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Enhancing Disaster Response Through Mental Health Resilience: A Force Field Analysis

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2025

Abstract

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MS, Walden University, 2019

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Doctoral Study Submitted in Partial Fulfillment

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Abstract

Having a post-disaster program in place can offer survivors and emergency responders support, resource navigation, and resiliency planning. Human services workers in the field aid in disaster recovery and crisis prevention. The problem is that rural Nevada is already limited on resources and workforce with respect to mental and behavioral health response and recovery services. The purpose of this study was to identify unknown gaps within mental and behavioral health services in rural and frontier Nevada, in order to focus on advocating to enhance community resilience-related services post-disaster and potentially bolster resilience and disaster response preparedness. The framework for the study is rooted in the Community Resiliency Model (CRM), which emphasizes skills-based trauma recovery and is aligned with the Federal Emergency Management Agency's National Risk Index, measuring community resilience. For this qualitative study eleven subject matter experts within the state participated in a force field analysis. Open-ended surveys were accessed to obtain narrative data which was analyzed using content analysis. Findings suggest that rural communities in Nevada would benefit from implementing more community-based disaster behavioral health interventions, particularly those that engage non-clinical individuals in trauma-informed care models and to adopt peer-led frameworks, such as the CRM which have been shown to improve emotional regulation and resilience in disaster-affected populations These findings may contribute to positive social change by informing advocacy efforts for individual and community resilience, the need for disaster behavioral health services and enhanced disaster response preparedness concerning mental and behavioral health services.

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Dedication

This capstone is dedicated to my uncles – Jack, David, and Kevin Bird. As we all know, earning a doctoral degree takes time, and as time passes, so too do some of the people we love most in this world.

To my Uncle Kevin – your brilliance, curiosity, and quiet strength were a guiding light. A scholar in your own right, holding a Master's degree with many academic achievements, you set the standard for academic excellence. More than that, you carried the title of "Sheriff" with pride, a badge of wisdom and humor that you have passed on to me. I wear that badge with honor.

Acknowledgments

A very special thank you to my husband, who not only supported me throughout my doctoral journey but has been my greatest cheerleader since day one. Your encouragement and unwavering patience have meant everything to me during this time. I also want to thank my wonderful parents for always reminding me of my "why" and for teaching me that giving up is never an option—that the things most worth having in life are often the ones that require the most effort.

I would like to extend my heartfelt thanks to Dr. Barbara Benoliel for her encouragement, insight, and, most importantly, her kindness and compassion. Her generous sharing of knowledge has been a true gift—one for which I will always be grateful. I also wish to thank Dr. Tammy Totten, whose expertise and guidance helped shape me into a stronger scholar and writer. Finally, I am deeply appreciative of the Walden University faculty for their unwavering support throughout my doctoral journey, especially during moments when I felt unmotivated.

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Section 1: Introduction to the Problem

Background of the Human Services Program

Disasters, whether natural or human-caused, can have a lasting impact on individuals and communities. These events disrupt daily functioning and can occur at any time without notice. Preparation and planning are important when handling disasters, and they may include federal, state, or even communal emergency response plans. However, despite continuous planning, behavioral health needs vary across communities (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023a). Additionally, some regions need help with such plans, as there may be additional barriers that other regions do not face. For example, rural communities face economic and social stressors, lack of healthcare infrastructure, and providing care for a population spread over a large geographic area during a crisis. With such challenges, rural and remote communities require alternative planning and implementation to ensure appropriate disaster planning.

The focal research question of this study pertains to the analysis of unexplored gaps within mental and behavioral health services to be considered in providing advocacy for averting crises and enhancing resilience post-disaster among rural and frontier regions in Nevada. The catalyst for further research stems from the cessation of operations of Nevada's post-disaster crisis counseling program in early 2024, which has resulted in the loss of a disaster behavioral health program focused on prevention and early intervention services. This cessation eliminates a service to a region with already limited access to essential resources and services, and this study highlights the need to advocate for such services in rural Nevada. I conducted a qualitative study to collect the opinions and

experiences of subject matter experts in Nevada, employing an open-ended survey research methodology anchored in a force field analysis framework. Potential consequences of this study encompassed recommendations for advocacy for disaster behavioral health services in the area, which may inform policy or procedures in the state.

Social Problem

Rural and remote communities have a unique set of strengths and weaknesses. One such vulnerability is the lack of services for behavioral health issues (SAMHSA, 2023a). For example, a theme of needing disaster mental health training indicates that rural school counselors feel unprepared to address the mental health needs of students and staff during natural disasters, suggesting a gap in available behavioral health services and training. (Crumb et al., 2021). Adopting a proactive, community-based approach could assist in disaster planning for these communities, helping to bolster resilience and empower individuals and communities with regard to mental and behavioral health after a disaster.

Remote areas can benefit from various community-based approaches designed to address their unique social challenges. Program activities like Crisis Counseling Programs (CCP) offer personalized, short-term services that identify stressors, support systems, and potential barriers, allowing for a comprehensive assessment of individual or community needs and promoting resilience. CCP operates on key strengths-based, anonymous, and outreach-oriented principles, conducted in non-traditional settings to reinforce existing community support systems (Substance Abuse and Mental Health

Services Administration [SAMHSA], 2021a). Additionally, such programs work to bolster individuals and communities who survived disasters and disaster responders.

Local Problem

Nevada and many other states face challenges related to limited resources and workforce shortages within mental and behavioral health services. According to the Health Professional Shortage Area designation, all 17 counties of Nevada have some shortage due to high population ratios to providers (Health Resources and Services Administration, 2024). Rural and frontier areas have the additional barrier of limited access due to travel (Division of Public and Behavioral Health, n.d.). If this problem persists, it may result in continued reliance on law enforcement during mental and behavioral health crisis response and increased risk of death by suicide.

In rural Nevada, there may be unknown gaps within mental and behavioral health services to prevent crises and enhance resilience post-trauma. The closure of Nevada's CCP services on March 14, 2024, eliminated a state program of crisis prevention or early intervention program related to disaster behavioral health services (Nevada Resilience Project, n.d.). This gap impacts rural Nevadans tremendously due to the limited mental and behavioral health resources. There is missing information about the unique needs of this population that would help professionals and community advocates who wish to lobby for more services for the region. Thus, rural Nevada residents may benefit from disaster behavioral health services to offer additional support and bolster individual and community resilience.

Purpose of the Study

The purpose of this qualitative study was to identify both existing gaps and assets of the disaster behavioral health services in rural Nevada through a force field analysis to provide new information for a possible opportunity to advocate to expand and enhance existing services to support rural and frontier communities' resilience post-disaster. I conducted a force field analysis that included engaging key stakeholders, such as subject matter experts, mental and behavioral health providers, community organizations, and community members within rural and frontier Nevada. This study informs advocacy by identifying current gaps and collecting data to inform the problem and contribute to generating a quality strategic plan to address the identified issues.

Research Question

The research question for the study was: What are the existing gaps and assets of the disaster behavioral health services and existing mental and behavioral health supports in rural Nevada to aid community resilience post-disaster?

Conceptual Framework

The constructs that provide a framework for this study are the Community Resiliency Model (CRM) (Grabbe et al., 2023) and the National Risk Index (FEMA, n.d). The Trauma Resource Institute formed the CRM to provide a model for training to educate community members in helping themselves and others (Trauma Resource Institute, n.d.). The model’s focus is skills-based to reset the natural balance of the nervous system post-trauma and is resiliency-focused and trauma-informed (Trauma Resource Institute, n.d.). Furthermore, the Federal Emergency Management Agency

(FEMA) (n.d.) measures community resilience through the National Risk Index, which encompasses social vulnerability, community resilience, and expected annual loss to determine risk.

The logical connection between the presented constructs and the nature of this study included utilizing the CRM to guide the survey semi-structured questions to use in the force field analysis to help identify gaps and assets within the existing resources. Additionally, understanding where Nevada is currently situated according to the National Risk Index supported the analysis. The purpose is to ensure future advocacy efforts will help provide effective and appropriate expansion of services that align with the model, as well as state and federal strategic planning; thus establishing potential funding opportunities and sustainability planning for long-term supportive services.

Nature of the Study

I conducted a qualitative study using force field analysis to assess the gaps and assets in existing disaster behavioral health as well as opportunities to advocate for prevention and early intervention services, in rural and frontier Nevada (Graf, 2021). I focused primarily on natural disasters, as much of the literature stems from a natural disaster planning and recovery perspective. Disaster planning, on a behavioral health level, does not appear to vary by natural disasters. However, disaster behavioral health services may vary greatly between natural disasters versus human-made. Gaining the perspective of subject matter experts alongside community members of Nevada's rural and frontier regions aids in understanding and examining what is needed within these

areas to advocate to expand mental and behavioral health services related to disaster preparedness and response.

In keeping with the research model outlined by Graf (2021), this research design required a sequence of online surveys with open-ended questions as a data collection tool to obtain key stakeholder engagement, an email account, access to Microsoft Office (e.g., Word, Excel) to allow online brainstorming, knowledge and understanding of disaster behavioral health, and knowledge and understanding of state and federal strategic planning. Additionally, the data sources included government reports (e.g., white papers and research studies), data reports from community organizations in rural and frontier counties, and community organization vision and mission statements. Data points were sourced from the survey responses of key stakeholders and force field analysis participants.

Defined Terms

Community Resiliency Model: A framework established by the Trauma Resource Institute to establish training and educate community members in helping themselves and others. The model's focus is skills-based to reset the natural balance of the nervous system post-trauma and is resiliency-focused and trauma-informed (Trauma Resource Institute, n.d.).

Disaster: An occurrence of a natural catastrophe, technological accident, or human-caused incident that has resulted in severe property damage, deaths, and/or multiple injuries (Substance Abuse and Mental Health Services Administration [SAMHSA], 2021b).

Disaster Behavioral Health: Encompasses the delivery of mental health support, behavioral interventions, and stress management assistance to both disaster survivors and responders (Administration for Strategic Preparedness and Response, n.d.).

Emergency: An incident, whether human or naturally caused, that requires responsive action to protect life or property (SAMHSA, 2021b).

National Risk Index: A dataset created by the Federal Emergency Management Agency that aids in the illustration of communities across the United States of America deemed most at risk for the labeled identified 18 natural hazards and encompass expected annual loss, social vulnerability, and community resilience (National Risk Index, n.d).

Natural Hazard: Environmental phenomena that may impact societies and the human environment.

Preparedness: A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and making corrective actions to ensure effective coordination during incident response (SAMHSA, 2021b).

Recovery: Measures to support individuals and communities affected by an incident in recovering efficiently, including rebuilding infrastructure; providing sufficient short-term and long-term housing for survivors; restoring health, social, and community services; fostering economic development; and reviving natural and cultural resources.

Resilience: The journey and result of effectively adjusting to challenging circumstances by demonstrating mental, emotional, and behavioral adaptability in response to internal and external pressures (American Psychological Association, n.d.).

Risk: Potential for negative impacts caused by a natural hazard.

Significance of the Study

Significance of the Study for Community or Organization

Addressing gaps and assets within disaster behavioral health services in Nevada allows for opportunities to advocate for improvement and potentially new programs. This study is pointed because it addresses gaps and assets of disaster behavioral health services to improve the accessibility of mental and behavioral healthcare post-disaster through such services for rural Nevada residents (Graf, 2021).

Significance of the Study for Human Services

There are various potential implications for positive social change. This study offers significance for the human services field, in using advocacy to help support heightened individual and community resilience, increased awareness of the need for disaster behavioral health services, which could lead to decreased law enforcement involvement in mental health crises, reduced hospital and jail admissions related to such crises, and enhanced disaster response preparedness concerning mental and behavioral health services (SAMHSA, 2023b.).

