as nutritional assistance. For individuals appropriately diagnosed as having mental disabilities, those incapable of making safe and appropriate decisions independently, the option of placement in nursing homes should be contemplated, as these individuals merit a safe and protected environment where they can receive necessary healthcare and basic needs to maintain stability, health, and survival. A government that permits and institutionalizes homelessness without providing adequate housing (Przybylinski, 2024) neglects the true implications of homelessness within our society. Such an approach constitutes a false justification for ignoring this pressing issue. Even those representatives who assert their right to free speech, rooted in noble principles yet failing to uphold them, are engaging in self-contradiction. As a representative democracy, our collective aim should be to promote and practice genuine equality and civility. Consequently, all individuals bear the responsibility to strive toward improving conditions for everyone ethically.

Housing or nursing facilities for these individuals must be situated in secure areas. The financial requirements of these resources and services should be distributed across all levels of government, including contributions from organizations, institutions, corporations, and businesses of various sizes in the private sector, which may collaborate with nonprofit organizations. These partnerships will be promoted by different tiers of the United States government through tax incentives or deductions for organizations that demonstrate documented evidence of their collaboration with nonprofits in endeavors to enhance socioeconomic conditions while promoting social justice.

The primary objective of these recommendations is to systematically reduce the homeless population and gradually mitigate the impacts of disasters that lead to homelessness. Non-profit organizations dedicated to aiding people experiencing homelessness should consistently demonstrate their commitment to eradicating homelessness in the United States. Each successful rescue from homelessness contributes to this overarching goal and should be publicly recognized and celebrated. Concurrently, these organizations should pursue their secondary objective of collaboration with local authorities to ensure that more individuals remain in temporary shelters for extended periods following hazardous events until these individuals can safely return to their homes or another safe household, thereby preventing their transition into homelessness. This strategy aids in reducing additional physical and mental health issues associated with homelessness (Phillips & Sullivan, 2024).

Households

Households comprise one or more individuals living together, regardless of ownership or rental status. There exists a variety of family structures; typical households include single or multiple adults aged 18 to 59, as well as households where both parents are raising children (ages 0 to 17). Although there are alternative household arrangements, such as single adults caring for children, disabled individuals, or elderly persons, one of the most vulnerable groups is those composed of single or partnered older adults (60+ years), with or without disabilities.

Individual Household EP

Adults are advised to remain informed regarding household risks through the routine review of hazard risk percentages pertinent to their geographic location. Such information should be disseminated by state and local authorities to support residents residing in areas identified as high-risk hazard zones. Geospatial analysis has demonstrated efficacy in pinpointing groups of residents within flood-prone regions, thereby offering an effective method for delineating these high-risk areas (Bukvic & Borate, 2023). It is recommended that all adult household members systematically monitor the hazard risk percentage of their specific locality. For those residing in high-risk zones, such as flood-prone areas, it is crucial to carefully assess these risks and develop strategies for managing and mitigating potential impacts should they materialize.

Adults should undertake household preparedness activities tailored to the specific risks associated with their location. Preparing a checklist in advance ensures that older adults stay aware and prepared for all essential items necessary for survival, including evacuation procedures, DR protocols, and accessible resources (Wyte-Lake, 2019). Zamboni et al. (2020) identified critical preparedness components for households, including having an emergency carry-on kit, adequate food and water supplies, effective communication strategies, and predetermined evacuation meeting points. FEMA (2023d) recommends that the general public undertake the following preparedness measures: “To assemble or update supplies, to document or insure property, to get involved in your community, to know your evacuation routes, to make a plan, to make your home safer, to plan with neighbors, to practice emergency drills or habits, to safeguard documents, to save for a rainy day, to sign up for alerts and warnings, and to test the family communication plan” (FEMA, 2023, p. 3). Rao and Enelamah (2024) advise households to prepare by collecting sufficient non-perishable food for at least three days, three gallons of water per person, an evacuation plan, a communication plan, a reliable vehicle, an emergency kit, financial information, financial resources, and an energy generator.

Incorporate measures that enhance financial and economic resilience into the list of preparedness strategies. Individuals or their care providers should establish a comprehensive emergency financial plan, including creating and periodically updating an emergency budget, documenting assets and properties with photographs or videos, consulting a qualified financial counselor, establishing an emergency savings account, securing cash in a safe location, safeguarding important records and receipts, outlining procedures for claiming financial disaster assistance, monitoring credit scores, reviewing homeowner or renter's insurance coverage, procuring hazard-specific insurance (such as for floods, fires, earthquakes, hurricanes, tornadoes, volcanic eruptions, etc.), and implementing secure practices to prevent scams and cyberattacks to protect financial assets (FEMA, 2023c).

Include instructions on how to prepare for future pandemics or epidemics. Provide specific guidance on avoiding infection, basic survival techniques, planning and preparing in case a household member becomes infected, proper use of protective equipment if needed, information about the behavior and lethality of the biological hazard, updates on testing, clinical trials, treatments, vaccines, side effects, and current mortality rates (FEMA, 2023c).

Include explicit instructions concerning flood health hazards and safety concerns that could exacerbate the circumstances. For instance, following a flood, the residence may harbor snakes, spiders, and other wildlife; the property may be contaminated with mold; and there exists a risk of live electrical lines contacting water, potentially resulting in fatal electrocution (FEMA, 2023c).

In the event of an earthquake, enumerate measures that all household members can undertake to ensure their safety should the structure commence shaking. Engage in regular practice of drop, cover, and hold-on self-protective techniques, and consistently update with new, practical safety procedures (Centers for Disease Control and Prevention, 2024). In the event of a hurricane, the household emergency plan must include the location of a safe and effective shelter (FEMA, 2023d). It is recommended to install shutters to cover the windows of the home, keep phones and other devices charged, gather supplies to store in the car, keep the vehicle's gas tanks full, learn about evacuation zones and routes, familiarize yourself with different types of alerts and warnings, clean drains and gutters, secure or bring in outside furniture, and identify and contact family or friends' homes for temporary shelter in case evacuation is necessary.

In the event of riverine flooding while driving, “stay inside the vehicle and proceed slowly, slow down just a little to keep your momentum to the other side, stop, get out, and check the depth before proceeding, otherwise turn around and find another way to stay safe” (FEMA, 2023d).

In the event of a radiological emergency, FEMA advises the following procedures: “seek shelter immediately, preferably underground or in an interior room of an undamaged building, ensuring maximum distance and dense shielding between yourself and the outdoors where radioactive materials may be present. Seal windows and external doors that are not fitted securely with duct tape to minimize infiltration of radioactive particles. If circumstances allow, deactivate ventilation and heating systems, close windows, vents, fireplace dampers, exhaust fans, and dryer vents. Cover your nose and mouth with a tissue, filter, or damp cloth to prevent inhalation or ingestion of radioactive substances. Avoid ingesting or transferring any material to areas of your face where it could be ingested, for instance, refrain from eating, drinking, or smoking, while in the area affected by radiation. Retrieve your disaster supplies kit and a battery-powered radio, and bring them to your designated shelter room. Remain attentive to official instructions and adhere to all directions. It is imperative to understand the significance of taking shelter in a designated safe area specifically prepared for radiological emergencies" (FEMA, 2024a,b).

In circumstances of quarantine during pandemics and epidemics, the appropriate utilization of technological tools is essential for effective EM. Connon et al. (2024), Dias et al. (2024), and Haltom et al. (2023) provided recommendations on how to support vulnerable populations against the adverse effects of social isolation during the pandemic, advising the inclusion of procedures for contacting first responders in household emergency preparedness plans. First responders play a vital role in connecting these individuals with public social and health services and in disseminating critical information during disasters, particularly for persons with chronic conditions or disabilities. It is also crucial that emergency mitigation plans emphasize the advantages of community engagement, as it has been demonstrated to be fundamental for individuals to recover the emotional resilience necessary for recovery (Sun & Yan, 2019), and to integrate the use of digital health applications to connect older adults with their healthcare providers during emergencies (Gelman, 2023; Ryan et al., 2023).

