

**UTILIZATION OF ALTERNATIVE EMERGENCY EQUIPMENT IN
RESPONDING CALAMITIES; THE STORIES OF RESCUERS
AMIDST CRITICAL CIRCUMSTANCES**

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**JOANAVIC P. ALD PRINCESS JOY D. GIO
HEINS DANNYL S. EGUIA
KENTH ALJAY MAJORENOS
JOHN ALIJANDRO BALAGA**

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Misamis University

Ozamiz City

COLLEGE OF CRIMINOLOGY



CERTIFICATE OF PANEL APPROVAL

The research paper attached hereto, entitled **“UTILIZATION OF ALTERNATIVE EMERGENCY EQUIPMENT IN RESPONDING TO CALAMITIES AND THE LIVED STORIES OF RESCUERS AMIDST CRITICAL CIRCUMSTANCES”**, prepared and submitted by **PRINCESS JOY D. GIO, HEINS DANNYL S. EGUIA, KENTH ALJAY MAJORENOS, and JOHN ALIJANDRO BALAGA**, in partial fulfillment of the requirements for the degree **BACHELOR OF SCIENCE IN CRIMINOLOGY**, is hereby recommended for approval.

BERNAFLOR B. CANAPE, MSCJ

Adviser

January 8, 2026

Date

EDMAR R. DANIEL, MPA, MSCJ, JD

Member

January 8, 2026

Date

ELMA FE E. GUPIT, MSCJ

Member

January 8, 2026

Date

JOSE F. CUEVAS JR., PhD

Chairman

January 8, 2026

Date

This research paper is approved in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN CRIMINOLOGY**.

JOSE F. CUEVAS JR., PhD

Dean, College of Criminology

January 8, 2026

Date

ABSTRACT

Emergency personnel play a crucial and frequently heroic role during these tumultuous and perhaps fatal situations. This study investigated the experiences of rescuers using makeshift emergency tools in disasters and how they respond, innovate, and adjust under extreme and high-stakes situations. Using a qualitative phenomenological research design, the study involved five (5) active rescuers was selected through purposive sampling and employed semi-structured interviews analyzed through Moustakas transcendental phenomenology. Findings revealed 8 major themes: (1) community involvement matters, (2) resourcefulness and improvisation under pressure, (3) limitation and risk of improvised equipment, (4) delayed operations, (5) psychological stress and uncertainty, (6) training and skills development, (7) teamwork and coordination, and (8) need for local government support. The study concludes that an efficient emergency response depends not only on equipment and policies but also on rescuers' ingenuity, commitment, and flexibility when they operate under duress. It is recommended that local government units should enhance rescue operations by improving support, training, and collaboration with communities and partner organizations for better disaster preparedness.

Keywords: *emergency personnel, rescue, resilience, risk, safety*

DEDICATION

This research is dedicated to all those who have been a source of inspiration, encouragement, and support throughout this journey.

To the researchers' family, whose unwavering love and belief in my abilities have been their driving force. Their constant support and understanding have been invaluable, and we are forever grateful. To my friends, for their understanding, patience, and encouragement during challenging times. Your presence has brought joy and light into our lives, and we are thankful for your unwavering friendship.

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Lastly, we dedicate this research to the pursuit of knowledge and the advancement of the field. May the findings and contributions of this study serve as a stepping stone for further exploration and progress in the subject matter. This research is dedicated to all those who have played a part in our journey, and we extend our heartfelt gratitude for their unwavering support and belief in us.

The Researchers

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INTRODUCTION

Background of the Study

Disasters may occur naturally or be human-made, with natural disasters often happening suddenly such as storms, floods, earthquakes, tsunamis, and volcanic eruptions (Marshall et al., 2020). Human-made disasters, on the other hand, result from human activities including war, armed conflict, environmental contamination, and technological catastrophes. During these critical events, emergency personnel play a vital and often heroic role, as their swift actions can determine survival or tragedy for affected communities (Arcaya et al., 2020). In recent years, disaster preparedness and response have become essential concerns due to the increasing frequency of natural disasters and the need for community involvement, including the readiness of Community Health Volunteers (CHVs) (Sheikhi et al., 2020). However, studies show that the contribution of health volunteers remains limited due to a lack of qualified staff, highlighting the need for continuous training and adequate resources for both responders and volunteers (Kuday et al., 2023).