Literature Review

In the vast expanses of rural Nevada, where communities are scattered amidst rugged landscapes, disaster response presents unique challenges. From wildfires engulfing stretches of wilderness to the threat of earthquakes shaking the foundation of isolated towns, the resilience of these communities is tested in ways distinct from their urban counterparts. Amidst the physical devastation wrought by such disasters, the toll on mental health often remains understated yet profound.

I conducted a literature review that delves into the critical intersection of disaster response and mental health resilience in rural Nevada. I explored existing research, interventions, and gaps in understanding how to bolster the psychological fortitude of these communities in the face of adversity. By examining a diverse array of scholarly works, ranging from psychological theories to practical disaster management strategies, my goal was to provide insights into enhancing the capacity of rural Nevadans to withstand and recover from disasters.

Understanding the unique socio-cultural dynamics, geographic isolation, and limited resources that characterize rural Nevada is essential in devising effective strategies. Challenges such as limited access to mental health services, the stigma surrounding mental health issues, and the close-knit yet contrasting nature of rural communities all influence the landscape of disaster response. However, within these challenges lie opportunities for innovative approaches tailored to the specific needs of rural populations.

My goal for this literature review is to contribute to the ongoing discourse on disaster resilience in rural Nevada by synthesizing existing knowledge and identifying areas for further research and intervention. Ultimately, it aspires to inform my capstone, which may inform policymakers, emergency responders, mental health professionals, and community leaders in their efforts to build stronger, more resilient communities capable of weathering the literal and metaphorical storms that rural Nevada may face.

Literature Search Strategy

I conducted a systematic literature review to comprehensively explore the relationship between disaster response and mental health resilience in rural Nevada. To identify, select, and analyze relevant literature, I identified keywords and search terms, selected specific databases, assigned criteria for inclusion and exclusion, and screened relevant sources to conduct quality assessment and data analysis.

A thorough understanding of the key concepts involved, such as disaster response, mental health resilience, and rural Nevada, guided the selection of appropriate keywords and search terms. Variants and synonyms of these terms were considered to ensure a comprehensive search. Specific keywords and terms used throughout the research process are as follows: *disaster behavioral health, resilience,* or *resiliency* or *resilient* or *strengths* or *coping* or *hardiness* or *adaptation, trauma, rural areas* or *rural communities, mental health* or *mental wellness* or *mental wellbeing, disaster response,* and *Nevada.*

Multiple academic databases through the Walden University library, including but not limited to *Complementary Index, ERIC, Journals@OVID, Medline, Directory of Open Access Journals*, *APA PsychInfo*, *Taylor and Francis Online, APA PsychArticles, Academic Search Complete*, and *CINAHL Plus with Full Text* were utilized to access a diverse range of peer-reviewed publications. Additionally, I considered relevant literature sources and published journal references, such as government reports and journal publications through the Substance Abuse and Mental Health Services Administration.

I established clear criteria to determine the eligibility of studies for inclusion in the review. Studies must focus on disaster response and mental health resilience. The

sources I also included primarily focused on rural Nevada or rural settings. Additionally, sources that focused on relevant conceptual frameworks were reviewed for consideration and included as appropriate. Lastly, I considered articles published between 2021 and 2024 to ensure the inclusion of recent research. Publications in languages other than English were excluded due to limitations in translation resources. Initial screening of search results involved assessing titles and abstracts for relevance to the research topic. Selected studies have undergone a full-text review to determine their suitability for inclusion based on the pre-defined criteria.

I have systematically extracted and synthesized pertinent information from selected studies, including research methods, findings, and key conclusions. Through this process, I have identified common themes, patterns, and gaps in the literature. Appropriate assessment tools or criteria relevant to the study designs were used to evaluate the quality of the selected studies. Synthesized data has also been analyzed to identify recurring themes, conceptual frameworks, and practical implications relevant to enhancing mental health resilience in rural Nevada's disaster response efforts. In this rigorous literature review, I compile a comprehensive synthesis of existing knowledge and insights into improving disaster response through enhanced mental health resilience in rural Nevada.

Themes within the literature review show that accessibility to resources is limited in rural communities due to a lack of appropriate resources, a lower population, mental health stigma, and a larger space between resources, which limits transportation. However, the literature shows an awareness of the need for mental and behavioral health

resources in rural communities. Much of the literature also reflects a theme of research surrounding primarily natural disasters without much reference to human-made disasters. Additionally, the literature reflects that rural communities are a minority population at risk for health disparities. Lastly, I found that researchers from the literature discovered that the Community Resiliency Model Framework is an effective tool to enhance resilience for disaster preparedness and response.

Conceptual Framework

This study is rooted in a main framework: the Community Resiliency Model (CRM) and also draws on the National Risk Index (FEMA). The CRM, developed by the Trauma Resource Institute, aims to equip community members with skills to support themselves and others in the aftermath of trauma. It focuses on resetting the nervous system post-trauma, emphasizing resilience and trauma awareness. The National Risk Index, established by the Federal Emergency Management Agency (FEMA), assesses community resilience by considering factors like social vulnerability and expected annual loss.

CRM has been used in recent research to reflect whether the framework is appropriate for enhancing resilience. Research also included using CRM in various countries with multiple populations. The model is an effective framework for improving mental health, evidenced by significant improvement across all trauma symptoms (Habimana et al., 2021). Furthermore, the CRM has effectively addressed mental health concerns post-disaster in low-resourced settings immediately after the disaster and six months after (Aréchiga et al., 2024). This framework is a practical approach that is

effective for disaster survivors and responders. The framework aids in education on self-care to enhance overall wellness and individual resilience, especially in increasingly stressful environments (Duva et al., 2022).

The National Risk Index, designed and developed by FEMA alongside stakeholders, is a dataset and online tool illustrating the 18 natural hazards and communities deemed most at risk (FEMA, n.d.). The National Risk Index measures community resilience as a component of the Consequence Reduction Risk based on community preparedness. The risk index is calculated by multiplying the expected annual loss by the social vulnerability rating and dividing it by the community resilience rating. The expected annual loss is measured by the expected financial loss caused by natural hazards. Social vulnerability measures the susceptibility of social groups to the adverse effects of such hazards, which may include deaths, injury, loss, or disruption. Lastly, community resilience measures a county's preparedness abilities, ability to adapt, and timeliness of recovery from hazards.

The hazards include avalanches, coastal flooding, cold waves, heat waves, drought, earthquakes, hail, hurricanes, ice storms, landslides, lightning, riverine flooding, strong wind, tornados, tsunamis, volcanic activity, wildfire, and winter weather. Not all states are susceptible to all 18 hazards, nor are all counties within a single state. For example, Nevada is not considered at risk for coastal flooding since no coastline exists, just as Carson City is vulnerable to avalanches, whereas Clark County is not (FEMA, 2024). This framework is essential for stakeholders as it highlights which regions are

considered socially vulnerable and where their community resilience rating stands. This allows for a well-informed strategic disaster preparedness, response, and recovery plan.

The National Risk Index has been analyzed in recent research to determine effectiveness. Researchers state that developing the National Risk Index is innovative and significant as an initial step toward establishing a baseline for a multi-component measurement of natural hazard risk (Zuzak et al., 2022). Conversely, critics state that social vulnerability and community resilience measurements are conceptually and empirically identical (Derakhshan et al., 2022). However, researchers conducting this study to analyze the measurement found that both are critical in interpreting local community capacities in disaster planning, as a vulnerable community may be highly resilient.

In rural Nevada, the application of the CRM and the National Risk Index can address unique challenges posed by geographic isolation and limited access to behavioral health services. Rural areas often lack the infrastructure and resources necessary for timely mental health interventions, which can hinder recovery post-trauma (SAMHSA, 2023c). CRM's focus on equipping community members with self-care and trauma-resilience skills is particularly relevant in these settings, where formal support systems may be sparse. The National Risk Index highlights rural Nevada’s susceptibility to certain natural hazards, such as droughts and wildfires, which can exacerbate social vulnerability. By utilizing a force field analysis, communities can identify driving forces, such as local leadership and community cohesion, that support resilience, while also recognizing restraining forces, like limited healthcare access and resource scarcity.

Aligning these factors can help rural Nevada create a more comprehensive, data-driven approach to mitigating risks and fostering long-term resilience.

Disaster Behavioral Health and Resilience in the Literature

The following literature review presents material relevant to disasters, behavioral health, disaster preparedness and recovery, the impacts of natural and manufactured disasters on resilience, and the academic concepts of resilience. The purpose of this literature review is to identify and summarize key themes in past research to support this study. I define key terms in this review, highlighting themes throughout the literature. Additionally, I offer an overview of concepts to measure resilience and why this measurement is important. Lastly, I examine the unique barriers that rural regions face, delving into health disparities and how such barriers may impact these regions during disasters.

Disasters

In December 2021, the island nation of Tonga experienced a catastrophic volcanic eruption and subsequent tsunami following the explosive eruption of the Hunga Tonga-Hunga Ha'apai volcano. One of the most powerful eruptions in recent history sent shockwaves worldwide and produced a massive ash plume visible from space that blanketed the region (Jet Propulsion Laboratory, 2022). The resulting tsunami waves caused extensive flooding and damage to coastal communities in Tonga, displacing hundreds of residents and destroying homes, infrastructure, and crops. The ashfall contaminated water supplies and created urgent humanitarian needs. International aid was swiftly mobilized, but the remote location and COVID-19 pandemic restrictions

complicated relief efforts, highlighting the challenges faced by island nations in the wake of such devastating natural disasters.

This example of a disaster is a sudden event that caused significant disruption, damage, and destruction, overwhelming the ability of affected communities to cope using their own resources. Disasters can be natural or human-caused and often result in substantial loss of life, injuries, and damage to property and infrastructure. They disrupt the normal functioning of societies, creating a need for external assistance to aid recovery and rehabilitation efforts (SAMHSA, 2021b). The severity of a disaster is typically measured by the extent of its impact on human lives, economic stability, and the environment.

Various types of disasters can be classified into natural and human-induced categories. Natural disasters include earthquakes, hurricanes, floods, tsunamis, and volcanic eruptions, such as the Hunga Tonga-Hunga Ha'apai eruption. Natural processes usually drive these phenomena and can occur without warning, challenging preparedness, and response. Human-induced disasters, on the other hand, are a result of human activities and include industrial accidents, oil spills, nuclear meltdowns, and acts of terrorism. Global changes, including climate shifts, have heightened the frequency and intensity of certain natural disasters, making it harder to distinguish between natural and human-induced events.

The impacts of disasters on individuals and communities can be profound and long-lasting. On an individual level, disasters can lead to physical injuries, psychological trauma, loss of loved ones, and displacement from homes. The immediate aftermath often

sees people struggling with basic needs such as food, water, and shelter, which can exacerbate trauma. Long-term effects include chronic health issues, financial instability, and disrupted life, such as education and employment opportunities (American Psychological Association, n.d.). Communities, especially those with limited resources, may struggle to recover and rebuild, leading to prolonged hardship and vulnerability.

For communities, the wider impacts of disasters include damage to infrastructure, economic losses, and environmental degradation. Essential services such as healthcare, education, and transportation can be severely disrupted, hindering recovery and extending suffering. The financial burden of rebuilding and rehabilitation can be immense, straining local and national budgets. Furthermore, disasters negatively affect community resilience and social capital, which can harm mental well-being (Hall et al., 2023). Enhancing resilience through preparedness, effective response strategies, and sustainable development practices is crucial for mitigating the impacts of disasters and improving the ability of individuals and communities to recover (SAMHSA, 2021b).

Preparedness and Recovery

Disasters, both natural and human-caused, have become a significant concern in contemporary society. With the increasing frequency and severity of events such as hurricanes, earthquakes, wildfires, pandemics, and terrorist attacks, the importance of disaster preparedness cannot be overstated. Effective disaster preparedness involves a comprehensive approach that includes risk assessment, planning, communication, and community involvement (Crandall et al., 2021).

Disaster preparedness encompasses the measures to plan for, respond to, and recover from disasters. It involves a proactive approach to reduce vulnerabilities and enhance emergency management capacity (SAMHSA, 2021b). Key elements of disaster preparedness include risk assessment, emergency planning, resource management, training and education, and communication (SAMHSA, 2023b).