Older Adults Who Live Alone

Addressing the preparedness of older adults who live independently necessitates an acknowledgment of their unique requirements, which may differ from those of individuals residing with others. Bell et al. (2021) discovered that older adults living alone and utilizing medical devices that depend on electricity were less likely to be adequately prepared with at least a week's supply of food and water, an emergency kit, and knowledge of evacuation routes. Consequently, EM authorities and local officials must identify these specific older individuals and follow up with them to ensure that their needs for emergency preparedness, response, and recovery are adequately addressed.

Older Adults Who Receive Home-Based Primary Care (HBPC)

Home-based primary care is essential for sustaining healthcare services, particularly for individuals with mobility impairments. It provides medical services within patients' residences, and during emergencies, healthcare professionals extend their care to shelters, hotels, or other temporary locations following emergency evacuations. Bell et al. (2021) identified the support requirements of older adults at both individual and community levels in the aftermath of Hurricane Irma and Hurricane Harvey. Based on feedback from providers of home-based care, they observed challenges arising from inadequate preparedness during response and recovery stages, which impeded the continuity of care (Krishnan et al., 2019). These challenges included navigating government systems and confronting institutional and systemic barriers to obtaining emergency assistance. Nevertheless, checklists and assessments serve as invaluable accountability tools to ensure safety, security, disaster readiness, evacuation procedures, recovery efforts, and logistical management of resources (Wyte-Lake, 2019). Such tools can be employed by healthcare providers within the Veterans Health Administration (VHA) and Home-Based Primary Care teams to bolster preparedness and facilitate the critical steps necessary for emergency mitigation.

Based on a decade of peer-reviewed research by Zimbroff et al. (2021), only a limited number of elderly individuals receive primary care in a home setting due to their particular health constraints. The researchers identified that emergency preparedness, the deployment of interdisciplinary teams, positive health outcomes, and interest in telehealth are critical areas requiring further investigation, given the advantages these services provide to older adults. Routine home visits conducted by primary care providers can enhance connections and support for seniors, potentially leading to improved preparedness, response, and recovery during emergencies.

Nursing Homes

Individuals Living Inside Nursing Homes or Healthcare Facilities

Nursing homes are extensive institutions that cater to a diverse population of elderly individuals, including those with disabilities affecting health, mobility, cognition, or communication. The administration and staff comprise trained professionals with specialization in nursing and healthcare tailored to these vulnerable residents. Such facilities are required to comply with federal, state, and local regulations. For additional details regarding their management and services, please refer to their pertinent policies.

Nursing Home EP

It is imperative to safeguard nursing home residents during emergencies and disasters, and administrators must be adequately prepared to support the nursing facility population (Peterson, 2023). The administration of the nursing home must adhere to federal, state, and county policies concerning Emergency Management (Walsh, 2020). These policies should be integrated into the nursing facility's operational procedures. It is of utmost importance to perform preventive maintenance on all utilities, as many older adults residing in nursing homes depend on electrical equipment for life support devices (Sapat et al., 2022), including emergency power systems and water pumps, particularly prior to the commencement of the high-hazard incident season. The emergency preparedness plan should be prepared and routinely updated, incorporating sections with instructions regarding emergency kit supplies and detailed evacuation procedures. Training should be provided for residents, nurse practitioners, and staff members, and potential procedural gaps identified must be corrected and communicated collaboratively. Subsequently, the documentation should be revised, emergency plans practiced, and training and drills repeated consistently. A regular schedule for evacuation drills, such as monthly or biweekly, should be established, depending on the risk level of potential hazards.

The administrator must be updated on emergency preparedness, response, and recovery training certifications (Walsh, 2020) and provide the necessary instruction to inform staff and residents about the steps involved in emergency preparedness, considering the high-incidence hazards in their region (Festa et al., 2023). Administrators, staff, and capable residents should not presume that the facility is fully prepared for catastrophic emergencies. Administrators are required to consult with nursing practitioners and engineering personnel regarding the status of critical equipment as part of preventative measures in EM. The preparedness plan should encompass a checklist to review all critical areas requiring readiness prior to a hazard event, along with additional checklists for evacuation procedures, DR protocols, and resource availability (Wyte-Lake, 2019).

For elderly residents residing in assisted living facilities, Hua et al. (2024) recommended that the first responders collaborate with the facility manager or administrator to assess the risks and implications of remaining in place versus evacuating. This step is vital, as the stress experienced by these individuals could exacerbate their health conditions, potentially leading to premature mortality or post-traumatic stress disorder (PTSD). Furthermore, EP plans must include special instructions for evacuation on how to move people with special needs, for instance, for those highly sensitive patients as well as those living in memory care centers including those receiving palliative special care, among others in critical or delicate conditions, encompassing medical treatment, pain alleviation, psychological, social, and spiritual support, is vital during critical incidents such as pandemics. The provision of palliative care is indispensable for patients undergoing critical healthcare and surgical procedures, ensuring that these critical services are integrated into emergency preparedness strategies for nursing homes (Parekh de Campos et al., 2021).

Nursing home residents who are still capable and aware without health, mobility, cognitive, or communication impairments may be cognizant of potential hazards within the facility. With proper training, such residents will not hesitate to ask questions or follow up with the facility administrator regarding emergency and disaster preparedness. The training should motivate these individuals to request a copy of the most recent emergency preparedness plan, familiarize themselves with evacuation routes, and understand the essential items required in case of an emergency. Furthermore, resources must be accessible to address their emergency needs as well as those of more vulnerable residents.

Adult Day Centers

Adult day centers are designed to support the social needs of the elderly population. Sadarangani et al. (2021) investigated the factors that enhance resilience among older adults through participation in these adult day service centers during the COVID-19 pandemic. During this period, numerous centers were mandated to close due to national lockdown measures, resulting in older adults remaining at home with their caregivers. This interruption in social engagement contributed to deterioration in their physical, cognitive, and mental health status. Accordingly, developing comprehensive emergency preparedness strategies for these centers is imperative, outlining operational procedures during pandemics that minimize the risk of viral transmission or biological threats to older adults. Furthermore, given that some centers provide transportation services, it may be prudent for stakeholders and administrators to consider utilizing their facilities—particularly if situated in secure locations—as temporary shelters for their usual clientele. Such individuals are already acquainted with the staff and administration, which may facilitate their comfort compared to relocating to unfamiliar sites.

Communities

The population distribution within each state and territory encompasses counties, towns, or municipalities, and further subdivides into local areas. Certain populations are densely concentrated in urban zones, whereas others are dispersed across rural regions. These classifications may be based on geographical, or topographical features, or the size of the population. Urban areas typically possess improved access to transportation resources compared to rural areas (Childs & Washington, 2022). It is advisable to identify the locations and availability of educational institutions, hospitals, community centers, libraries, and churches, particularly in case these facilities need to be utilized as temporary emergency shelters, which afford practical convenience.

Community EP and ER

Local governments are required to identify and establish connections with vulnerable older adults, especially those with disabilities and lacking social and familial support, by engaging with community-based service agencies (Thompson et al., 2025). These agencies are capable of assisting such individuals in preparing for and utilizing technology to sustain two-way communication, thus enabling them to receive emergency alerts and immediate assistance during impending hazards that necessitate evacuation (Peterson et al., 2022). Furthermore, it is essential that local authorities collaborate effectively with nursing home management through coordinated efforts and resource sharing in emergency preparedness and planning (Peterson et al., 2021). Local organizations, including the Age-Friendly Public Health Systems (AFPHS), which already provide support to older adults, can offer EM training to enhance disaster awareness within this demographic. Such initiatives can significantly improve emergency readiness, particularly among socioeconomically disadvantaged individuals who require additional financial support to adequately prepare.

Community leaders have the capacity to disseminate survivor experiences through training conferences and other educational platforms. Stamm (2017), a survivor of a wildfire who experienced the loss of her residence, meticulously documented and publicly shared her DR narrative to educate the community. This presents an opportunity to showcase her account at venues such as community centers, churches, or social clubs situated in regions susceptible to wildfires. In a similar vein, individuals who have encountered disaster emergencies may contribute their testimonies, serving as crucial tools to promote awareness regarding the significance of emergency preparedness, response measures, and DR protocols. Robust community connections are essential for providing support to local households. Community leaders and local governments can ensure that older adults have ongoing access to healthcare services, medications, psychological support, and additional community resources such as food, drinking water, and DR information (Krishnan et al., 2019).