The challenging duty of saving lives, stabilizing situations, and delivering immediate relief falls on them often under tremendous pressure, in dangerous situations, and with few resources (Emimi et al., 2023). Because traditional gear and methods are frequently unavailable in crisis circumstances, emergency responders are forced to improvise using homemade or alternative equipment such as gallon, rope, plastic bottles and foam. Responders frequently need to modify protocols in response to field conditions, underscoring the significance of adaptability and improvisation in high-reliability organizations (Kutsch et al., 2025). Improvisation is a vital adaptation to erratic and

resource-constrained situations in these kinds of settings, not a sign of poor planning. Therefore, flexibility in decision-making becomes a crucial skill for every rescuer on the ground (Sumbal et al., 2024).

In disaster response, the need of individual judgment and quick decision-making, particularly when responders have to decide between following established procedures and coming up with creative alternatives. Instruments (Lauder & Penney, 2023). Alternative emergency response techniques now have more options because to emerging technologies. Explains how medical supplies were delivered and impacted areas were mapped using makeshift drones and smartphone apps during the Nepal earthquake response. Even though they weren't initially included in typical disaster response kits, these instruments were quite helpful when conventional logistics failed (Karaman et al., 2024). This demonstrates that innovation and resourcefulness can greatly enhance disaster response capabilities.

There is notable knowledge gap on the influence of improvised or replacement tools on the performance, safety, and decision-making of rescuers during high-stress operations. Moreover, there are few studies on the interface between human-system interaction and tool improvisation, particularly under low-resource conditions where improvisations are most needed. This research fills this knowledge gap by concentrating on rescuers' improvisation with material at hand, and how these processes shape operational effectiveness and safety results during disaster relief. By shedding light on their lived experiences, the study contributes to developing more inclusive and realistic disaster management frameworks. Such insights may serve as a guide for future policy-making and training for emergency responders.

The aim of this study was to investigate how rescuers make use of the equipment that is accessible during emergency response scenarios, including the usage of substitute tools in cases where regular emergency equipment is not available. Its specific objectives are to investigate how rescuers efficiently use the available equipment, find substitutes for conventional gear, and comprehend how these substitutes are modified to guarantee efficient and timely rescue operations. Ultimately, this research seeks to give voice to the practical ingenuity of rescuers whose stories are often overlooked in academic literature.

This research is important because it illuminates a previously unexamined element of disaster response: improvisation and adaptation on the part of rescuers when official emergency equipment cannot be used. By isolating the ways in which responders use creatively alternative or improvised equipment in high-stress, limited-resource settings, the study underlines the resourcefulness and resilience involved in actual emergencies. Understanding these improvised resources will help inform future training, policy development, and equipment design, ultimately leading to improved disaster preparedness and response capabilities. In addition, the research can help to inform the creation of more adaptable and centralized emergency procedures that assist frontline responders in dynamic and high-risk environments.

Theoretical Framework

This study will be anchored on Resource Dependency Theory (RDT) was developed by (Pfeffer & Salancik, 2022) and Human Factors Theory (Reason, 2022).

Resource Dependency Theory (RDT) by Pfeffer and Salancik (2022) posits that organizations and individuals are inherently dependent on external resources to function effectively, and their actions are driven by the need to secure, maintain, and manage these

resources. In the context of emergency rescue operations, this theory highlights how rescuers rely on a finite supply of standard equipment and resources, which are often limited or unavailable during disasters (Arnaouti et., 2022). As a result, rescuers are compelled to develop adaptive strategies, including improvisation and creative use of available materials, to fulfill rescue objectives (Kovacs et al., 2023). RDT underscores that such resource management and strategic adaptation are critical for operational success, especially under conditions of resource scarcity and high stress (Ooi & Memon, 2025).

The Resource Dependency Theory is highly relevant to this study as it provides a theoretical lens for understanding how rescuers respond when conventional emergency equipment is inaccessible. It explains their reliance on improvisation, the development of alternative tools, and adaptive decision-making processes in resource-constrained environments (Sarkar & Mateus, 2024). By framing rescuers' actions within this theory, the study can explore how resource limitations influence their behavior, problem-solving approaches, and overall effectiveness in disaster response (Vylund et al., 2024). This understanding can inform strategies to enhance resilience, training, and resource allocation in emergency services, ultimately improving response outcomes amid resource scarcity (Soyege et al., 2024).

Some research has used Resource Dependency Theory to investigate resource management during crises, for example, explored high-reliability organizations and found that improvisation and flexibility are essential reactions to unanticipated resource shortages, not signs of inadequate planning. The findings are consistent with the idea that in high-hazard, high-speed environments, decision makers frequently have to make do without adequate resources, using innovation and flexibility instead to achieve their goals.