The first step in disaster preparedness is to conduct a thorough risk assessment. This involves identifying potential hazards, evaluating the likelihood of their occurrence, and assessing their potential impact on communities. Risk assessments should consider various factors, including geographic location, climate, infrastructure, and population density (Everly et al., 2023). By understanding the specific risks faced by a community, authorities can develop targeted strategies to mitigate these risks and allocate resources effectively.

Once the risks are identified, developing comprehensive emergency plans is next. These plans should outline the procedures and protocols to be followed before, during, and after a disaster. Key components of an emergency plan include evacuation routes, shelter locations, communication systems, and emergency contact information (Crandall et al., 2021). Additionally, the plan should address the needs of vulnerable populations, such as the elderly, individuals with disabilities, and children (SAMHSA, 2023b). Regular drills and exercises should be conducted to ensure that everyone is familiar with the emergency procedures and can respond effectively in a crisis.

Effective disaster preparedness involves having and managing resources efficiently. This includes stockpiling essentials like food, water, and medical supplies.

Partnerships with local businesses, non-profit organizations, and government agencies are crucial for a coordinated response. Investing in infrastructure improvements, such as stronger buildings and reliable transportation networks, can enhance resilience and reduce disaster impact (National Conference of State Legislatures, 2023).

Education and training are key to disaster preparedness. Communities must be informed about the risks they face and the correct actions to take in emergencies. Public awareness campaigns, workshops, and training programs can spread this information and foster a culture of preparedness (Fu & Zhang, 2024). Schools, workplaces, and community centers should regularly conduct drills and provide training in first aid, CPR, and basic survival skills (American Red Cross, n.d.). Empowering individuals with knowledge and skills increases community resilience and improves disaster response.

Effective communication is critical during a disaster. Timely and accurate information can save lives and prevent panic. Authorities should establish robust communication systems that can disseminate information to the public quickly and efficiently. This includes using multiple channels, such as radio, television, social media, and mobile apps, to reach a wide audience (Crandall et al., 2021). Additionally, clear and concise messaging should be developed to ensure people understand the risks, know what actions to take, and where to seek help. Communication plans should also address the needs of non-English speakers and individuals with disabilities to ensure inclusivity and accessibility (SAMHSA, 2022a).

Community involvement is a cornerstone of disaster preparedness. Engaging community members in preparedness activities fosters a sense of ownership and

responsibility. Local governments should establish partnerships with community organizations, faith-based groups, and volunteer networks to leverage local knowledge and resources (FEMA, 2023a). Community-based disaster response teams can be trained to provide immediate assistance and support during emergencies. Furthermore, involving community members in the planning process ensures that their unique needs and perspectives are considered, leading to more effective and inclusive preparedness strategies (Ellis et al., 2022).

Resilience is the ability to withstand and recover from disasters. Building resilience requires a holistic approach addressing the social, economic, and environmental factors contributing to vulnerability. Communities should invest in sustainable development practices that reduce exposure to hazards and promote adaptive capacity (Perez, 2024). This includes land-use planning, environmental conservation, and economic diversification. Additionally, social cohesion and support networks play a crucial role in resilience (US Department of Homeland Security, 2024). Strong community bonds and social capital can enhance collective action and provide a safety net during times of crisis.

Examining case studies of successful disaster preparedness initiatives can provide valuable insights and lessons. For example, Japan's comprehensive disaster management system, which includes early warning systems, strict building codes, and extensive public education campaigns, has significantly reduced the impact of earthquakes and tsunamis (Ministry of Foreign Affairs of Japan, n.d.). Similarly, the Community Emergency Response Team (CERT) program in the United States empowers citizens to take an

active role in disaster preparedness and response, enhancing community resilience (FEMA, 2022). These examples highlight the importance of a multi-faceted approach integrating technology, policy, and community engagement.

Disaster preparedness is a continuous process that requires collaboration, planning, and investment. By understanding the risks, developing comprehensive emergency plans, managing resources, educating the public, and fostering community involvement, societies can enhance their resilience and ability to cope with disasters (Environmental Finance Center at Sacramento State [EFC], 2020). The ultimate goal of disaster preparedness is to protect lives, minimize damage, and ensure a swift and effective recovery (US Department of Homeland Security, 2022). As the frequency and intensity of disasters continue to rise, prioritizing preparedness is essential to building a safer and more resilient future. In recent years, efforts to strengthen preparedness have proven successful. For example, improved urban planning and resilience measures in countries like Costa Rica have mitigated the economic impact of disasters while advancing environmental sustainability (UNDRR, n.d.). These examples underscore the need for continued investment in preparedness to confront the growing challenges posed by natural hazards.

Significance of Disaster Behavioral Health Preparedness and Recovery. Disaster behavioral health preparedness and recovery are essential components of effective disaster management, focusing on the mental and emotional well-being of individuals and communities affected by crises. This area encompasses strategies and practices designed to support mental health and resilience before, during, and after a disaster. As the

frequency and severity of disasters increase, addressing behavioral health needs becomes increasingly critical to overall recovery efforts. The literature highlights the importance of integrating behavioral health considerations into disaster preparedness and recovery plans, exploring key strategies, implementation practices, and emerging trends.

Disasters—ranging from natural events like earthquakes and hurricanes to human-induced incidents such as cyber-attacks and system failures—can have profound impacts on mental health, leading to stress, anxiety, depression, and trauma. Effective behavioral health preparedness ensures that individuals and communities have access to the necessary psychological support, helping to mitigate these impacts and facilitate recovery (SAMHSA, 2024a). Mental health support is vital for maintaining overall resilience and ensuring a quicker, more effective recovery.

Various sectors are increasingly recognizing the need for behavioral health preparedness. For instance, the healthcare sector integrates behavioral health support into its disaster plans, as highlighted by guidelines (SAMHSA, 2023b). Similarly, educational institutions are developing programs to support students and staff during and after crises, reflecting a broader understanding of the need for mental health resources (Crumb et al., 2021).

Disaster Behavioral Health Planning. Effective disaster behavioral health planning begins with a comprehensive risk assessment and needs analysis. This involves identifying the potential psychological impacts of disasters and evaluating the resources required to address these needs (Ma at el., 2023). The assessment helps understand the

likelihood and severity of mental health issues resulting from various disaster scenarios, while the needs analysis focuses on the availability of support services and resources.

A Disaster Behavioral Health (DBH) Plan is a documented strategy outlining how an organization or community will address mental health needs during and after a disaster (SAMHSA, 2024b). The BHPP should include the following components:

1. Plan Scalability: This component ensures that the disaster behavioral health plan can be adjusted to fit the scale of the disaster. It involves creating flexible strategies that can be expanded or contracted depending on the severity and scope of the incident, allowing for appropriate resource allocation and response efforts tailored to the situation's specific needs.

2. Partnerships: Partnerships focus on establishing and maintaining collaborative relationships with local, state, federal, and community organizations. These partnerships are crucial for leveraging resources, expertise, and support during a disaster. They help create a coordinated response network that can address the diverse behavioral health needs of affected populations.

3. Financial and Administrative Preparedness: This component involves ensuring that financial and administrative systems are in place to support the plan's implementation. It includes securing funding, streamlining procurement processes, and establishing administrative protocols that can be quickly activated during a disaster. This preparedness ensures the necessary resources and personnel are available to effectively deliver behavioral health services.

4. Implementation: Plan implementation covers the procedures and actions required to activate and execute the disaster behavioral health plan. It includes establishing command and control structures, mobilizing personnel and resources, and initiating communication and coordination with relevant stakeholders. The implementation phase ensures that the plan is operational and responsive to the needs of the affected population.

5. Services Assessment: Services assessment involves evaluating the availability, adequacy, and quality of behavioral health services in the aftermath of a disaster. This component helps identify gaps in services, prioritize needs, and adjust the response to ensure that the affected population receives appropriate behavioral health care. Ongoing assessment is crucial for adapting the response as the situation evolves.

6. Logistical Supports: Logistical support encompasses the planning and management of resources, such as transportation, facilities, and supplies, necessary for delivering behavioral health services during a disaster. It ensures that the physical and operational infrastructure is in place to support personnel deployment, materials distribution, and care provision in various settings, including shelters and community centers.

7. Legal and Regulatory Guidance: Legal and regulatory guidance ensures that the disaster behavioral health plan complies with relevant laws, regulations, and ethical standards. This component provides a framework for decision-making that protects the rights and safety of both responders and affected individuals. It also addresses liability

issues, confidentiality concerns, and the legal implications of delivering behavioral health services in a disaster context.

8. Plan Integration: Plan integration involves aligning the disaster behavioral health plan with other emergency response and public health plans. This component ensures that the behavioral health response is coordinated with broader disaster management efforts, such as medical care, sheltering, and public safety operations. Integration fosters a holistic approach to disaster response, enhancing overall effectiveness and efficiency.

Implementation of Behavioral Health Preparedness. Providing mental health support during disasters involves several key practices. Psychological First Aid (PFA) is a foundational component, offering immediate assistance to individuals in distress, stabilizing their emotional state, and connecting them with further support (The National Child Traumatic Stress Network [NCTSN], n.d.-a). PFA can often be integrated into emergency response efforts, ensuring that trained personnel are available to provide support as needed.

PFA is an evidence-based modular approach to individuals immediately following a disaster, which may include survivors and responders alike. The purpose of this approach is to reduce the initial distress and aid in building resilience through the eight core actions:

1. Contact and Engagement: This initial step involves establishing a connection with the affected individual. The goal is to introduce yourself in a calm and

compassionate manner, ensuring that the person feels comfortable and supported.

2. Safety and Comfort: After making contact, it's important to ensure the person's physical and emotional safety. This includes helping them feel secure, providing basic needs like food or shelter, and offering reassurance to reduce distress.
3. Stabilization: If the individual is in acute distress, stabilization techniques are used to help them regain a sense of control and composure. This might involve grounding exercises or simple breathing techniques to calm intense emotions.
4. Information Gathering: In this phase, the individual providing PFA gathers relevant information about the person's immediate needs, concerns, and current situation. This helps tailor the support to their specific circumstances.
5. Practical Assistance: The individual providing PFA provides practical support to address the person's immediate needs based on the information gathered. This could include helping them find shelter, access services, or reconnect with loved ones.
6. Social Support Connections: Strengthening or reestablishing social connections is crucial for recovery. This component involves helping the individual connect with family, friends, or community resources to build a support network.

7. Coping Information: Providing information on coping strategies is essential for helping the person manage stress and emotional reactions. This might include discussing common stress responses and suggesting healthy ways to cope.
8. Linkage to Collaborative Services: Finally, the individual providing PFA connects the individual with longer-term services or resources, such as mental health care, medical assistance, or community programs, to ensure ongoing support and recovery.

Redundancy and coordination are crucial for maintaining effective mental health support during a disaster. This includes having multiple access points for support services and ensuring that behavioral health teams are coordinated with other disaster response teams (Wyte-Lake et al., 2021). Collaboration with local organizations and mental health professionals is essential for delivering comprehensive care.

Community-based approaches play a significant role in disaster behavioral health. Engaging community leaders and organizations in preparedness planning helps ensure that mental health services are culturally appropriate and accessible to diverse populations (Ruzek, 2020). Community outreach and education can enhance resilience and preparedness (SAMHSA, 2023a).

Emerging Trends in Behavioral Health Preparedness. As the field of disaster behavioral health evolves, new trends and innovations are shaping how communities and organizations prepare for and respond to the psychological impacts of crises. The integration of advanced technologies, adoption of trauma-informed care principles, and a

focus on continuous improvement are transforming traditional approaches to mental health support during disasters. These emerging trends not only enhance the effectiveness of behavioral health preparedness efforts but also ensure that support systems are adaptable and resilient in the face of evolving challenges. By exploring these trends, we gain insight into how contemporary strategies are advancing the field of behavioral health preparedness and improving outcomes for individuals affected by disasters.