Evacuation and Critical Meeting Points

There are essential gathering points within the safest zones of communities that should be identified and incorporated into emergency preparedness plans. These points should be complemented by paper diagrams, pictures, and/or digital maps and routes that can be easily accessed with smartphones or digital portable devices to facilitate proper access to nearby critical meeting points or temporary shelters for individuals. For instance, identify an appropriate non-hazardous location within one mile of a residence and designate it as the primary meeting point. Such locations may include a community center, public school, library, hospital, police station, fire department, church, or other communal gathering places, which can be utilized for interaction and sharing emergency resources during periods of poor digital, radio, or cellular communication.

These community meeting points can serve various purposes related to emergency preparedness and response. For example, they could be used as temporary shelters to protect individuals, as well as communication centers and distribution points for food, potable water, and emergency health services. If the hazard affects or is expected to affect a household within a 1-mile radius, the household's individuals should proceed to the next available community meeting point within the next mile. They will continue to expand the perimeter until they find a secure location for temporary evacuation, pending further instructions from local first responders (Iman et al., 2023). Additionally, animated virtual emergency scenarios can be provided for the public, tailored to their communities, to help them learn how to prepare for evacuation. This approach is similar to proposals by Zhou et al. (2022), Chen et al. (2023), and Mc Cue (2024). During a hazard, emergency responders will offer instructions based on their local policies and procedures. After the event, depending on the area's conditions, they will assess whether it is safe for residents to return to their homes.

Community services play a fundamental role in assisting individuals during emergencies and disasters by providing coping strategies to help them manage their fears. Consequently, the involvement of qualified professionals in designing and overseeing community training sessions and conferences would serve to motivate individuals to better prepare for and cope with the anxiety induced by information deficits during periods of heightened risk. Torres-Mendoza et al. (2019) advised that emergency plan training should encompass connecting individuals with community mental health services, thus enabling them to receive the support necessary for recovery, as recommended by the Florida Department of Health (FDOH).

Localities

Counties, Towns, Municipalities, Urban Areas, and Rural Areas

This section includes a list of EP recommendations for the counties, towns, municipalities, and urban or rural areas at the local level.

- Implement State policies, adapting and documenting exceptions to peculiar situations.
- Develop, implement, and promote programs for the activation of volunteers or citizen responders who will be trained in basic disaster response skills. These are the Community Emergency Response Teams (CERT) programs that will collaborate within localities in their disaster response efforts (FEMA, 2023d).

- Provide funding for “state-of-the-art” emergency response training for the ER teams.
- Coordinate EP, ER, and DR with localities, including tribal government, and provide monetary EM support to the Households, Counties, and state infrastructure.
- Ensure monetary provisions for EM support for Emergency First Responders, including National Guard, Fire Departments, Police Departments, Hospitals, ERs, Temporary Sheltering Facilities (Schools, Libraries, and Community Centers), and Urgent Care facilities.
- Provide immediate support to the localities, avoiding unnecessary delays.
- Provide preventative maintenance to ER equipment and vehicles.
- Provide training and counseling services to ER personnel to stay updated on ER sciences and focus on ER tasks, as well as ensure their health and readiness for their critical ER responsibilities.
- Provide direct support to Households.
- Provide preparedness training using media and short ads with repetition to ensure awareness of emergency preparedness information.
- Prepare guidelines, train, and perform fire (or other hazard) drills frequently.
- Older adults, people with disabilities, and their care providers must receive support for preparedness.
- Provide direct support resources to communities and hospitals in Rural (Korosi, 2019) and Urban Areas.

- Provide emergency planning, response, and recovery support to older adults in hospice care (Rogers & Cliff, 2024; Rogers, 2023) as well as those ageing-in-place organizations that can provide emergency preparation support to older adults (Pendergrast et al., 2021).
- Identify, prepare, and properly supply schools, community centers, and libraries in safe locations to function as temporary shelters.
- Improve trustworthiness on dissemination efforts of evacuation information (Iman et al., 2023).
- Distribute useful information about different types of emergencies and hazards, and how to respond to them, based on the specific requirements each hazard may have, depending on its nature and effects. Local governments can utilize various communication channels, such as media outlets, news broadcasts, or magazines, to disseminate instructions on how to prepare for potential hazards and risks that may need to be managed.
- Ensure all the emergency alert systems and local alarms are well-maintained and always ready and functional for immediate hazard alert.
- Ensure vital utilities are well-maintained and functional to provide for the ER. For instance, water pumps and water supply for fire emergencies, potable water for humans, animals, agriculture, functional electric generators, and contingency equipment needed for hospitals, nursing homes, and community centers that will work as an oasis for affected households, individuals, and essential community and public services.

- Provide security, transportation, and temporary shelters with emergency supplies, food, potable water, and fuel sources during the hazard event.
- Call non-profit organizations, social workers, and mental health providers to assist the evacuees (Hardy, 2023).
- Disaster response and recovery efforts must encompass activities such as “cleaning debris from roads and communal areas, providing daily first aid, food, and water to victims, establishing temporary housing or shelters, delivering medical devices, health and medical services and supplies, or pharmacy services for medication provision, pet care, search and rescue operations, transportation, childcare, restoration of local communication services, infrastructure, transportation, and local safety and security services including law enforcement, fire services, government agencies, and community safety" (FEMA, 2023c).
- It is imperative that in counties, towns, urban areas, rural regions, or municipalities where revenue insufficiency impairs emergency preparedness, state intervention should be contacted to provide supplementary funding to support these communities and their residents, particularly older adults living alone, and those of socioeconomically disadvantaged vulnerable populations.

States and Territories

This section includes a list of EP recommendations for the state or territorial level.

- Coordinate HRM, EP, ER, and DR with localities, including tribal government, and provide monetary EM support to the Households, Counties, and state infrastructure.

- It is critical that in counties, towns, urban areas, rural regions, or municipalities where revenue insufficiency impairs emergency preparedness, state intervention should be employed to provide supplementary funding to support these communities and their residents, particularly those of socioeconomically disadvantaged vulnerable populations.
- Provide funds for standardization, knowledge transfer, and training plans of areas of significant expertise in evacuation and rescue missions (Hardy, 2023).
- Monetary support for HRM and EM services aimed at Emergency First Responders, such as the National Guard, Coast Guard, Fire Departments, Police Departments, Hospitals, ERs, Facilities intended to be used as temporary shelters (schools, libraries, community centers), and Urgent Care centers.
- Provide immediate support to the disaster-affected localities, avoiding unnecessary delays.
- Work in collaboration with Federal agencies to provide support to clean debris off the highways/roadways to restore transportation (motor services, mass transit, railway, aviation, maritime services) as soon as possible.
- Provide clear policies that instruct the public on EM, Mitigation, Preparedness, Response, and Recovery.
- Integrate current EM policies with innovative tools that simplify the EP process and encourage the use of local services to help individuals develop their emergency preparedness plans. For example, the idea from Brown and Easterday (2016) of using CPA services to create individual emergency preparedness plans

can be an effective way to increase the number of people with such plans. When combined with practical community training, this approach might also reduce the number of unprepared individuals.

- Coordination between federal/state/territorial authorities for emergency assistance, such as the National Guard, Small Business Administration, HUD, and Congressional supplemental assistance.
- Provide financial assistance to households, individuals, and non-profit organizations, and conduct forecasts to help prepare the detailed fiscal EM budget. Zhao et al. (2020) provided a quantitative framework for decision-makers to utilize catastrophe insurance in disaster risk management, facilitating budget allocation for fund estimation and comparing pre-disaster and post-disaster risk management strategies.
- Decision-makers should incorporate identified stages of the recovery process into plans as visual aids to help assess recovery levels after incidents that affect socioeconomic status. This approach enables the real-time identification of individuals who struggle more with recovery, allowing the government to provide additional aid to address their critical needs. These five stages are: securing bare subsistence, accessing public services, rebuilding communication networks, ensuring and improving stable housing, and reshaping economic and social activities (Terumoto et al., 2021).
- It is critical that emergency plans include clear instructions with illustrations that enhance understanding and cover the entire spectrum of EM, from mitigation

through preparedness, response, and recovery. These training sessions should incorporate real-life pictures of past disasters and videos with recordings of survivors explaining their experiences, feelings, and how they survived. Additionally, sharing lessons learned helps motivate those who have never faced a hazard but need to be well-informed and prepared for emergencies.