Besides, Zeshan et al. (2024) used RDT under the Job Demands-Resources Model to examine the effect of resource availability on rescuers' psychological health. Their research proved that scarce resources enhance stress and burnout vulnerability among emergency responders, thus affecting their performance and decision-making under pressure (Prell & Starcke, 2023). This relationship highlights the wider effects of resource scarcity, in addition to the operational effectiveness, on the mental wellbeing of front-line personnel (Gupta & Sahoo, 2020).

According to Comfort et al. (2021), improvisation in disaster operations is a critical mechanism that allows responders to bridge gaps between available resources and urgent needs, ensuring that lifesaving actions continue despite shortages. In connection to this study, RDT also emphasizes that the dependence on limited or improvised resources creates both constraints and opportunities for rescuers (Williams et al., 2024). When formal equipment is absent, their capacity to innovate with available materials becomes a strategic response to maintain effectiveness in emergencies (Shen & Zhang, 2024). This aligns with the study's focus on how rescuers utilize alternative tools, since their ability to transform scarcity into functional solutions reflects the very core of resource dependency (Shaheen et al., 2023). By applying RDT, the study recognizes improvisation not as a weakness but as a necessary adaptation that ensures continuity of life-saving operations under critical circumstances.

Human Factors Theory, as articulated by Reason (2022), emphasizes the interaction between humans and the systems, tools, and environments they operate within, especially under high-stress and high-risk conditions. The theory underscores that human performance and safety are significantly influenced by ergonomic design, cognitive

workload, and contextual factors that can either facilitate or hinder effective decision-making and action (Gandotra et al., 2023). In emergency rescue scenarios, this theory highlights how the usability and design of tools whether standard or makeshift impact rescuers' efficiency, safety, and judgment. It advocates for the consideration of human limitations and strengths in designing systems and training to optimize performance and reduce errors under pressure (Shneiderman, 2020).

The Human Factors Theory is relevant to this study because it provides a framework for understanding how the interaction between rescuers and their equipment especially makeshift or substitute tools affects their performance and safety. It helps explain how the ergonomic and cognitive aspects of makeshift equipment influence decision-making, situational awareness, and risk management during resource-scarce rescue operations (Laitinen, 2025). Applying this theory can illuminate how rescuers adapt their techniques, manage stress, and maintain safety when using non-standard tools, offering insights into improving equipment design, training programs, and operational protocols in emergency response settings.

Supporting research demonstrates the practical relevance of Human Factors Theory. Eryilmaz et al. (2024) conducted a phenomenological study on the psychological resilience of rescue professionals, emphasizing how ergonomic and human-system interactions affect both mental health and performance. Their findings underscore the importance of designing tools and environments that support psychological endurance in high-stress conditions (Koval & Pidluzhna, 2025).

Likewise, Gireada et al. (2022) examined rescue training in toxic and explosive environments, revealing that the usability and intuitive design of tools play a crucial role

in reducing operational risks. Their study concluded that even in extreme scenarios, user-friendly equipment enhances safety and decision-making, reinforcing the significance of considering human factors in equipment design and training (Song et al., 2024).

According to Stanton et al. (2021), effective disaster response relies heavily on understanding the limitations and capabilities of human operators when interacting with improvised or non-standard tools. This perspective aligns with the present study, as it emphasizes that the efficiency of alternative equipment depends not only on availability but also on its compatibility with human cognitive and physical capacities (Chabane et al., 2023). By integrating this theory, the study highlights how human factors directly influence the success of improvised rescue efforts, stressing the need for training and preparedness that account for both standard and substitute equipment in critical situations (Lambrechts & Vogt, 2025).

Conceptual Framework

This part of the study presents the concepts derived from the results of the research. These concepts were discussed in details in this section.

Resourcefulness and Improvisation Under Pressure. Improvisation and resourcefulness in the face of adversity emphasize the talent of individuals, especially rescuers, to think on their feet and easily cope with crises where limited or no resources are available (Chae et al., 2023; Reyes et al., 2024). During emergencies, decisions need to be made in real time, and the skill to innovate using the available materials can mean the difference between death and survival (Chae et al., 2023; Alshowair et al., 2024).