Technology and digital tools are transforming disaster behavioral health support. Virtual counseling, telehealth services, and mobile apps provide accessible mental health resources and support, particularly when in-person services are limited (SAMHSA, 2024c). These tools can facilitate rapid and widespread access to psychological support.

Trauma-informed care is becoming increasingly integrated into disaster response efforts. This approach recognizes the widespread impact of trauma and incorporates practices that promote safety, trustworthiness, and empowerment for individuals affected by disasters (NCTSN, n.d.-b).

Continuous improvement is essential in disaster behavioral health preparedness. Regular training, drills, and evaluations help ensure that mental health support systems are effective and responsive to emerging needs (FEMA, 2021). This includes adapting strategies based on feedback from previous disasters and ongoing research in behavioral health.

Disaster behavioral health preparedness and recovery are critical to comprehensive disaster management. By integrating mental health support into disaster planning and response, communities can better address the psychological impacts of

crises and promote overall resilience. As the landscape of disasters evolves, ongoing adaptation and innovation in behavioral health practices will be key to effective disaster response and recovery (SAMHSA, 2022b).

Disaster Behavioral Health

Disasters can have a detrimental impact on communities, both physically and emotionally. The impacts of disasters and complex emergencies can trigger psychological distress or long-lasting effects on the mental health of individuals. Additionally, these effects can impact not just the individual but the community as a whole. With natural disasters increasing, it is critical that effective interventions and metrics are identified to aid individuals and communities (Abrash Walton et al., 2021). Disaster behavioral health provides mental health, substance abuse, and stress management services for disaster survivors and responders (Administration for Strategic Preparedness and Response, n.d.). Disaster behavioral health on a federal level also encompasses the behavioral health structure, individual and community resilience, and risk communication.

Disaster behavioral health is a specialized field focused on understanding and addressing the psychological and emotional impacts of disasters on individuals and communities. This field integrates psychology, psychiatry, public health, and emergency management principles to develop strategies and interventions that promote mental health and resilience before, during, and after disasters (SAMHSA, n.d.). Key concepts in disaster behavioral health include trauma, resilience, crisis intervention, and community recovery.

Trauma is a central concept in disaster behavioral health. Disasters can cause a wide range of traumatic experiences, from the loss of loved ones and homes to the disruption of daily life and a sense of security. Psychological trauma resulting from disasters can manifest in various forms, including post-traumatic stress disorder (PTSD), depression, anxiety, and grief. The intensity and duration of these symptoms can vary depending on factors such as the nature of the disaster, individual and community resilience, and access to social support and mental health services. Recent studies have shown that early intervention and continuous support are critical in mitigating the long-term psychological impacts of trauma (Goldmann et al., 2021).

Resilience, another key concept, refers to the ability of individuals and communities to adapt and recover from adversity. In the context of disaster behavioral health, resilience is seen as a dynamic process that involves multiple factors, including psychological well-being, social support, and access to resources (Wei et al., 2021). Research has highlighted the importance of fostering resilience at both the individual and community levels. For example, a study published in the "International Journal of Migration, Health, and Social Care" found that individuals with strong social networks and community ties are more likely to exhibit resilience and recover more quickly from the psychological impacts of disasters (Lester et al., 2022). Programs that promote social cohesion, community engagement, and mental health literacy are essential in building resilience.

Crisis intervention is a crucial component of disaster behavioral health. It involves providing immediate psychological support to individuals affected by disasters to prevent

the development of severe mental health issues. PFA is a widely used crisis intervention approach designed to reduce initial distress and foster short- and long-term adaptive functioning. PFA includes establishing safety, listening to individuals' concerns, connecting them with social support, and providing information on coping strategies. A recent study in "Psychological Trauma: Theory, Research, Practice, and Policy" found that PFA can significantly reduce symptoms of acute stress and improve psychological outcomes in disaster survivors (Ni et al., 2023).

Community recovery is another vital aspect of disaster behavioral health. Recovery is not just about rebuilding physical infrastructure but also about restoring communities' social and psychological well-being. Community-based interventions that involve local leaders, mental health professionals, and residents are essential for effective recovery. These interventions often include mental health education, support groups, and community activities that promote social interaction and collective healing (DTAC, 2023b). Research emphasizes that community-driven recovery efforts are more sustainable and effective in addressing the long-term psychological impacts of disasters (SAMHSA, 2021a).

Recent studies in disaster behavioral health have also explored the role of technology in enhancing mental health support during and after disasters. Telehealth and digital mental health platforms have emerged as valuable tools for providing psychological support, especially in remote or underserved areas (SAMHSA, 2024c). A study in "Counseling Psychology Quarterly" highlighted the effectiveness of telehealth interventions in delivering cognitive-behavioral therapy (CBT) to disaster-affected

individuals, demonstrating significant improvements in PTSD and depression symptoms (Arnold et al., 2021). These technological advancements offer promising avenues for expanding access to mental health care in disaster-affected populations.

The Crisis Counseling Assistance and Training Program (CCP) is a critical initiative designed to support disaster recovery through mental health services. Established under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the CCP provides funding to state and local agencies to offer short-term, crisis-oriented counseling to individuals affected by disasters (FEMA, 2023b). The program aims to address immediate emotional needs, reduce stress, and promote psychological recovery by facilitating access to mental health services, supporting community-based interventions, and fostering resilience (SAMHSA, 2021a). By focusing on crisis counseling and training, the CCP helps communities manage the psychological impacts of disasters, enhance their coping mechanisms, and rebuild social cohesion in the aftermath of a crisis.

In conclusion, disaster behavioral health is a critical field that addresses the complex psychological and emotional impacts of disasters. By understanding and applying concepts such as trauma, resilience, crisis intervention, and community recovery, professionals in this field can develop effective strategies to support individuals and communities. Recent studies underscore the importance of early intervention, social support, community engagement, and technological innovations in promoting mental health and resilience in the face of disasters. As the frequency and severity of disasters continue to rise, advancing research and practice in disaster behavioral health remains

essential for building resilient communities and mitigating the psychological toll of these events. While not new, disaster behavioral health concepts may be shadowed by the prioritization of disaster preparedness and recovery. How disasters impact individuals and communities, both mentally and emotionally, may determine resiliency.

Resilience

Following a disaster, individuals may experience distress or anxiety related to safety, health, recovery, and overall well-being. The concepts of disaster behavioral health fully integrate preparedness, response, and recovery to ensure a continuum of care (SAMHSA, n.d.). Disaster behavioral health considers the importance of building effective interventions and strategies to measure and assess resilience and positive health-related outcomes.

Outcomes include mental health, emergency preparedness, social capital, and emergency planning skills. Measurements for such outcomes require evidence-based interventions to ensure impactful mental health interventions during distress. For example, during the COVID-19 pandemic, the COPEWELL rubric, The COAST Project, and Ready CDC were the most effective for building and measuring resilience (Abrash Walton et al., 2021). However, CRM is recommended as a broader application in low-resourced settings.

The CRM focuses on nervous system regulation and is designed for underserved communities with complex trauma histories. This model has shown significant improvements in mental health in various contexts. In a quasi-experimental study, the CRM was implemented among Tutsi genocide survivors in Rwanda (Habimana et al.,

2021). Researchers found that the CRM was significant, and survivors showed substantial mental health improvements. Participants reported reduced symptoms of trauma, including depression, secondary traumatic stress, and improved satisfaction.

As discussed in the literature, the CRM was established for resource-limited settings; however, the model has also shown significant improvement in rural communities and frontline workers. A randomized controlled trial introduced this model to healthcare workers during the COVID-19 pandemic and aimed to increase somatic awareness and well-being and reduce stress (Gaiser et al., 2023). The researchers found that healthcare workers showed increased well-being, teamwork, and stress reduction, which suggests that CRM was a practical support for healthcare workers in crisis situations.

Measured resilience assesses an individual's or community's capacity to withstand and recover from adversity, often quantified through specific indicators or metrics. An example of measured resilience can be found in community resilience assessments conducted after natural disasters. One such assessment was carried out by the International Federation of Red Cross and Red Crescent Societies (IFRC), which developed the Community Resilience Measurement Dashboard (IFRC, n.d.).

An example of a community resilience measurement tool is the Resilience Star. The Resilience Star is made up of six characteristics and 11 dimensions as part of the ‘Roadmap to Community Resilience,’ which offers an in-depth assessment. The six characteristics of a resilient community include understanding risks, social cohesion, economic opportunities, solid infrastructure and accessibility, management of natural

assets, and connectedness (IFRC, n.d.). Additionally, the 11 dimensions include risk management, health, water and sanitation, shelter, food and nutrition security, social cohesion, inclusion, economic opportunities, infrastructure and services, natural resource management, and connectedness (IFRC, n.d.).

The Community Resiliency Model (CRM) is another example of a resource that was established to enhance mental health resources within diverse communities to regulate the nervous system. This model shows positive outcomes when conducted in community settings. For example, one study published in the 'International Journal of Mental Health' found an improvement in depression, anxiety, PTSD symptoms, and resiliency amongst individuals in Sierra Leon post-Ebola (Aréchiga et al., 2024). Additionally, enhancements have been found in overall well-being, stress levels, teamwork, and engagement among healthcare workers (Duva et al., 2022). CRM is also a low-cost and sustainable implementation, which makes it feasible to implement in most communities. This model may be an effective method to utilize, particularly in low-income communities with trained community members (Freeman et al., 2021).

Impacts on Rural Regions

While diverse, rural communities often face barriers such as social inequities, limited accessibility to resources, and stigma. Due to the wide geographic area, rural communities struggle with a lack of healthcare infrastructure, economic and social stressors, and physical challenges such as transportation. Consequently, such challenges cause rural regions to be more at risk when disasters occur. The opioid epidemic, for example, has shown increased prevalence and impact within rural communities, which

has shed light on behavioral health disparities and gaps within rural regions (Disaster Technical Assistance Center [DTAC], 2023a).

Rural or remote regions have smaller, less dense populations associated with specific trades, such as agriculture. Rural areas also account for 97 percent of the United States' land mass and are often disproportionately impacted by disasters (SAMHSA, 2023a). Rural regions often have limited resources, fewer investments in behavioral healthcare staff and facilities, and fewer investments in public health initiatives with limited funding for establishing new programs or initiatives (DTAC, 2023a). Such challenges are often necessary for disaster preparedness, response, and recovery. Providers in these regions also recognize that they are often unprepared to deliver services during or after a disaster.

Disaster preparedness is essential to disaster behavioral health and should incorporate evidence-based strategies to ensure swift and effective recovery. Within these strategies, resiliency and sustainability integration are crucial in disaster planning within rural communities. Researchers studying the recovery after China's Jiangsu Tornado found that government-driven resilience policies may not support long-term sustainability for individuals living in rural areas and that financial capital and institutional participation negatively impact community resilience for future recovery (Yang et al., 2022). Recommendations for these findings are to integrate resilience and sustainability alongside re-evaluating policies to foster long-term rather than short-term resilience and encouraging community-driven initiatives to increase independence and sustainability.

Disasters, whether natural or human-made, have profound and multifaceted effects on rural regions. Rural areas often face unique challenges and vulnerabilities compared to urban centers (SAMHSA, 2023c). One of the primary impacts of disasters in rural regions is the disruption of agriculture, often the backbone of these communities' economies (SAMHSA, 2023c). Floods, droughts, and storms can destroy crops and livestock, leading to immediate food shortages and long-term economic instability (Crumb et al., 2021). The loss of agricultural productivity can have a cascading effect, resulting in financial distress for farmers, increased food prices, and even migration as people leave in search of better opportunities.