- Improve institutional access to emergency support resources. The study on resilience opportunities for rural areas (Marshall, 2024) examined the recovery challenges faced by rural residents in Florida and Southwest Georgia after Hurricane Michael, highlighting issues such as a lack of support and inefficient institutional responses in providing access to resources.
- Provide preventative maintenance to ER equipment and vehicles.
- Provide training and counseling services to ER personnel to stay updated on ER sciences while ensuring health, focus, and readiness for their ER tasks (Hardy, 2023).

Federal Government

Social Protection Through Welfare Policies

Rao and Enelamah (2024) identified a correlation between disaster preparedness and social protection facilitated by welfare policies. Their research highlights the importance of federal welfare programs in alleviating the financial burdens associated with disaster preparedness, thereby safeguarding the lives of socioeconomically disadvantaged populations. It is imperative that in states, counties, towns, urban areas, rural regions, or municipalities where revenue insufficiency impairs emergency preparedness, the U.S. Congress intervene to provide supplementary funding to support these States, localities, communities, and their residents, particularly socioeconomic disadvantaged and vulnerable populations.

Protection of Data Assets for Further Research and Public Education

Given the current transition within the Federal government, FEMA, a federal agency under the jurisdiction of the Executive branch, may cease its operations and the management of monetary aid allocated by Congress through the Executive branch, FEMA's databases and comprehensive Emergency Management and mitigation resources must remain publicly accessible to all residents of states, territories, and localities, as well as to researchers and educators nationwide. This accessibility promotes strategies for emergency mitigation and facilitates resource development for future preparedness. These data assets, representing investments made with public funds, must be secured and accessible to enable the study and understanding of hazard mitigation and EM. Such access will also reduce training costs for individuals, as well as for state and local emergency administrators and responders. Furthermore, this approach exemplifies an optimal utilization of the nation’s historical, current, and future fiscal investments.

This section includes a list of EP recommendations for the federal level.

- Comply with the U.S. Constitution, the supreme law, and its amendments, in alignment with the Declaration of Independence of the USA.
- In alignment with the US Constitution, the US Congress shall provide supplemental monetary support to the affected States for repairing multiconnected state roads and transportation infrastructure.

- In alignment with the US Constitution, the US Congress shall provide supplemental aid and assist with EP education and training for socioeconomically disadvantaged individual households.
- In alignment with the US Constitution, the US Congress shall provide grants for non-profit organizations dedicated to assisting homeless, older adults, families, and individual households that are socioeconomically disadvantaged.
- In alignment with the US Constitution, the US Congress shall provide supplementary aid for those states that lack funding for public building reconstruction, infrastructure construction, and repairs.
- In alignment with the US Constitution, the US Congress shall monitor the use of supplemental funds through a designated congressional committee and the GAO (2025).

Education Institutions, Media, Press, and Domestic Trading Partners

The welfare of the American population is a collective obligation shared by all Americans, including organizations and corporations operating within the nation, as well as those benefiting from their trade and marketing influence over the American demographic or engaging in commercial agreements with Americans. It is incumbent upon the Department of Education, along with public, non-profit, and private educational institutions at all levels, media outlets, and the press, to promote and disseminate emergency preparedness, response, and recovery information that is transparent and unbiased. Such information must aim to report facts (Lwin et al., 2023; Sanchez Garcia, 2021; Thorton & Stairs-Davenport, 2025), as well as to be used to assist communities in recognizing the significance of remaining vigilant and staying prepared for hazard risks during periods of elevated incident activity.

UN, WHO, CDC, and EM Organizations Collaboration

In the event of an emergency anywhere on the planet, individuals must be adequately prepared. Clear communication, shared decision-making, collaboration, coordination, and strategic planning are vital components of effective ER (Ngoy et al. 2022). The COVID-19 pandemic demonstrated that no nation was sufficiently prepared to manage the crisis, resulting in millions of fatalities and disastrous consequences. Cooperation among the United Nations (UN), the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), and EM institutions, agencies, and organizations is indispensable for mitigating global emergency disasters (Lewis-Hughes & Brooks, 2023).

The United Nations should establish comprehensive guidelines regarding EM information to assist all countries, their governments, organizations, and their citizens in emergency preparedness. Disseminating preparedness information on a global scale will enhance mitigation efforts, thereby saving lives and improving resource allocation. In light of globalization, migration, tourism, trade, and conflicts, the continuous movement of populations introduces persistent risks that must be effectively managed and communicated. These risks entail costs that impact affected individuals, countries, and nations providing aid. It is imperative to develop and sustain accountability systems that enable the sharing of information among the United Nations, the World Health

Organization, the Centers for Disease Control and Prevention, as well as with local and international communities.

Policy Performance

To evaluate the effectiveness of these policies, subject matter experts, researchers, highly skilled EM professionals, and experienced senior emergency responders in the domains of EM, mitigation, preparedness, response, and DR must conduct regular monitoring through documented audits of the policies and procedures (Hirsch-Lanute, 2021). Furthermore, the replication of research studies employing reliable surveys should be utilized to gather feedback on current public experiences, prevailing behaviors, validate policy efficacy, analyze data, report findings, and implement suitable adjustments to procedures. Necessary corrections should be applied to adequately address the needs of high-risk populations affected by emergencies and disasters.

Future Research Recommendations

Limited access to emergency support resources has posed significant challenges for survivors of recent natural disasters, resulting in increased casualties after events due to inadequate preparedness, not only at the household level but across all levels of government, from localities to federal agencies. Therefore, a lack of sufficient economic support for localities and states can immediately increase the risk of loss of life for everyone in the hazard zone. Given these escalating risks during the natural disasters' emergency season, there is an urgent need for objective qualitative and quantitative statistical studies that provide clear information on how each locality and county within each state or territory is preparing to respond and recover, including detailed projected budgets that specify their resources for EM for their current and subsequent fiscal years. The following list includes recommendations for future research studies or replication of previous studies that are needed to continue monitoring the trends related to HRM and EP.

- Qualitative and Quantitative studies on hazard risk mitigation strategies differences among rural and urban residents in a sample representing all the counties of Florida, and within each state and territory at the national level.
- Examine current EP policies to identify exceptions based on Medicare or non-Medicare access of older adults receiving care services at home.
- Use of geospatial analysis to perform risk assessments using the spatial distribution data, rurality, and socioeconomic characteristics of ALL the counties of Florida, and other states and territories.
- Explore the relationship between the application of EP mitigating solutions and awareness of disaster information.
- Research on safe, effective, and efficient evacuation methods for older adults.
- Qualitative studies gathering pre, during, and post-disaster experiences in detail from survivors, including their interactions with local EM support authorities.
- Research on the effectiveness of catastrophe insurance for fund estimation as a disaster mitigation or disaster recovery strategy for households in disaster-prone areas within each state.

- Research on how state property taxes might be used as supplemental aid or tax deduction to cover recovery expenses for households affected by disasters in non-disaster-prone areas.
- Research on disaster-prone areas using GIS and solutions for building resilience capacity or relocation of vulnerable populations.
- Studies on disaster resilience in older adults and demographic characteristics.
- Studies on logistics of aid delivery during EP, ER, and DR.
- Studies regarding adverse mental health effects associated with disasters.
- Studies on building codes and disaster-prone areas.
- Studies on existing infrastructure, preventative maintenance, and EP.