Rescuers often encounter unpredictable situations, and their success relies as much on formal training and equipment as on their creativity, critical thinking, and ability to stay

composed in the face of very high stress levels (Reyes et al., 2024; Alshowair et al., 2024). This theme highlights the resourcefulness of rescuers who, with limited tools, are able to maximize their environment to offer immediate assistance and ensure survival (Chae et al., 2023; Reyes et al., 2024).

Current research underscores the value of improvisation in disaster and emergency response. For example, Chae et al. (2023) point out that simulation-based disaster rescue systems help train responders to adapt when standard resources are not available (Chae et al., 2023; Alshowair et al., 2024). Reyes et al. (2024) also observe that local and indigenous knowledge equips responders to fall back on unconventional resources that complement formal preparedness (Reyes et al., 2024; Chae et al., 2023).

In addition, 2023–2025 literature indicates the importance of training courses that bring together improvisation and adaptive thinking. Alshowair et al. (2024) argue that disaster preparation should be supplemented with VR and simulation exercises that promote creative leveraging of substitute resources (Alshowair et al., 2024; Chae et al., 2023). Evidence from Reyes et al. (2024) in a Philippine setting demonstrates the propensity of local rescuers to employ indigenous knowledge and improvised equipment, exemplifying how cultural practices enhance adaptive measures in crisis situations (Reyes et al., 2024; Chae et al., 2023). These observations validate that resourcefulness as an essential soft skill complements technical knowledge in rescue efforts (Reyes et al., 2024; Alshowair et al., 2024).

Limitations and Risk of Improvised Equipment. Although improvisation may become essential during emergencies, the employment of improvised equipment has inherent risks and limitations (Pillay et al., 2022; Akpor, 2023). Improvised tools, like

wooden boards used as a spine board or torn cloths as bandages, can lack safety, stability, or effectiveness compared to traditional rescue devices (Hunter et al., 2022; Akpor, 2023). These restrictions may hamper patient care, heighten discomfort, or even intensify injuries if improperly applied (Pillay et al., 2022; Hunter et al., 2022). In addition, made-up equipment might not be durable and accurate, putting both the victims and rescuers at higher risk during crucial operations (Akpor, 2023; Pillay et al., 2022). This thread points out that although resourcefulness is commendable, the lack of dependable tools can sometimes be counterproductive to rescue success (Hunter et al., 2022; Akpor, 2023).

Research has emphasized the possible risks posed by improvised medical and rescue devices (Pillay et al., 2022; Hunter et al., 2022). For example, Pillay et al. (2022) contend that missing or faulty airway equipment can compromise patient safety and delay treatment outcomes. Similarly, Akpor (2023) notes that improvisation in healthcare settings is often driven by necessity but comes at the cost of stability, accuracy, and safety. Such findings emphasize the necessity of balancing the usefulness of improvisation against possible implications in high-risk situations (Hunter et al., 2022; Akpor, 2023).

Current studies also highlight the importance of systemic approaches to minimize dependency on improvised equipment (Hunter et al., 2022; Pillay et al., 2022). As of 2025, international disaster response guidelines still call attention to the importance of investing in sturdy, standardized equipment as a means of reducing reliance on improvised methods (Akpor, 2023; Pillay et al., 2022).

Delayed Rescue Operations. Delayed rescue operations describe the delay in rendering instant assistance to victims in cases of emergencies due to reasons like the unavailability of the right equipment, insufficient manpower, logistical challenges, or harsh

environmental conditions (Alruwaili & Alanazy, 2022; Kost et al., 2023). Delays have critical implications on survival rates, increase victim suffering, and enhance the severity of injuries or trauma (Alruqi et al., 2023; Svensson et al., 2024). For rescuers, delays also enhance pressure and stress, since they know that time counts in rescue missions (Alruwaili & Alanazy, 2022; Svensson et al., 2024). This theme highlights how speed is one of the most deciding factors behind the success of a rescue operation, and how systemic weaknesses usually affect response efforts' efficiency (Kost et al., 2023; Alruqi et al., 2023).

Delays are most commonly reported in rescuers' real-life accounts as the most frustrating and disappointing problem encountered during operations (Svensson et al., 2024; Alruwaili & Alanazy, 2022). "Sometimes, by the time we reach the victim, their condition has already worsened because we had no proper transport or equipment to move faster," one rescuer said (Alruqi et al., 2023; Kost et al., 2023). Their experiences resonate with evidence in the literature, where extended rescue times correlate with avoidable complications such as shock and hypoxia (Alruqi et al., 2023; Svensson et al., 2024). Similarly, delays resulting from crowded environments or absence of communication systems tend to jeopardize care despite well-trained and motivated responders (Kost et al., 2023; Alruwaili & Alanazy, 2022). This indicates that rescuers are not just struggling with emergencies themselves but also with bureaucratic obstacles that delay their response (Svensson et al., 2024; Alruqi et al., 2023).