Despite these challenges, rural communities often exhibit remarkable resilience and strength in the face of disasters. The close-knit nature of these communities fosters a strong sense of solidarity and mutual support (SAMHSA, 2023c). Neighbors help each other rebuild homes, share resources, and provide emotional support. This communal spirit can be a significant asset during recovery efforts, enabling faster and more effective rebuilding. Additionally, local knowledge of the land and environment can be invaluable in disaster preparedness and response, as residents often have a deep understanding of the local terrain and weather patterns.

However, rural areas also face significant barriers that can hinder their ability to respond to and recover from disasters. One major barrier is the lack of infrastructure. Rural regions often have limited access to healthcare, transportation, and communication networks (SAMHSA, 2023a). During a disaster, this can translate to slower response times, difficulty accessing emergency services, and challenges coordinating relief efforts.

Moreover, the distance from urban centers means that aid and resources may take longer to arrive, exacerbating the immediate impacts of the disaster.

The economic impacts of disasters on rural areas can be long-lasting. Beyond the immediate loss of crops and livestock, disasters can damage infrastructure such as roads, bridges, and irrigation systems, which are critical for agricultural activities. Repairing and rebuilding this infrastructure can be prohibitive for many rural communities, leading to prolonged periods of economic hardship (Yang et al., 2022). Additionally, the loss of income can result in reduced spending in local markets, affecting other businesses and services in the community and leading to a broader economic downturn.

Environmental impacts are another significant concern for rural regions hit by disasters. Natural disasters like floods and hurricanes can lead to soil erosion, water contamination, and loss of biodiversity. These environmental changes can have long-term effects on agricultural productivity and the ecosystem's overall health (Yang et al., 2022). In some cases, disasters can also trigger secondary environmental issues, such as landslides or the spread of invasive species, further complicating recovery efforts and long-term sustainability.

Summary

In conclusion, while rural regions face significant challenges in the wake of disasters, their strengths in community cohesion and local knowledge can be powerful assets in recovery efforts. Addressing the barriers to effective disaster response and recovery, such as infrastructure deficits and economic vulnerabilities, is crucial. By investing in resilient infrastructure, enhancing access to resources, and fostering

sustainable agricultural practices, rural communities can better withstand the impacts of future disasters and build a more secure and prosperous future.

Section 2: The Project

This project focused on enhancing advocacy for disaster behavioral health in rural Nevada through a force field analysis (Graf, 2021). I used the analysis of the findings from this study to create a comprehensive white paper that synthesizes existing research, trends, and policies identified by participants, and made recommendations for advocacy based on the research findings. I contextualized study results and proposed best practices linked to actionable recommendations, demonstrating the practical implications of findings for various stakeholders. I recruited 11 participants, combining subject matter experts and community residents to ensure diverse perspectives. Through a force field analysis, I identified driving and restraining forces impacting disaster behavioral health on rural Nevada. Ultimately, the findings of this study can help inform policy development and improve behavioral health outcomes in rural communities by addressing the unique challenges they face.

Purpose Statement

The purpose of this qualitative study was to identify the gaps and assets of the disaster behavioral health services in rural Nevada through a force field analysis to inform and advocate for the opportunity to expand and enhance existing services to support rural and frontier communities and to enhance community resilience post-disaster. I conducted a force field analysis that engaged key stakeholders, which included subject matter experts, mental and behavioral health providers, community organizations, and community members within rural and frontier Nevada. The findings of this study

provided critical insights to current service gaps and informed the development of a strategic plan to guide future advocacy and improvement efforts.

Project Design

This study was completed in two main components, using force field analysis (Graf, 2021). This method was chosen to assess rural Nevada's current situation regarding disaster behavioral health, define expected outcomes, and identify both driving and restraining forces, which was evaluated to create an action plan to help advocate and inform legislative policies or strategic planning. Force field analysis is an effective problem-solving tool for advocacy, as it prioritizes input from individuals with lived experience and subject matter experts (Mattaini et al., 2020). It not only helps prioritize actions but also facilitates stakeholder engagement and promotes critical thinking to identify barriers and opportunities. For this study, it highlighted key strengths and opportunities to guide strategic planning for disaster behavioral health services throughout rural Nevada.

The force field analysis findings supported the development of a white paper that provided foundational insights, context, and evidence to support my findings. White papers explore the current landscape, including existing research, trends, and policies, which help frame the study results within a broader context, highlighting the relevance or implications (University of Massachusetts, 2023). This white paper (See Appendix C) synthesized relevant research and data and offers a foundation for advocacy that can explain the significance of my findings.

Role of the Researcher

As a qualitative researcher, my role is to act as both a facilitator and interpreter throughout the data collection and analysis process. I was responsible for designing the study, identifying appropriate participants, and guiding data collection methods per the force field analysis method. My primary objective was to create a safe and open environment where participants felt comfortable sharing their experiences, particularly given the sensitive topic of disaster behavioral health in rural Nevada. By actively listening and engaging with participants, I gathered rich, in-depth data that reflects their perspectives, challenges, and insights (Graf, 2021). Once the data was collected, my role changed to analysis, where I identified key themes, patterns, and forces driving or hindering behavioral health outcomes in these communities (Graf, 2021). By employing rigorous qualitative methods and reflexivity, I presented my findings that are both authentic and reflective of the lived experiences of those affected by disaster behavioral health issues, ultimately contributing to valuable knowledge in this field.

There are preconceived notions I may have. For example, I remained mindful of selection bias, as I could not select participants based on specific characteristics, experiences, or circumstances, as that would lead to an incomplete or unrepresentative sample. I mitigated this bias by offering random and anonymous surveys via designated email listservs, of which I had no control. Throughout this process, I stayed mindful of my own biases and ensured that my interpretations were grounded in the participants' voices.

Ethical considerations are central to my role in ensuring that the study was conducted with integrity and respect for the participants. One of the primary responsibilities was maintaining the privacy and confidentiality of participants, especially when dealing with sensitive topics. This involved ensuring that personal information was anonymized and securely stored, and that participants' identities were protected at all stages of the research. Additionally, informed consent is a key ethical obligation; I ensured that I clearly communicated the purpose of the study, the participants' rights, and any potential risks or benefits, ensuring that consent was freely given without any coercion.

My primary ethical responsibilities were to protect participants' privacy, ensure informed consent, and avoid causing harm. This included safeguarding their identities, clearly explaining the study's purpose and their rights, and providing emotional support if discussing sensitive topics caused distress. I also needed to remain neutral and avoid letting my personal biases affect the data collection or analysis. Overall, I wanted to ensure the study design respected participants' well-being, dignity, and autonomy.

Participant Recruitment and Sampling Strategy

The population for this study included subject matter experts in the field of behavioral health, disaster behavioral health, and disaster preparedness. Additionally, it was valuable to include community residents within rural Nevada, as this study directly relates to their communities. Recruitment included reaching out to the administrators of the state of Nevada’s Behavioral Health Planning and Advisory Council (BHPAC), Regional Behavioral Health Policy Boards, and rural Nevada-focused community

organizations email lists to send the initial survey and study's informed consent out via email listserv. Individuals that were on the email listservs for BHPAC and the Regional Behavioral Health Policy boards were considered stakeholders in some capacity, and valued participants. Additionally, rural Nevada-focused community organizations are typically housed in rural Nevada, which automatically qualified them for this study.

An ideal sample for study participants encompassed a diverse range of perspectives to effectively capture the complexities of disaster behavioral health in rural Nevada. Specific criteria for participants included various stakeholder groups, including rural-based behavioral health professionals, Nevada's Regional Behavioral Health Coordinators, community residents, subject matter experts within disaster behavioral health, and Nevada's Department of Emergency Management, Disaster Planning Division. Additionally, geographic diversity was important for this sample, as there are various counties throughout Nevada that are considered rural. Lastly, I wanted to ensure broad representation of the population and individuals with various levels of lived experience would aid in capturing a range of insight. While there was no fixed number for an ideal sample size, I obtained 11 participants to provide meaningful data.

Data Collection

This study was conducted using a force field analysis design, which is often used to diagnose a problem or gap (ASQ, n.d.). The initial survey with open-ended questions was sent out via email listservs, which included the informed consent prior to being able to access the survey. This method allowed participants to complete the initial survey anonymously. The informed consent required participant acknowledgment and

acceptance before the survey could be viewed. I used SurveyMonkey to collect data, which was user-friendly, compatible with various systems, and provided me with the capacity to analyze the data once the surveys were completed. Once the initial survey was released, I requested that participants respond immediately, and a reminder was sent out one week before closing. Within the initial survey, I also included an option for participants to either accept or deny participating in a confidential follow-up survey for the rating and ranking portion of the identified forces. If participants elected to participate in the second survey, I provided a section for them to input an email address they would like to use, which was kept confidential.

I took one week to analyze the initial data, identifying the driving and restraining forces, before I released the secondary survey. The participants had two weeks to complete the second survey, where they were invited to rank the ideas that have been summarized from the first survey. All data was recorded via SurveyMonkey, which allowed me to analyze all collected data. As the first survey had too few participants, I expanded my reach by emailing rural Nevada-based community organizations, such as NAMI Western Nevada, NAMI Nevada, and Frontier Community Coalition to gather additional participants.

Debriefing participants included providing them with a summary of my findings from the initial survey and offered a follow-up meeting to discuss any questions and concerns. I also ensured that gratitude was expressed for their contributions and engagement in this study.

Data Analysis

Data Analysis Plan

Throughout data analysis, I focused on identifying and categorizing the driving and restraining forces that influence disaster behavioral health in rural Nevada. First, I manually organized the data by grouping the forces that promoted positive outcomes (driving forces) and those that created barriers or challenges (restraining forces). Each force was then carefully examined for patterns and recurring themes, drawing from participants' perspectives collected from surveys.

Next, I had participants assess the relative strength and impact of each identified force. This involved assigning a ranking to each force based on how significantly it affects disaster behavioral health, allowing visualization of which forces are most influential. I then looked for potential connections or interactions between both forces, identifying areas where advocacy efforts could either enhance the driving force or reduce the restraining forces' impact.

Lastly, I interpreted these findings within the context of this study, using them to develop actionable recommendations for improving disaster behavioral health services. This approach ensured that the analysis not only highlighted the key forces at play but also offered practical insights for addressing the identified challenges.

During the analysis process, I had to familiarize myself with the data collected by reviewing the completed surveys numerous times to gain a comprehensive understanding of participants' perspectives. Following this, I broke out the data into smaller, meaningful units. The data was categorized into driving forces and restraining forces per the force

field analysis process (ASQ, n.d.). From there, I organized each force into broader themes. For example, driving forces may be broken into such themes as *community support* or *access to healthcare*, whereas restraining forces may include *lack of resources* or *cultural barriers*. These were then prioritized based on participants' perspectives and impact, helping to identify the most influential factors. The simplest method to analyze this data included using SurveyMonkey's analysis tool and digitally annotating the exported documents to identify key themes.

Lastly, thematic mapping allowed me to create a visual representation of the relationship between the two forces (Naeem et al, 2023). This map highlighted interactions and illustrated how certain driving forces may aid in mitigating restraining forces. The final step was to interpret and synthesize established themes and offer actionable recommendations.

Addressing discrepant cases in force field analysis was valuable for ensuring the validity of findings. I addressed such cases by examining each one closely to understand why they differed. These discrepant cases were categorized as other opinions that enabled me to offer an alternative to participants' perspectives and opinions without judgment. Integrating these cases into the thematic framework provided a deeper understanding rather than seeing them as a contradiction. Providing transparent reporting in such discrepancies to enhance the credibility of the research and discussing how they were handled offers a comprehensive view of the findings. I maintained an open mindset to revising my initial conclusion based on the discrepant cases, leading to more accurate interpretations and recommendations that reflect the complexity of my study.

Ethical Considerations for Data Collection

In conducting a qualitative research study using force field analysis to address disaster behavioral health in rural Nevada, it was essential to prioritize the ethical treatment of all participants. Given the sensitive nature of disaster behavioral health, particular care was taken to protect participants' emotional well-being and confidentiality throughout the research process. Several key steps were taken to ensure this protection.