Creation of a Preparedness System Through a New Interrelated Institution

Establishing a new innovative institution, organization, and system dedicated to enhancing the socioeconomic status of the general population and aiding their preparedness for imminent hazardous risks is of paramount importance. This new framework shall receive support from all stakeholders and beneficiaries within American society, including institutions and their agencies, local offices and communities, as well as both non-profit and for-profit organizations, who will contribute with honor and dedication to safeguarding vulnerable populations from emergencies and disasters.

All previous recommendations in this manuscript, along with additional innovative assets, shall be efficiently, effectively, economically, ethically, and uniformly implemented through a new interconnected multilevel structure that can be established under the current administration for the ongoing constitutional protection of the

American people in the United States and its territories. I have divided this section to consider decision makers and stakeholders across all communities, counties, states, territories, the federal government, non-profit organizations, and the private sector.

Initial Concept for a New USA National Response Framework

In compliance with the requirements of the U.S. Constitution, Article I, Section 8 (U.S. Const. art. I, § 8), as an American researcher, I respectfully submit the preliminary proposal for a novel National response framework. This proposal outlines the establishment of the American Institute of Innovative Human Potential, which will report directly to Congress and serve as a coordinated collaboration among Federal, State, and Territorial Preparedness Efforts. This collaboration aims to develop and support new and improved policies dedicated to safeguarding and assisting the American population, the U.S. government, the public, as well as non-profit and private sectors in their emergency mitigation strategies.

The American Institute of Innovative Human Potential:

An Interconnected Preparedness Collaboration.

Stakeholders shall proactively communicate and collaborate on effective and efficient efforts to promote efficient EP message dissemination, collect EP feedback from the population, and provide EP support to the USA and US Territories Populations.

To the decision makers and stakeholders of all communities, counties, U.S. states, territories, and the federal government:

To the Honorable President of the United States of America

As an American researcher, I respectfully present a formal proposal to you, honorable President of the United States, and the executive leader of our nation's administration. My primary professional goal is to collaborate with your government to improve the lives of the American people. Due to the imminent high risks threatening our nation and the potential to weaken our domestic infrastructure and endanger citizens' lives, mainly because of insufficient provisions for emergency mitigation, preparedness, response, and recovery, I suggest establishing a new centralized federal agency. This agency would focus on critical tasks aimed at reducing socioeconomic disparities that affect preparedness across all U.S. states and territories. It would utilize innovative technology, research analysis, and statistical tools to support federal and state governments during emergency mitigation and recovery efforts. The centralized agency would be connected in real time with other federal agencies and each state and territory government. This coordination aims to ensure more effective, efficient, economical, equitable, and ethical management of resources and activities throughout all stages of mitigation, preparedness, response, and recovery. Additionally, this structure will include necessary checks and balances to monitor and maintain the quality of resources and services.

To the Honorable Members of Congress

As an American researcher, I humbly submit a formal proposal to you, honorable members of the United States Congress. My goal is to collaborate with the current administration to enhance efforts in improving the lives of the American people. Considering the imminent high risks that threaten our nation, which could weaken our domestic infrastructure and endanger the lives of our citizens due to insufficient provisions for emergency mitigation, preparedness, response, and disaster recovery, I urge reconsideration of establishing a new centralized federal institution. This institution would focus on critical tasks aimed at alleviating socioeconomic disadvantages across all

US states and territories, thereby improving community preparedness. It would employ innovative technology, research analysis, and statistical tools to assist both the federal government and state authorities in emergency mitigation and resource management for recovery. This federal entity would be connected in real-time with other federal agencies and state and territory governments to enable more effective, efficient, economical, equitable, and ethical management of resources during mitigation, preparedness, response, and recovery. Such integration would support necessary checks and balances to ensure effective administration, monitoring, and quality control of resources and services. Additionally, the Government Accountability Office (GAO, 2025) should oversee policies and budget performance in real time, recommending adjustments based on predictive incidents, hazards, or impacted locations.

To the Honorable Governors of the United States of America and Territories

As an American researcher, I humbly present a formal proposal to you, esteemed governors of the fifty United States and inhabited U.S. territories, aiming to collaborate with the current administration to enhance the well-being of the American population. Given the imminent significant threats jeopardizing our nation, potentially undermining our domestic infrastructure, and endangering our citizens, due to insufficient provisions for emergency mitigation, preparedness, response, and disaster recovery, I solicit your support for the establishment of a new centralized federal agency. This agency would concentrate on vital tasks dedicated to alleviating socioeconomic disparities that influence preparedness across all U.S. states and territories. It would utilize cutting-edge technology, research analysis, and statistical tools to aid the federal government, states, and territories in emergency mitigation and resource management for recovery efforts. The proposed federal agency would be interconnected in real-time with other federal agencies, as well as with state and territorial governments, to facilitate more effective, efficient, economical, ethical, and equitable management of resources and activities during the mitigation, preparedness, response, and recovery stages. In this manner, it will uphold necessary checks and balances to guarantee the effective oversight and quality control of resources and services.

To Honorable Mayors, Executives, Board Members, and Administrators

As an American researcher, I respectfully propose to the Honorable County Elected Executives and Board Members of local governments that, given the imminent high risks that could threaten and weaken our domestic infrastructure and American population due to insufficient provisions for emergency mitigation, preparedness, response, and disaster recovery, support your State Congress representatives in advocating for the establishment of a new centralized federal institution. This institution would focus on critical tasks aimed at alleviating socioeconomic disadvantages affecting the preparedness of individuals across all US States and Territories under federal jurisdiction. It will employ innovative technology, research analysis, and statistical tools to assist the federal government and states in essential functions such as emergency mitigation and the effective management of recovery resources. This centralized federal entity will be interconnected in real time with other federal agencies, as well as state and territorial governments, to ensure a more effective, efficient, economical, equitable, and ethical administration of resources and activities during mitigation, preparedness, response, and recovery. In doing so, it will promote necessary checks and balances to guarantee effective monitoring and quality management of resources and services.

To All the Non-Profit and Not-For-Profit Organizations and Communities

As an American researcher, I respectfully propose to the Honorable Board Members and Administrators of Community Centers, Residents Associations, and Non-Profit Organizations that, considering the imminent and substantial risks that may threaten and undermine our domestic infrastructure and the well-being of the American population due to inadequate provisions for emergency mitigation, preparedness, response, and disaster recovery, contemplate supporting the establishment of a new centralized federal institution. This institution would be tasked with essential responsibilities aimed at alleviating socioeconomic disadvantages affecting individuals' preparedness across all U.S. states and territories. It would employ advanced technology, research, analysis, and statistical tools to assist the federal government and state agencies in emergency mitigation and the efficient administration of recovery resources. Furthermore, this federal entity would be interconnected in real-time with other federal agencies, as well as state and territorial governments, to promote more effective, efficient, economical, equitable, and ethical management of resources and activities during the mitigation, preparedness, response, and recovery stages. Such integration would ensure necessary checks and balances, fostering effective monitoring and quality management of resources and services.