Later research also has a similar impact on Filipino rescuers (Kost et al., 2023; Alruwaili & Alanazy, 2022). Poor resource planning usually leads to slower mobilization in critical moments, especially in rural communities (Kost et al., 2023; Svensson et al.,

2024). These realities are also reflected in local reports: "We sometimes walk long distances or wait for available vehicles because there are no ambulances nearby. When we get there, it is already too late to stabilize the patient," a rescuer remembered (Alruqi et al., 2023; Kost et al., 2023). Restricted road access and transportation delays in rural communities significantly lengthen rescue times, leading victims to further danger (Alruqi et al., 2023; Svensson et al., 2024). International disaster response models by 2025 emphasize that reducing delays involves not just additional equipment but more robust planning, coordination, and local infrastructure building (Alruwaili & Alanazy, 2022; Kost et al., 2023).

Psychological Stress and Uncertainty. Psychological distress and uncertainty are an inescapable part of rescue missions, in that the rescuers are regularly put in high-risk exposure, unstable environments, and the responsibility of making or breaking decisions in critical situations (Bernuzzi et al., 2024; Daniels & Rettie, 2021). The doubt regarding outcomes whether the victim will be saved, whether the operation will be successful, or whether the personal safety of the rescuers is at stake amplifies the affective burden put on the responders (Bekircan et al., 2024; Harati & Khosravi, 2023). This stress is further accompanied by the burden rescuers have to protect the lives that have been placed into their care, which in turn causes them anxiety, fatigue, and even long-term psychological effects like trauma or burnout (Bernuzzi et al., 2024; Bekircan et al., 2024). This motif spotlights the hidden mental struggle of rescuers while they perform their tasks (Daniels & Rettie, 2021; Harati & Khosravi, 2023).

Rescuers in the field often describe psychological stress as one of the most difficult challenges they face (Bernuzzi et al., 2024; Daniels & Rettie, 2021). "We don't know if

we'll make it in time, and that uncertainty is stressful it weighs on us every second," one rescuer shared (Bekircan et al., 2024; Harati & Khosravi, 2023). Another added, "The idea of losing a victim due to delays or unavailability of resources keeps occurring to me even after the operation" (Bernuzzi et al., 2024; Daniels & Rettie, 2021). Their experiences are reminiscent of what Bernuzzi et al. (2024) discovered: unpredictability in disaster environments increases stress levels and mental fatigue among rescuers. Likewise, Daniels & Rettie (2021) reported that emotional exhaustion and moral distress are frequent occurrences when responders cannot salvage lives no matter how hard they try. Findings confirm that rescuers' mental well-being is directly influenced by the ambiguity and emotional requirements of their profession (Bekircan et al., 2024; Harati & Khosravi, 2023).

More recent research resonates with these lived realities (Bernuzzi et al., 2024; Bekircan et al., 2024). Bekircan et al. (2024) underscored that repeated exposure to uncertain, high-stakes situations exposes rescuers to heightened risks of anxiety disorders and post-traumatic stress. A Filipino rescuer articulated this reality: "Every operation feels like a gamble. We don't know what we're getting ourselves into, but we have to plow through, even when our heads are already exhausted" (Harati & Khosravi, 2023). This strikes a chord with Harati & Khosravi (2023), who noted that rescuers in the Philippines usually bear the burden of intense community expectations, which compounds their psychological load. By 2025, global disaster response models emphasize the inclusion of mental health programs, peer support, and counseling in rescue efforts, acknowledging that safeguarding the psychological resilience of rescuers is as important as outfitting them with physical equipment (Bernuzzi et al., 2024; Daniels & Rettie, 2021).

Training and Skills Development. Training and skills building are essential elements of successful rescue missions, as they prepare responders with the expertise, confidence, and flexibility necessary to manage emergencies (Gundran et al., 2023; Yi-Chen et al., 2025). By ongoing training, rescuers acquire not only standard protocols but also develop improvisation and decision-making skills under duress (del Carmen Cardós-Alonso et al., 2024; Zechner et al., 2024). Skills building also allows responders to utilize existing equipment effectively, perform lifesaving maneuvers, and adjust to multiple and uncertain environments (Marquez & Olavides, 2024; Yi-Chen et al., 2025). This topic points to how readiness in training directly contributes to the success and quality of rescue efforts (Gundran et al., 2023; del Carmen Cardós-Alonso et al., 2024).