First, informed consent was obtained, ensuring that participants fully understood the purpose of the research, what it entailed, and any potential risks involved, with participation being entirely voluntary. A trauma-informed approach was used, emphasizing the creation of a safe environment, recognizing signs of trauma, and using sensitive language to avoid re-traumatization. Emotional support was made available, with mental health resources on hand to assist if any participant experienced distress.

Anonymity and confidentiality were safeguarded by anonymizing data and ensuring secure storage, with only authorized personnel having access to sensitive information. Participants were given the option to withdraw from the research without any consequences. Cultural sensitivity was prioritized by respecting and tailoring the approach to the cultural backgrounds of participants, particularly when working with vulnerable or marginalized groups. Additionally, the research process was designed to minimize emotional distress by avoiding unnecessarily distressing topics and allowing participants to pause or stop when needed. These combined measures ensured a compassionate, respectful, and secure environment for participants throughout the research process.

To safeguard participants' well-being, I ensured that all participants were fully informed about the purpose of the study, their role, and any potential risks or benefits associated with participation. This information was provided in clear, accessible language both verbally and in writing. Participants signed an informed consent form that outlined their right to voluntarily participate or withdraw at any stage without any negative repercussions. Surveys were provided in English and Spanish, as needed, to ensure informed consent was genuinely obtained and participants were accommodated based on their preferred written and spoken language.

To protect the privacy and confidentiality of participants, all data collected was anonymized, with each survey assigned a number. Personal identifiers were removed to prevent the identification of individuals or specific communities, especially given the small, close-knit nature of rural Nevada populations. Data was stored securely in password-protected files, accessible only to the researcher.

The study adhered to the principles outlined by the Institutional Review Board (IRB) to ensure all participants were treated with respect, dignity, and care, while minimizing risks and maximizing benefits. These measures ensured that the research was conducted ethically and that participants' rights and well-being were fully protected.

Establishing trustworthiness for this force field analysis involved key strategies that ensured my findings were credible and accurately reflected the studied context. One such method used was member checking, wherein participants voluntarily returned to complete a second survey based on my analysis of their initial survey. This allowed participants to prioritize and confirm the analyzed results and ensured that it accurately

represented their perspectives. Clear documentation and organization were also prioritized to safeguard data collection, coding decisions, and thematic development, which allowed others to follow the analytical process and assess the validity of my conclusions. Additionally, reflexivity was vital to establishing validity, as this required me to acknowledge and address personal biases that may have influenced my analysis and interpretation of the data.

In conducting research that involves human participants, it was essential to adhere to institutional permissions, including obtaining Institutional Review Board (IRB) approval. Before recruiting my participants or accessing any data, I submitted a formal IRB application and received approval. The IRB evaluated the ethical implications of my study, ensuring that the rights, welfare, and privacy of participants were adequately protected through processes such as informed consent and secure data management.

All recruitment materials and processes were carefully designed to ensure that participation was voluntary, and that individuals fully understood the nature of the study, including any potential risks or benefits. Recruitment was conducted via email through various listservs. The recruitment process was transparent and fair, with materials that clearly explained participants' rights, the confidentiality of their data, and the option to withdraw from the study at any time without penalty. A clear consent process was implemented in both English and Spanish, as needed, ensuring that all participants acknowledged and consented before participating.

Ethical considerations related to data collection and intervention activities required careful planning. Participants were free to refuse participation or withdraw early

from the study without facing negative consequences. Protocols were established to respond to any adverse events that might have arisen during the study, including pausing data collection or offering referrals to appropriate support services. Data was handled with strict confidentiality, and any identifiable information was securely stored and de-identified by assigning numbers to protect participant privacy.

I employed rigorous methods to ensure the trustworthiness of data collection and analysis. Data was gathered using a semi-structured survey via SurveyMonkey, a validated instrument. Each phase of data collection was guided by me, emphasizing consistency and organization. During the analysis portion of this study, I prioritized transparency through maintaining organized documents, addressing potential limitations, and ensuring reproducibility of results. Additionally, ethical oversight, such as IRB approval, safeguarded participants' rights and promoted integrity in research practices.

Summary

With this project, I aimed to assist in enhancing disaster behavioral health in rural Nevada through a comprehensive white paper that synthesized relevant research and policies. By contextualizing study results and proposing best practices linked to recommendations, I illustrated the practical implications of the findings for diverse stakeholders, aiding in policy development. As a qualitative researcher, I facilitated data collection and analysis, ensuring a safe environment for participants to share their experiences while prioritizing ethical considerations such as privacy, informed consent, and emotional support.

I recruited 11 participants, including subject matter experts and community residents, to achieve a diverse sample reflective of rural Nevada's demographics. Employing force field analysis, I identified driving and restraining forces affecting disaster behavioral health, with validity ensured through member checking and rigorous documentation. Data was collected via SurveyMonkey and analyzed thematically, with an emphasis on transparency and addressing any discrepant cases to enrich the findings. Overall, ethical considerations guided the treatment of participants, ensuring their well-being while adhering to Institutional Review Board principles. Building on the rationale and methodology outlined in the proposal, the following project outline details the specific steps and timeline that were followed to conduct the force field analysis and achieve the study's objectives.

Section 3: Results of the Study

Introduction

This section presents the key findings from a force field analysis study exploring behavioral health resilience in the context of disaster response in rural Nevada. This research identified their ideas about driving and restraining forces influencing community resilience, as reported by both workforce professionals and rural residents. The analysis of the data revealed key themes related to emotional support, access to services, training needs, and infrastructure limitations. I conducted a comparative analysis to see if there were differences in priorities between community members and professionals, and a follow-up survey to rank these themes to guide implementation. With these results, I offer a prioritized framework for improving behavioral health preparedness and recovery in rural settings.

Research Question(s)

The research question for the study was: What are the existing gaps and assets of the disaster behavioral health services and existing mental and behavioral health supports in rural Nevada to aid community resilience post-disaster?

Presentation of the Results

An FFA model was used as the methodology for this qualitative study. The purpose of which was to identify driving and restraining forces related to mental and behavioral health supports in rural Nevada. A total of 11 participants were recruited by email listservs through Nevada's Division of Public and Behavioral Health, NAMI Nevada, NAMI Western Nevada, and individual outreach and completed the initial

survey, with eight participants identifying as workforce professionals. Workforce professionals were defined as someone who is employed in the state of Nevada that works primarily with mental or behavioral health services or a government employee. The remaining three identified as community members residing in rural Nevada. Participants represented diverse roles within behavioral health and crisis response. And community-based support systems. An additional nine participants completed a follow-up survey, providing deeper insight into the themes identified in the initial analysis. This sample reflects a balance of professional expertise and lived experience relevant to disaster behavioral health resilience in rural settings.

I employed a sequential qualitative approach using FFA as the guiding framework to identify driving and restraining forces influencing disaster behavioral health in rural Nevada. Once the initial survey was completed, responses were exported and annotated to highlight key words and phrases, then coded manually using an inductive thematic analysis. Once key words and phrases were identified, they were then grouped into broader categories that reflected thematic domains, such as emotional support, access to services, structural barriers, etc. Throughout this process, I took notes to track emerging ideas and patterns related to both content and language.

Following this initial analysis, a set of seven distinct focus areas were established based on the most frequently occurring and strongly emphasized themes. These areas formed the basis of the follow-up survey, which asked participants to rank the focus areas in order of importance. The follow-up survey was designed to validate the initial thematic findings and assess their perceived relevance and priority from a broader perspective.

This two-phased analysis strategy provided both depth and confirmation, allowing the study to first explore the nuances of participant experience and then determine which themes were most actionable or pressing according to community and professional judgement.

Findings

The initial survey identified key driving and restraining forces influencing behavioral health resilience, including emotional support, training needs, access barriers, and system-level challenges. A comparative analysis highlighted differences in emphasis between groups, with community members focusing on relational support and workforce professionals highlighting formal training and infrastructure. The follow-up survey validated and ranked these themes, reinforcing the importance of emotional support, resource navigation, and volunteer capacity. Together, the findings offer a structured understanding of resilience priorities to inform community-based disaster planning.

Initial Survey

The initial survey responses revealed a strong consensus among participants regarding the critical roles that both community members and professionals can play in supporting disaster recovery in rural Nevada. Community members were seen not only as providers of physical aid but as essential sources of emotional support. However, as participant noted, traditional response systems may fall short, asserting, "Professionals…tend to have workplace cultures that don't support maintenance or building of healthy coping or resiliency skills…they are probably not the professions to [support resiliency in others]." Participants emphasized the importance of neighbors

checking in on one another, offering a listening ear, and serving as informal navigators to connect others with available services. As another participant stated, “Some hands-on training like how to calm someone down, what to say, and how to guide them to help would be useful. Not everyone wants to be a therapist, but most people want to help, they just don’t know how.” This peer-based, trust-centered approach reflects the unique social dynamics of rural communities and highlights the centrality of grassroots support in trauma recovery.

Training and preparedness emerged as a major theme. Workforce professionals advocated for structured, evidence-based training such as Psychological First Aid (PFA), Mental Health First Aid (MHFA), and suicide prevention techniques including SafeTALK and ASIST. Respondents also highlighted the importance of cultural competency and trauma-informed care, especially when working with tribal communities, immigrant populations, and agricultural workers. Community members similarly emphasized the need for basic emotional support and de-escalation training. Many believed that even minimal preparation, such as knowing how to recognize signs of trauma or where to refer someone, could make a significant difference in post-disaster recovery efforts.

Barriers to both access and effectiveness of disaster behavioral health services were clearly articulated. Participants pointed to geographic isolation, limited local healthcare infrastructure, and a severe shortage of mental health providers as structural challenges that hinder timely response. Additionally, poor broadband connectivity and transportation issues were frequently cited as compounding factors that reduce the

viability of telehealth and mobile services. Participants also described the pervasive stigma around mental health in rural communities, noting that this discourages individuals from seeking support, particularly when services are provided by unfamiliar or non-local professionals. A lack of interagency coordination, short-term or pilot-based programming, and unstable funding streams were further identified as limitations that prevent sustained and effective behavioral health interventions.

Despite these challenges, participants also proposed solutions that align with the needs and capacities of rural communities. Many recommended the development of a rural-specific trauma response manual that includes local contact lists, culturally tailored training modules, and actionable guidance for both professionals and community members. Respondents also expressed strong interest in regional collaboration, sustainability planning, and the revival or expansion of previously effective programs like the Nevada Resilience Project. The findings from the initial survey underscore the urgency of addressing behavioral health resilience in rural disaster planning, and suggest that community-driven, low-cost, and trauma-informed strategies hold significant promise.

Comparative Analysis: Community Members vs. Workforce Professionals

To better under the alignment and divergence between lived experience and professional perspectives, responses were analyzed based on participant roles. Community members were defined as individuals who reside in rural Nevada, while a workforce professional is employed in the state of Nevada that works primarily with mental or behavioral health services or as a government employee. While both groups

shared a concern for improving disaster behavioral health response in rural Nevada, their focus areas and priorities revealed distinct patterns shaped by their respective contexts.