To the For-Profit Organizations, Businesses, Companies, and Corporations

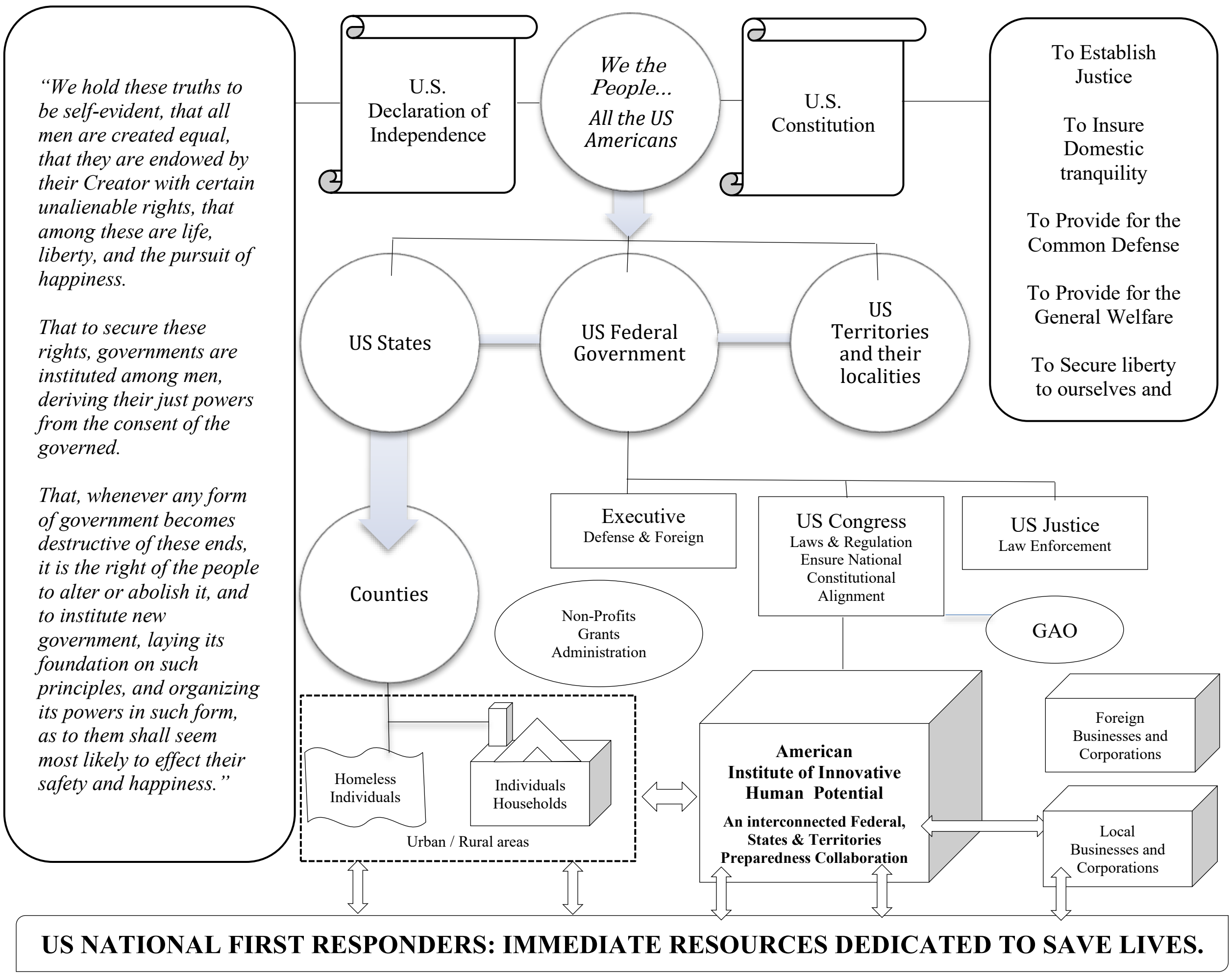
As an American researcher, I respectfully propose to the Honorable Board Members and Administrators of For-Profit Organizations, businesses, companies, and corporations that, considering the imminent high risks that could potentially threaten or weaken our domestic infrastructure and the American population due to insufficient provisions for emergency mitigation, preparedness, response, and disaster recovery, support the establishment of a new centralized federal institution. This institution would focus on essential tasks aimed at alleviating socioeconomic disadvantages that impact individuals across all US states and territories under federal jurisdiction. Utilizing innovative technology, research analysis, and statistical tools, this organization will assist the federal government and state entities in managing emergency mitigation and allocating resources effectively for recovery. The institution will be interconnected in real-time with other federal agencies and with state and territorial governments to enable more effective, efficient, economical, equitable, and ethical administration of resources and activities during mitigation, preparedness, response, and recovery efforts. This interconnected system will foster necessary checks and balances to ensure effective monitoring, management, and delivery of resources and services.

Figure 3

U.S. National Response Framework

Figure 3: U.S. National Response Framework

Securing Americans' General Welfare through Innovative Preparedness Solutions



Potential Hazard Events

Coastal floodings, earthquake, hurricane, tornadoes, radiological emergencies, riverine flooding, wildfire, epidemics, pandemics, terrorism, active shooter, avalanche, biological attack, chemical attack, chemical emergency, cyberattack, dam failure, drought, earthquake, electromagnetic pulse (EMP), explosion, extreme heat, financial emergency, sudden income loss, disability, flood (flash, inland, coastal surge), food or water contamination, HAZMAT release, home fire, landslide, nuclear explosion, power outage, radiological attack, space weather, thunderstorm, tsunami, typhoon, utility interruption, volcanic eruption, winter storm, among others.

Recommendations

The US Constitution was written in alignment with the Declaration of Independence to ensure the strength and continuity of "We the People," the self-governed nation of the United States of America. It is critical to consider the risks of potential hazards that threaten our domestic tranquility and endanger individuals' lives, liberty, and pursuit of happiness.

Therefore, based on the analysis provided as evidence of the urgent need for our nation to support and prepare our population, especially the most vulnerable, I, as an American researcher, kindly suggest to the US President and members of the US Congress that they include in the federal budget the supplemental monetary provision required to establish the first innovative interconnected federal, state, and territorial institution. This institution will provide supplemental and administrative preparedness aid through education, professional and technical training, and support for response and recovery efforts to states, counties, and territories, directly benefiting individuals of all ages, particularly the most vulnerable.

Its primary mission will be to ensure the welfare and preparedness of the general population through innovative educational solutions that foster the ongoing exploration of human potential. Achieving innovation requires collaboration among multidisciplinary resources, including public service members. Agencies in every state, with local offices in every county, will guarantee consistency of services. US Congress should efficiently monitor, through GAO, the implementation of related provisions to ensure these programs' success by the US Const. Art. 1 Section 8.

Implications

As indicated in the literature review section of Chapter 2, it is crucial to comprehend how government institutions, agencies, community services, and organizations are equipped to support the emergency preparedness needs of vulnerable populations. This understanding is crucial for mitigating future disasters that could threaten the lives of both individuals and the general public. Since the establishment of our nation, the founding fathers have ensured that our citizens have access to necessary safety and welfare provisions (U.S. Const. art. I, § 8) to maintain an economically self-sufficient, resilient, and independent country. This principle is consistent with the principle of uniformity, which ensures that resources from all levels of government are available and accessible. To remind us of the core values of independence, freedom, and justice that have been at the heart of our nation's inception, the founding fathers, who recognized the importance of articulating these fundamental principles, knew that these words must endure for future generations.

Consequently, the Constitution of the United States of America was established to create a robust framework for self-governance, incorporating an efficient system of checks and balances with three distinct branches of government at the Federal level. Through the judicial branch, this system fosters ongoing discourse among the population to adhere to ethical standards, enabling the formulation and substantiation of arguments (U.S. Const. Amend. I) in the pursuit of truth and justice, thereby safeguarding equality as a fundamental assurance of transparency and liberty. This essential principle of freedom of speech constitutes the cornerstone of our system of representative democracy.

Systems of Checks and Balances for National Protection

Similarly, the governmental system of checks and balances is designed to be reflected in the states to ensure proper, equitable, and balanced management of their own resources and those of the nation as a whole. This system is intended to supervise the implementation of policies and procedures that must periodically demonstrate their effectiveness, efficiency, economy, ethics, fairness, and consistency for the benefit of all citizens of the United States. As explained by Institutional theory (Scott, 2014), it entails dialogue among multiple adults and/or groups who have reached consensus on common principles and formed partnerships or alliances to pursue shared goals respectfully and honorably, without being judged or ignored based on race, age, natural or self-chosen identity, ethnicity, religion, beliefs, education level, cultural background, disabilities, political ideals, or any other self-determined or chosen identities inherent to the human experience—these are expressed through their capacity to exercise their natural free will, individual conscience, and intellect in decision-making, while accepting the responsibilities and consequences of such decisions.

Freedom and Power for the People Through a Republican Democracy

The Founding Fathers endeavored to secure these liberties for the United States of America for perpetuity. The people's prerogative to independently determine our future and posterity—both as individuals and as a collective with shared interests—while practicing mutual respect responsibly, is fundamental. In a constitutional representative democracy, it is imperative to precisely interpret the definitions articulated in the U.S. Declaration of Independence, which affirmed their legitimacy and intentions to the global community (Muñoz, 2025). Subsequently, the written constitutional mandate and its amendments, including the Bill of Rights, established the foundational framework for managing the nation's resources and delineating the roles of U.S. citizens and elected officials. It is noteworthy that the United States of America functions as a republican democracy. Within this republican democracy, the concepts of "republican" and "democracy" are intrinsically linked; this nation comprises millions of individuals, each with a voice that possesses significance. Every citizen should be allowed to contribute to shaping the nation's future through elected representatives who bear the crucial responsibility of formulating and executing policies. These officials must act with prudence, not solely to satisfy the majority's needs, but also to remain steadfast in their oaths. They are expected to set aside personal biases and interests, adhere diligently to their public commitments and oaths, and consistently uphold the fundamental principles enshrined in the U.S. Declaration of Independence, the Constitution, and its amendments.

New EP Initiative Opportunities via Multipartisan Collaboration Efforts

It is anticipated that the citizens of the United States recognize that both the policy preferences of the majority and those of minority groups must conform to the U.S. Constitution and its amendments, thereby safeguarding the fundamental principles that deter tyranny. All individuals within America, irrespective of whether they belong to the majority or minority, are to be afforded equitable consideration and justice. The term "People" in the U.S. Constitution pertains to the citizens of the United States, including those who fought and collaborated for the liberation of the original thirteen colonies from British rule (Albert, 2025). These individuals were diverse in physical characteristics and ethnic origins, and their collective efforts in the struggle for independence culminated in the formation of our nation. They constituted the foundation of the United States, agreeing upon the Declaration of Independence, various sections, and subsequent amendments to the Constitution. According to the Declaration of Independence, they refer to the human race, without distinction of groups or classes. Except for the indigenous Native Americans, the original inhabitants of the American continent, all other foundational Americans were immigrants. The population of the United States experienced exponential growth as new immigrants from around the world continued to adopt America as their cherished homeland, right up to the present day. Citizens who hold a deep reverence for our Constitutional Republic Democracy, its guaranteed civil liberties, and who dedicate their lives to defending the Constitution and its laws, ensure the enduring stability of our nation.

Similarly, the needs of the United States and all its American citizens, including those residing in U.S. Territories, must be addressed diligently by elected officials without ideological bias. As they are all Americans, their rights should be consistent with those of residents on the mainland to prevent discrimination based on geographic location, given that these territories are part of mainland USA and their residents are subject to Federal authority. Therefore, the benefits of the U.S. Constitution must be universally applied to all Americans, regardless of whether they reside in U.S. States or Territories, provided that the criterion of constitutional uniformity is satisfied. Accordingly, our government will seek new opportunities for preparedness through bipartisan collaboration between the majority and minority, with an annual assessment of these efforts.

Alignment of Roles of Public Servants with Foundational Principles

It is not challenging to verify and guarantee that the responsibilities of politicians and public officials conform to the proclamation and constitutional obligations. We should commence by citing the preamble of the United States Declaration of Independence (1776), which states, “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are Life, Liberty, and the Pursuit of Happiness.”

Subsequently, in revising the roles of our government representatives, it is noteworthy that "The Congress shall have power to lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defense and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States..." (U.S. Const. art. I, § 8). Moreover, the oath taken by the President of the United States of America is: "I do solemnly swear (or affirm) that I will faithfully execute the office of the President of the United States, and will to the best of my ability, preserve, protect, and defend the Constitution of the United States." Therefore, our founding fathers intentionally delineated the roles and responsibilities of our nation's representatives, ensuring that our government officials act in accordance with the fundamental principles articulated in the Declaration of Independence and the U.S. Constitution. This careful delineation safeguards the integrity of our representative democracy.

Risk Assessments, Prevention, Change Control, and Monitoring

In our form of government, numerous variables and unforeseen circumstances can have abrupt influences and alter our multicultural traditions or the functioning of our government. Nonetheless, our founding fathers ensured the delineation of fundamental principles that withstand the test of time and technological progress, remaining resilient against obsolescence within our Declaration of Independence and constitutional statutes. Their efforts were directed towards establishing protections for all Americans. They deliberately avoided incorporating contradictory, subjective, and convoluted arguments within their language, likely recognizing that for a nascent nation to persevere, it required more objective language that embodies justice and equality. Such an approach helps prevent misunderstandings among the population that could otherwise lead to their own demise through immediate civil conflict. Consequently, in their formulation of these documents, they set aside personal vulnerabilities, cultural biases, sins, addictions, and struggles—encompassing, but not limited to, selfishness and greed—representing, in essence, the potential frailties of every human being.

The undertaking of establishing this new nation with constrained resources involved confronting stereotypes, ideas, and biases directed against others, while endeavoring to recover from the catastrophic consequences of a war for independence. This war resulted in numerous casualties among individuals of all types in pursuit of these freedoms. Although these freedoms were intended for all, their realization was delayed, indicating that the struggle for these rights did not conclude with the American Revolutionary War of 1783. Instead, it led to further bloodshed during the Civil War

(1861-1865), which ultimately secured the abolition of slavery in the United States. Nevertheless, injustice in various forms of discrimination continued to restrict access to resources, thereby producing socioeconomic disadvantages for the affected populations, and the ongoing fight against discrimination persists to this day. Consequently, from the outset, it was imperative to amend the Constitution by incorporating provisions to broaden opportunities and to safeguard the safety and welfare of all citizens, with the intention of creating a "more perfect union" and aligning the U.S. Constitution more closely with the principles outlined in the Declaration of Independence.

The freedom of speech, a fundamental principle of American democracy, enables individuals to assemble, articulate, deliberate, and express their viewpoints; to exercise their beliefs; and to demonstrate their intelligence, conscience, and reasoning capabilities. This liberty has paved the way for innovation and has contributed to the development of justice systems that better serve the population. It is within these freedoms that the strength of our nation resides—specifically, in the liberty to exercise our individual will, as granted by our Creator and articulated in the US Declaration of Independence—while acknowledging the responsibilities, costs, and consequences inherent in our decisions as American citizens. Furthermore, it is essential to recognize that our choices are ultimately upheld by our government representatives, whose policies must be consistent with the US Declaration of Independence, the US Constitution, and its foundational principles.

Presidents, Congress members, senators, governors, mayors, and state representatives diligently carried out the constitutional mandate by establishing institutions and agencies aligned with these fundamental principles. As with any human endeavor, the government structure created to fulfill the US foundational mandate required policies from the outset to ensure a resilient, transparent (free from bias), and regularly assessed organization. These policies included risk assessments (Chavas, 2004), incident prevention, monitoring, and change management procedures to ensure an ethical, effective, efficient, economical, equitable, and consistent process that provided the necessary services and resources for the safety and well-being of society.

However, when the elected leadership of both main parties diverges from the foundational principles of our nation, the integrity of the implementation process that ensures the fulfillment of constitutional mandates is compromised. Governments that lack the capacity to adequately support and oversee the execution of policies aimed at maintaining these principles jeopardize the well-being of the American population, particularly the most vulnerable members, who are the first to bear the adverse consequences.

Potential Hazards Related to AI Technologies

Gradual Rise of Unemployment

We are on the brink of significant technological advancements occurring as I compose this manuscript. These developments pose potential threats to the lives of many Americans. They threaten employment and small businesses nationwide. The implementation of these technologies will be gradual and managed carefully, so most individuals may not perceive the impact until they face income loss and socioeconomic difficulties resulting from these innovations. This situation could cause many individuals who are not currently disadvantaged to fall into poverty and homelessness.

Increasing Costs of Energy

These technologies are expected to increase energy costs and accelerate the extraction of minerals and resources necessary for their development, while also facilitating the advancement of even more efficient technologies that do not depend on human labor.

Increase in Criminal Activities

Furthermore, American society may face additional threats stemming from the desperation of the population; consequently, alongside demographic growth and socioeconomic challenges, this desperation could trigger an instinct to survive and resist those in positions of privilege, who might, in turn, deploy AI robots against the American population. While this scenario may seem like science fiction, these technologies pose a significant and imminent risk to the American people. It is therefore imperative to institute regulations or prohibitions on these technologies before it is too late for many Americans who are at an increased risk of losing their employment or small businesses.