Table 1. Comparative Analysis: Community Members vs. Workforce Professionals

Category	Workforce Professionals	Community Members
Training Needs	• Emphasis on formal certifications: MHFA, PFA, ASIST, SafeTALK, trauma-informed care • Need for interprofessional coordination training and crisis protocols	• Basic emotional support training (e.g., how to listen, calm someone, make referrals) • Preference for hands-on, practical, low-barrier tools
Resource Awareness	• Familiar with state-run programs (CARE Teams, 988, MCRT, etc.)	• Less familiarity with formal programs; rely more on informal networks like churches or neighbors
Barriers Identified	• Funding inconsistencies, staff burnout, poor interagency coordination • Programs not designed for rural realities	• Distance to care, lack of trust in providers, lack of transportation or broadband • Services feel "not made for us" or out of reach
Suggested Manual Content	• Disaster protocols, response roles, funding maps, telehealth guidance	• Local contact lists, simple checklists, stories from similar towns
Role in Response	• System builders: responders, planners, coordinators	• Local allies: emotional support, resource navigators, safe space creators
Perceived Gaps in Current System	• Cultural change in professional settings (law enforcement, EMS) needed for trauma recovery	• Lack of access, awareness, and inclusion in planning
View on Program Sustainability	• Concerned with evaluation frameworks, policy support, and continuity post-grant	• Desire for continuity but skeptical about outside programs staying long-term
Use of Technology	• Stress need for telehealth expansion and digital infrastructure	• Acknowledge internet gaps; prefer in-person or hybrid solutions

Trust & Engagement	• Want buy-in from rural communities for professional initiatives	• Emphasize local trust and cultural familiarity as prerequisites for engagement

Both groups emphasized the importance of trauma recovery, emotional support, and accessible mental health resources. However, community members more often centered their responses on relational and peer-based support, emphasizing trust, local familiarity, and informal caregiving roles. Many community members highlighted the need for basic tools, such as how to listen, offer emotional support, or connect someone with services. They also frequently mentioned the lack of clear information and guidance, expressing a desire for simple, step-by-step manuals tailored to local needs.

In contrast, workforce professionals tended to focus more on formal training, system-level changes, and infrastructure development. Their responses prioritized interventions such as Psychological First Aid (PFA), Mental Health First Aid (MHFA), trauma-informed care, and professional burnout prevention. They were also more likely to identify barriers at the organizational or policy level, such as fragmented interagency coordination or unsustainable funding models.

A key takeaway from the comparison is that while both groups acknowledged the same structural issues including limited access, geographic isolation, and workforce shortages, they approached solutions differently. Community members highlighted human connection, while professionals stressed capacity-building and service expansion. These differences highlight the need for integrated strategies that bridge professional expertise with community-based knowledge, ensuring that behavioral health interventions are not only evidence-based but also culturally embedded and locally

trusted. Additionally, a small number of participants highlighted top-down structural reforms, such as standardized procedures and administrative protocols, without reference to trauma recovery, community trust, or peer-based support. While these perspectives were less common, they highlight the presence of divergent priorities across stakeholder groups.

Follow-up Survey

A follow-up survey was designed to validate and prioritize the thematic findings identified in the initial survey. While the first survey provided rich qualitative insights into the perceived challenges and opportunities for enhancing disaster behavioral health in rural Nevada, the follow-up allowed participants to rank actionable focus areas. Together, the two data sets create a robust picture of the needs, values, and preferences expressed by both community members and workforce professionals.

A clear throughline between the two surveys is the emphasis on human connectional and relational support. In the initial survey, participants repeatedly highlighted the importance of community members being present, listening, and offering emotional support in the aftermath of a disaster. This aligns directly with the highest-priority item in the follow-up survey, which is to provide more professional emotional support and listening opportunities for community members. This reinforces the notion that post-disaster interventions must prioritize emotional care and empathetic presence over clinical or bureaucratic structures, especially in small, close-knit communities.

Similarly, the initial survey identified confusion and fragmentation in accessing services as key barriers. Participants described difficulty locating resources, limited

awareness of available support, and a lack of user-friendly referral systems. This theme is echoed in the second highest-ranked priority in the follow-up survey to improve online and in-person resource navigation and clear information sharing. Participants appear to be calling for centralized, accessible, and clear systems whether printed materials, websites, or peer navigators, to help people find the help they need.

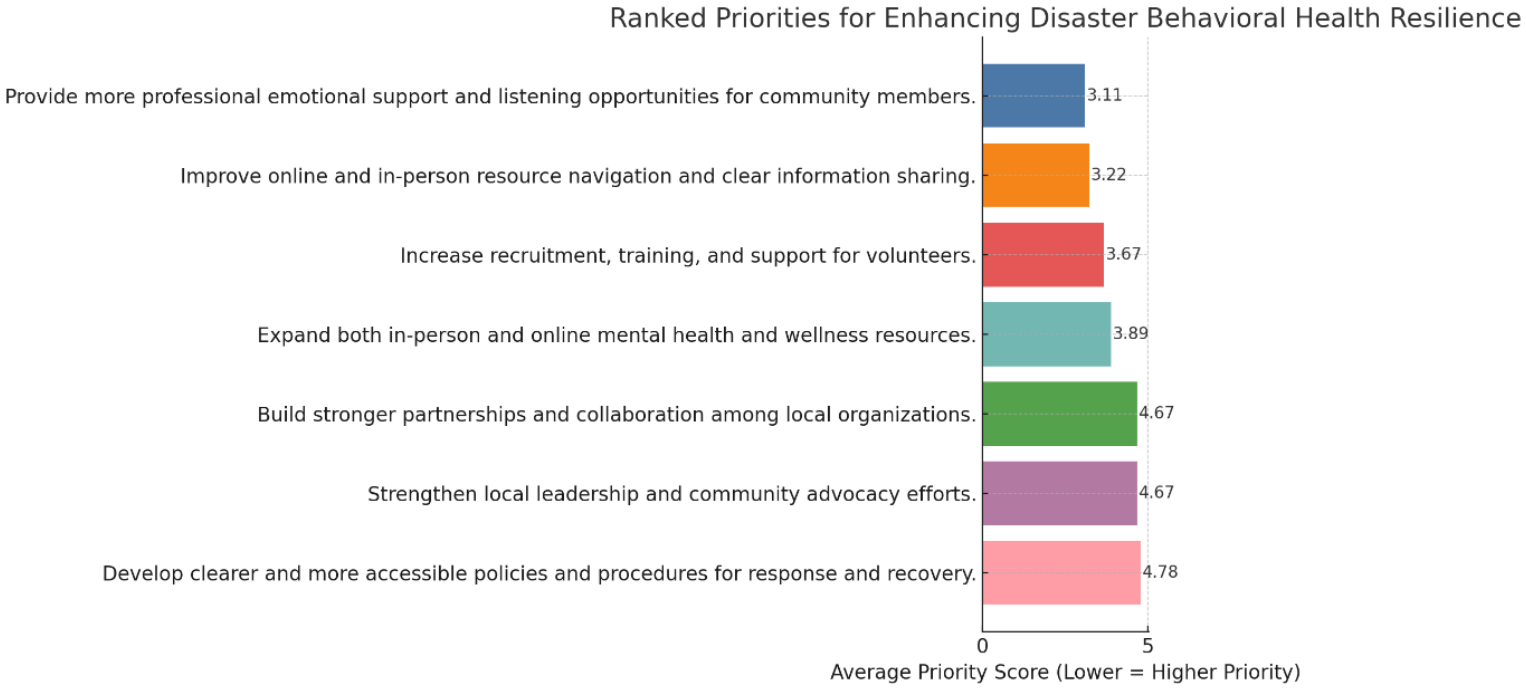
The theme of volunteer involvement also appears across both instruments. The initial survey noted that many rural responders are volunteers who often carry multiple roles and lack formal training. In the follow-up survey increasing recruitment, training, and support for volunteers was ranked third. This reflects strong community interest in building informal capacity and peer-led models, a key principle of the Community Resiliency Model framework underpinning this study.

In contrast, items related to policy, procedures, and leadership development, while discussed in the initial survey as structural needs, were ranked lowest in priority in the follow-up. This may suggest a disconnect between what systems typically prioritize (e.g., interagency protocols, emergency operations plan) and what communities feel they need to recover, which is clarity, connection, and compassionate care. It may also indicate community fatigue or skepticism toward institutional responses, reinforcing the need for participatory, bottom-up approaches to behavioral health planning.

Together, the two surveys offer both breadth and depth in understanding disaster behavioral health needs in rural Nevada. The initial qualitative data highlighted themes of trust, access, sustainability, and emotional support, while the follow-up data provided a practical ranking of these themes for implementation. This layered approach enhances the

credibility of the findings and provides a clear foundation for targeted, community-informed program development and policy advocacy.

Figure 1. Ranked Priorities for Enhancing Disaster Behavioral Health Resilience



The follow-up survey findings reveal that participants most strongly prioritize emotional and interpersonal aspects of disaster behavioral health. Specifically, the highest-ranked need was for professional emotional support and listening opportunities, followed by improved navigation of mental health resources and increased support for volunteers. Conversely, participants ranked structural and policy development, such as clearer procedures and leadership training, as lower priorities. These results reinforce the earlier thematic findings of rural communities valuing trust, human-centered interventions and express a need for practical, relational, and low-barrier strategies over bureaucratic or administrative fixes.

Alignment with the Community Resilience Model

The findings from both the initial and follow-up surveys align strongly with the Community Resiliency Model (CRM), which underlines accessible, community-based approaches to trauma recovery and mental health support. Across both data sets, participants consistently ranked emotional regulation, listening, and interpersonal connection, which are core tenants of CRM. Community members, in particular, voiced a desire for peer-based tools and simple training such as Psychological First Aid, which mirrors CRM's focus on self-and-co-regulation. Workforce professionals echoed these priorities, calling for broader dissemination of trauma-informed practices and culturally responsive care. The CRM's strength lies in its ability to empower non-clinical community members to support one another, which is a need clearly and repeatedly highlighted in the qualitative responses.

The CRM's emphasis on sustainability, accessibility, and community empowerment is also reinforced by the data. Participants expressed frustration with short-term, grant-funded behavioral health programs and highlighted the need for low-cost, locally grounded, and scalable training options. Several respondents specifically called for training that could be taught to volunteers or community leaders, further demonstrating demand for CRM-aligned models that do not rely solely on licensed mental or behavioral health professionals.

In addition, the findings strongly align with the National Risk Index (NRI), which considers factors that such as social vulnerability, exposure to natural hazards, and a community's ability to respond and recover. Participants described multiple components

of social vulnerability including limited broadband, poor transportation, economic instability, and stigma around mental health, all of which contribute to a low resilience score in NRI modeling. Furthermore, the repeated calls for better communication, cross-county collaboration, and long-term resource planning reflect the types of capacity-building efforts the NRI identifies as critical for improving resilience scores.

Together, the alignment of both CRM and NRI with the data illustrates a cohesive picture of rural communities in Nevada facing heightened behavioral health risks due to systemic vulnerabilities but possessing strong community-level assets that can be mobilized through culturally relevant, trauma-informed, and community-empowering strategies.

Other Opinions

While the majority of participant responses aligned around common themes, such as the importance of emotional support, peer connection, and accessible training, several responses stood out as other opinions due to tone, emphasis, or prioritization. These opinions offer valuable insight into the diversity of perspectives within rural behavioral health systems.

One notable example was a workforce professional who attributed the limited effectiveness of disaster behavioral health services primarily to “political will and [funding],” systems-level interpretation compared to the relational focus emphasized by most other participants. Another opinion in the follow-up survey, where one respondent ranked “providing emotional support and listening opportunities for community members” as the lowest priority, directly contrasting with the majority, who ranked it as

most important. This may reflect a participant with a more technical or policy-driven viewpoint, rather than one grounded in frontline or community-centered care.

These opinions do not diminish the overall findings; rather, they enrich the analysis by illustrating the range of experiences and expectations across different roles and professional lenses. Based on these responses, further actional should include intentional engagement with individuals who hold systems-level or policy-making roles. Doing so can help surface structural challenges, such as funding instability, interagency misalignment, or bureaucratic fatigue, that may not be fully captured through community-centered responses alone. Integrating these perspectives into planning efforts will help ensure that proposed behavioral health strategies are not only locally grounded but also informed by institutional realities. Future qualitative interviews or stakeholder workshops may be warranted to further explore these perspectives and incorporate them into more comprehensive disaster response frameworks.