Direct Catastrophic Risk of Autonomous AI against Humans

Our elected officials must comprehend the potentially devastating risks associated with the deployment of AI and Autonomous AI systems against the American population and humanity. Consequently, we must anticipate future challenges posed by the greed of current power holders and economic beneficiaries, who promote policies enabling the exploitation of AI for personal gain. Such actions are likely to concentrate greater wealth among a select few. At the same time, individuals whose skills are supplanted by these technologies will face loss of livelihood and may gradually experience socioeconomic hardship, with potentially severe repercussions. Furthermore, there exists a risk that these technologies could seize control over critical human systems that uphold public safety, defense, and welfare.

Control of AI through Risk Assessment, Education, and Risk Mitigation

It is essential to address the welfare needs of the American population as mandated by our Founding Fathers in the United States Constitution through innovative education and research. This approach will enable individuals to better prepare for future challenges, particularly given the increasing frequency of natural disasters, potential conflicts, and the emergence of artificial intelligence technologies that pose a direct threat to humanity. Consequently, the proposed new institution should prioritize not only EM preparedness but also education and social services. Technology should primarily serve as a research and modeling tool, rather than a substitute for human labor. The principle of "America first" should be interpreted as "American people are first within the USA," ensuring that no technology undermines the fundamental value of human life (Postman, 1993). Furthermore, Americans should advocate for all goods and products consumed domestically to be produced by humans, thereby restricting the reliance on AI technologies by farmers and trading partners, both domestic and international. The deployment of AI must also adhere to these principles and be utilized exclusively to protect and enhance the well-being of the American population.

Conclusion

The objective of this dissertation was to explore FEMA's public policies on emergency preparedness in Florida from the perspective of institutional theory. While verifying alignment with emergency preparedness policies and the US Constitution, I paused to analyze the sample population of older adult residents in Florida who responded to the 2023 FEMA survey on emergency preparedness. The analysis indicated that socioeconomically disadvantaged older adults are more likely to be unprepared for emergencies compared to their non-disadvantaged counterparts. Consequently, this population faces an imminent risk, necessitating increased support to enhance their emergency preparedness.

The United States Constitution mandates that the Federal Government assume leadership and oversight responsibilities for the nation's efforts to ensure the safety and well-being of all residents, including those in rural areas and in states and territories lacking sufficient revenue to cover their EM costs. We must cease governing the country through mere criticism of opponents of economic and political agendas, neglecting our historical mistakes, and focusing solely on superficial ideals while disregarding the costly yet vital welfare needs of the disadvantaged. Furthermore, in the development of new technologies that do not serve the fundamental purpose of "We the People," which primarily aims to reduce human labor costs to increase profits for private corporations, we risk forsaking the well-being of the American population, who are entitled to better treatment. Such technologies will, over time, deplete our economies and undermine the efforts of small and medium-sized entrepreneurs and their workers, thereby leading to significant impoverishment of our population.

It is imperative to conduct comprehensive scenario analyses and risk assessments; we must implement measures to mitigate risks and prevent succumbing to the allure of promising yet potentially misleading technologies. The persistent distrust among stakeholders is unsustainable, given that a constitutional representative democracy fundamentally depends on mutual trust. We hold a conviction in a nation composed of hopeful citizens where hope and trust are indispensable and mutually reinforcing. These foundational principles are essential for maintaining strength and unity. Additionally, utilizing the specter of potential terrorist attacks as a justification, we often diminish mutual trust, engage in surveillance driven by suspicion, and consequently, become prey to one another. The erosion of privacy rights has already occurred due to the predatory practices of current data brokers and the pervasive dark web environment, the perfect ecosystem for criminals and predators hidden in plain sight, disrupting our lives with their intrusion and unwanted marketing influence, which directly contributes to inflation and places a financial strain on the majority of the population.

We have permitted the trading paradigm of “free market” principles to evolve into an uncontrollable and insatiable entity that undermines our constitutional foundations and damages our societal and national integrity. It is disheartening to observe that many Americans remain unaware of the profound personal transformation taking place, mainly due to our preoccupation with electronic devices, the emotional turbulence generated by news media, and the pervasive toxicity that continuously engulfs our minds.

Demonstrating empathy becomes challenging when we are driven toward a so-called “comfortable” lifestyle, meticulously designed to render us numb and to induce a craving for fleeting pleasures—commonly referred to as “sugar rush” experiences—that inevitably lead to crashes and recurrent harm caused by excessive consumerism, potentially becoming permanent. As a society, we are faced with a severe crisis, evident in our approach to preparing for life and emergencies, our responses, and our ability to recover.

It is imperative to remember the historical calamities brought about by significant technological advances, such as the industrialization period (1750-1914) and the Great Depression (1929-1939), along with their associated causes and consequences, including war, poverty, and human losses. These losses encompass not only those who perished in sudden events but also individuals affected by the lack of sufficient socioeconomic resources, inadequate preparedness, and ineffective governance. These circumstances often result from greed and reckless negligence, with catastrophic outcomes. Are we in the United States adequately prepared for the potentially devastating effects of all types of hazards including of emerging technologies? Are we undertaking sufficient consideration and planning to mitigate these risks? Preparedness entails evaluating all the risks and consequences associated with reallocating economic resources from the population to the states, territories, and federal government for emergency mitigation. Nevertheless, socioeconomic preparedness also involves considering how the cost of goods fluctuates daily due to the impact of energy costs, tariffs, and numerous other key variables that directly and indirectly affect the costs of manufacturing, agriculture, the supply chain, and distribution.

Our government must focus on creating policies that improve the well-being and socioeconomic status of the American population, by creating jobs, business opportunities for new entrepreneurs, eliminating monopolies, solving the root cause of the economic inflation, facilitating the fair interaction of consumers and providers, eliminating misinformation, creating markets that create jobs for humans, instead of competing for accumulation of surplus and profit solely based in eliminating jobs by using emerging technologies such as AI to substitute human labor. Entrepreneurs must base their trades on one that measures and awards more implementation of positive social solutions that will ensure the continuity of a variety of businesses that will improve the socioeconomic status of everyone nationwide, producing economic health, for the stability of the whole population, which enhances the quality of life of the entire world.

Nevertheless, the development and dissemination of EP to underserved communities entail costs that counties, states, and the federal government, through the United States Congress, must manage. Moreover, it is crucial to create surveys to collect feedback from the population to evaluate the effectiveness of the information dissemination, which can enhance preparedness through genuine connections to all national first emergency responders, including healthcare and mental health service providers, thereby ensuring continued support for individuals in the event of an imminent hazardous incident.

Additionally, many non-profit organizations are dedicated to addressing resource shortages encountered by specific disadvantaged and vulnerable groups. They seek federal grants that are vital for fulfilling their objectives. How will these organizations endure without federal financial support provided through these essential grants? It is critical to continue emphasizing the significance of funding organizations that provide daily food, medicines, healthcare, safe shelter, and essential supplies and resources to disadvantaged older adults, particularly during and following emergencies. However, what about those who persistently reside within disaster zones, lack secure housing, and the essential resources for a quality, healthy life, and remain homeless within our nation? They do not deserve to be forced to live in poverty on the streets of the world's wealthiest country. However, they certainly deserve to receive the support needed for recovery without fear, with the support required to live with dignity in our society. The future of emergency preparedness for older adults and vulnerable populations hinges upon our empathy, kindness, care for others, as well as the competence of our leaders in public policy and administration, and on the extent to which we, as a nation, are adequately prepared, in accordance with our Declaration of Independence and the US Constitution.

Reforming FEMA or establishing a new innovative institution is crucial for creating a suitable framework within which all tiers of the United States government, organizations, and entities that engage with our national population or serve as trading partners can collaborate to identify innovative and enhanced solutions for preparedness and emergency mitigation. This initiative will bolster our resources and facilitate the transformation of American society into a more resilient nation. This World-Class collaboration will ensure effective EP and risk mitigation by focusing on protecting people. As we enhance the economic system, we improve their socioeconomic index, while lowering the associated costs of disasters. This will provide the diplomatic key for world peace.

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