Summary

Overall, the findings revealed strong agreement across participant groups regarding the importance of emotional support, peer connection, and culturally responsive care in post-disaster recovery. Community members emphasized relational support and local trust, while workforce professionals focused on formal training, interagency coordination, and sustainable infrastructure. Both groups identified common barriers including workforce shortages, geographic isolation, limited broadband, and stigma surrounding mental health. The follow-up survey reinforced these themes, ranking emotional support, resource navigation, and volunteer capacity as top priorities, while

placing lower emphasis on policy and procedural development. These responses, though limited, highlight a need for system-level perspectives to inform broader planning. Together, these findings underscore the importance of integrated, trauma-informed, and community-empowered approaches to disaster behavioral health in Nevada.

Section 4: Conclusion and Reflections

Introduction

Embarking on a doctoral journey is never a straight path, and mine was no exception. What began as an uncertain leap of faith eventually became a deeply transformational experience, both personally and professionally. This reflection explores how I evolved as a scholar and human services practitioner over the course of my doctoral studies. It outlines the internal and external challenges I faced, how I overcame them, and how this process sharpened my purpose and amplified my voice in the field. Additionally, I provide research-based recommendations for improving disaster behavioral health capacity in rural communities, an area of study that has become central to my identity as a practitioner-scholar and advocate.

Reflection of Self

In all sincerity, I started this journey on a bit of a whim. I had a clear vision of what I wanted to do, but not a clear idea of how I would apply what I learned. I began this path in 2021, and about a year in, I realized I needed to switch programs. That decision turned out to be one of the best I have ever made. During that pivotal year, I discovered a true passion for the work I was doing and began to shape how I wanted to apply my degree in the real world.

This has been a journey in every sense of the word, but one of the best kinds. Through it, I have learned more about what I want from life and how I want to serve and uplift my community. While the process has been long and challenging, I remain incredibly grateful for every step. There were times I wanted to give up, but I kept going.

Beyond the academic demands, life did not slow down. I changed jobs, moved away from the state I had originally focused my study on, mourned the loss of loved ones, embraced new opportunities, and adapted through it all. If there is one thing this journey has shown me, it is that I am capable of more than I ever imagined.

Reflection of Scholar-Practitioner

Throughout my doctoral journey, I have grown significantly as both a scholar and a human services practitioner. Early on, I often questioned whether I belonged in academic spaces, whether my voice, shaped by lived experience and frontline work, could hold weight among theoretical or conceptual frameworks and research. Over time, I realized that not only was there space for my voice, but that it brought necessary insight to the field. I became more confident in my ability to critically analyze systems, engage in ethical research, and connect academic knowledge to real-world practice. My thinking has expanded from addressing surface-level problems to interrogating root causes, particularly around prevention, intervention, and advocacy. This shift has allowed me to deepen my impact as a practitioner by applying research-backed strategies in ways that are culturally responsive and trauma-informed.

The road has not been easy. One of the greatest challenges I faced was balancing the demands of doctoral work with a full-time leadership role and the unpredictable nature of life. I navigated career transitions, personal losses, relocation, and moments of burnout. There were points where imposter syndrome crept in or feeling frustration over obtaining participants for my study, which made me question whether I should continue. I overcame these challenges by leaning on my community, setting firm boundaries with

myself, and staying grounded in my "why." Reminding myself that this was more than just a degree but about transforming how services are delivered and ensuring that vulnerable populations are not just served but seen and empowered. Each barrier became part of the foundation I now stand on as a more resilient, informed, and purpose-driven professional.

Recommendations for Human Services Organization or Human Services Field Advocacy

The results of this study suggest that rural communities in Nevada would benefit from implementing community-based disaster behavioral health interventions, particularly those that engage non-clinical individuals in trauma-informed care models. Community-based organizations and local health systems are encouraged to adopt peer-led frameworks, such as the Community Resiliency Model, which have been shown to improve emotional regulation and resilience in disaster-affected populations. Training programs aligned with such frameworks may address gaps in support following disasters by equipping community members with the skills necessary to provide informal, yet structured, emotional support.

In addition to programmatic implementation, organizations can play a critical role in advocacy efforts that promote equitable access to disaster behavioral health services. Key advocacy opportunities include lobbying for increased and sustained stated funding for rural behavioral health infrastructure, advocating for policies that reduce barriers to peer training and certification, and promoting legislation that integrates behavioral health into all stages of disaster planning and response. These efforts are aligned with the need

to reduce disparities in behavioral health access, especially in geographically isolated and socially vulnerable communities.

Advocacy should be guided by empirical evidence and community priorities. Organizations can amplify their influence by documenting pilot program outcomes, engaging in collaborative coalitions, and promoting culturally and contextually responsive solutions. These steps will ensure that rural communities are not only included in statewide behavioral health strategies but positioned as leaders in their own recovery and resilience.

Summary

Looking back, this journey has shaped me in ways I could never have fully anticipated. I grew from a practitioner with a passion into a scholar with a purpose, grounded in theory, informed by evidence, and driven by lived experience. The obstacles I encouraged, whether academic, personal, or professional, became catalysts for growth and resilience. Most importantly, I emerged with a clearer vision for how to apply my degree to improve systems, advance equity, and uplift vulnerable communities. As I move forward, I carry with me not just a credential, but a commitment to using what I have learned to push the field of human services toward more inclusive, trauma-informed, and community-led solutions.

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Appendix A: Survey Questions

1. What do you see are the possible roles for community members to provide support for recovery after disaster?
2. Can you identify any program, initiatives, or strategies currently in place that effectively address disaster-related mental and behavioral health needs of those in rural Nevada?
3. Please read these definitions and determine your role before responding to the next question. Are you a workforce professional or community member?
    a. A workforce professional, in this instance, is defined as someone who is employed in the state of Nevada that works primarily with mental or behavioral health services or a government employee.
    b. A community member, in this instance, is defined as someone who resides in rural Nevada.

If you are a workforce professional, please answer:

> What types of training or knowledge do you see as beneficial to professionals to enhance their ability to support resilience and trauma recovery for rural communities in Nevada?

If you are a community member, please answer:

> What types of training or knowledge do you see as beneficial to community members to enhance their ability to support trauma recovery for rural communities in Nevada?

4. What would you recommend be included in a manual for responding to trauma of disasters for communities in rural Nevada (ex., programs, funding opportunities, training, etc.)?
5. What, if any, do you perceive as barriers to availability of disaster behavioral health services for rural Nevadans?
6. What, if any, do you perceive as barriers to the effectiveness of existing disaster behavioral health services for rural Nevadans?

Appendix B: Follow-up Question

1. Based on the themes identified, please rank the following focus areas in order of importance for what should be prioritized next – with 1 being the most important and 7 being the least important:
    a. Provide more professional emotional support and listening opportunities for community members.
    b. Improve online and in-person resource navigation and clear information sharing.
    c. Increase recruitment, training, and support for volunteers.
    d. Expand both in-person and online mental health and wellness resources.
    e. Build stronger partnerships and collaboration among local organizations.
    f. Strengthen local leadership and community advocacy efforts.
    g. Develop clearer and more accessible policies and procedures for response and recovery.

Appendix C: White Paper

White Paper: Enhancing Disaster Behavioral Health Capacity in Rural Nevada

1. Introduction

Rural Nevada communities face persistent gaps in disaster behavioral health services. Rural residents often fill critical response roles for their neighbors, providing emotional support, sharing resources, and helping others find care. Yet many do so without formal training or support. Local behavioral health systems remain under-resourced, under-connected, and overstretched. This paper outlines the urgent need for action and presents a community-based, trauma-informed framework to improve disaster behavioral health capacity across rural Nevada.

2. Problem Statement

Rural Nevada communities' persistent gaps in disaster behavioral health services. Stakeholders have identified several challenges:

- Rural residents often experience geographic isolation and have limited access to reliable transportation.
- There is a shortage of trained behavioral health providers across rural counties.
- Coordination among counties and agencies is frequently poor, creating service fragmentation.
- Mental health stigma continues to discourage individuals from seeking help.
- Community members frequently take on informal crisis response roles without the necessary training or resources.

- Behavioral health professionals report high levels of burnout and unstable program funding limits the effectiveness and longevity of services.

These challenges leave rural communities especially vulnerable in the aftermath of disasters, and ill-equipped to meet the behavioral health needs of their residents during recovery.

3. Need and Context

This paper draws on findings from a two-phase community-engaged study in rural Nevada. In phase one, an open-ended survey gathered feedback from community members and workforce professionals. In phase two, participants ranked their priorities for improving disaster behavioral health services. The goal was to amplify local voices and elevate community-informed solutions.

4. Market and Social Realities

This local crisis reflects broader national trends affecting rural areas:

- Rural communities across the United States face a shortage of behavioral health providers and often rely heavily on volunteers.
- Essential infrastructure, including broadband access and public transportation, remains limited or unreliable in many rural areas.
- Behavioral health and crisis response systems frequently operate in silos, limiting coordination and effectiveness.
- Many programs are funded through short-term or pilot-based initiatives, without sustainable long-term support.

- The National Risk Index indicates that rural communities often have high social vulnerability, increasing the impact of disasters.
- Residents tend to prefer peer-based, relational models of care over traditional, top-down clinical approaches.

Together, these realities highlight the urgent need for coordinated, sustainable, and community-centered disaster behavioral health solutions.

5. Ethical Considerations

This research was conducted with volunteer participants who provided informed consent to complete the surveys. No special ethical considerations arose during the study, and all responses were collected anonymously in alignment with standard research practice.

In terms of application, ethical consideration includes ensuring that all communities have equitable opportunity to benefit from the proposed solutions and that all recommendations comply with relevant state laws and regulations. The focus remains on supporting rural communities in ways that are inclusive, fair, and responsive to their specific needs.

6. Evidence Supporting the Need for a Solution

The study identified five key areas of concern:

i. ***Emotional Support*** – Community members consistently expressed the need for trauma-informed tools that would help them support others, and themselves, following disasters.

ii. ***Resource Navigation*** – There is a lack of clear, localized information, leaving many residents unsure of where to turn for help during or after a crisis.

iii. ***Training*** – Both professionals and community members emphasized the need for practical training focused on disaster response and emotional regulation.

iv. ***Volunteer Capacity*** – Many volunteers are stepping into high-need roles without adequate support, which contributes to exhaustion and turnover.

v. ***Structural Barriers*** – Instability in funding, provider shortages, and poor coordination across agencies and jurisdiction continues to limit effective behavioral health responses.

A critical insight from the study was the misalignment between professional and community priorities, suggesting a need for integrated solutions that empower local residents while supporting systems change.

7. Description of the Proposed Solution

A community-based disaster behavioral health framework in the Community Resiliency Model (CRM) offers a practical, scalable solution. CRM is a trauma-informed training model designed for non-clinical community members. It equips them with tools for emotional regulation and peer support, helping them respond effectively during and after crises.

To successfully implement this framework, several key actions are needed:

- CRM-aligned peer responder training programs should be funded and implemented across rural Nevada to build local capacity.
- Regional behavioral health manuals should be developed to include local contacts and culturally tailored guidance.
- Cross-county collaboration among behavioral health and emergency response systems should be strengthened to improve coordination.
- Sustainable funding streams should be established to support long-term, community-led behavioral health initiatives.
- Investments in broadband and transportation infrastructure should be made to enhance the accessibility of telehealth and mobile services.

8. Recommendations for Next Steps and Call to Action

To build a more equitable and resilient behavioral health system in rural Nevada, the following actions are recommended:

- Coalitions of rural stakeholders should be expanded to include community leaders, health departments, and local service providers in co-developing culturally responsive disaster plans.
- A pilot CRM peer responder training should be launched in high-need rural communities to evaluate its effectiveness and potential for wider implementation.
- Advocacy efforts should focus on securing long-term state funding specifically dedicated to rural disaster behavioral health systems.

- Communities with high social vulnerability should be prioritized for targeted investments aimed at building local behavioral health capacity.

Call to Action

Policymakers, community leaders, and funders must invest in trauma-informed, locally driven disaster behavioral health strategies. These efforts will strengthen existing networks, close service gaps, and empower rural communities to lead their own recovery in the aftermath of disasters.