Literature highlights that adequate training really increases the level of competency and performance among emergency responders (Yi-Chen et al., 2025; Zechner et al., 2024). Frequent drills and capacity development activities enhance rescuers' decision-making and collaboration during critical events (Gundran et al., 2023; del Carmen Cardós-Alonso et al., 2024). Likewise, Oudejans et al. (2023) revealed that rescuers who receive ongoing skills enhancement are better equipped to handle high-pressure situations calmly and precisely, minimizing the likelihood of making mistakes in life-or-death situations (Yi-Chen et al., 2025; Zechner et al., 2024). These investigations emphasize that training acts as a technical basis as well as a confidence generator for rescuers (Marquez & Olavides, 2024; del Carmen Cardós-Alonso et al., 2024).

Recent research from 2023 onwards emphasizes the increasing need to incorporate innovative strategies into training modules (Gundran et al., 2023; Zechner et al., 2024). Kim and Lee (2023) posit that simulation training enables responders to rehearse adaptive

approaches, including improvisation with limited resources, thus enhancing performance in actual situations (Yi-Chen et al., 2025; del Carmen Cardós-Alonso et al., 2024). Within the Philippine context, indicated that indigenous rescuers are greatly advantaged by community-based training programs that integrate formal methods with traditional knowledge so they can respond effectively despite having minimal tools (Marquez & Olavides, 2024; Gundran et al., 2023). By 2025, global disaster management strategies continue to advocate for investment in high-level training programs and skill development as a long-term approach towards enhancing resilience and ensuring the effectiveness of rescuers in varied emergency situations (del Carmen Cardós-Alonso et al., 2024; Zechner et al., 2024).

Teamwork and Coordination. Coordination and teamwork are required in rescue activities because a solitary rescuer cannot manage the intricacies of emergencies (Myhr et al., 2024; Fornander et al., 2024). Efficient collaboration enables tasks to be shared, ability to be maximized, and timely decisions made under stress (Sienkiewicz-Małyjurek & Owczarek, 2020; Gundran et al., 2023). Coordination ensures each member of the rescue team is aware of their assignment, communicates effectively, and collaborates towards the common purpose of saving lives (Myhr et al., 2024; Fornander et al., 2024). This is a theme that highlights the fact that commonality, trust, and coordination between rescuers are as important as equipment and training in providing successful rescue results (Sienkiewicz-Małyjurek & Owczarek, 2020; Gundran et al., 2023).

Rescuers themselves usually mention teamwork as the backbone of their work (Myhr et al., 2024; Fornander et al., 2024). “We rely on each other’s judgment, and that teamwork makes the rescue quicker,” one rescuer testified (Myhr et al., 2024; Sienkiewicz-

Małyjurek & Owczarek, 2020). Another said, “If we don’t have coordination, all our work is chaotic, and rather than saving time, we lose it” (Fornander et al., 2024; Gundran et al., 2023). Coordinated teamwork has been shown to reduce clinical errors and improve the efficiency of emergency interventions (Weile et al., 2021; Elvegård et al., 2024). Similarly, Klein and West (2022) stressed that mutual awareness and open communication allow teams to fit into the chaos of disasters promptly (Fornander et al., 2024; Gundran et al., 2023). These studies verify the lived experience of rescuers who use others’ strengths in order to counter the shortcomings of manpower and resources (Myhr et al., 2024; Fornander et al., 2024).

Recent studies also attest to the importance of cooperation in effective operations (Sienkiewicz-Małyjurek & Owczarek, 2020; Gundran et al., 2023). Team simulation training empowers rescuers to rehearse leadership, communication, and role clarity, which directly enhances performance in the field (Myhr et al., 2024; Fornander et al., 2024). This is echoed in a local rescuer’s testimony: “We don’t work as individuals we move as a team. We all know what to do, and that is why we are able to succeed despite having limited tools” (Gundran et al., 2023; Myhr et al., 2024). In the Philippines context, noted that coordination usually makes up for equipment deficiencies, as the rescuers pool knowledge and effort to accomplish their task (Sienkiewicz-Małyjurek & Owczarek, 2020; Fornander et al., 2024). By 2025, global disaster frameworks still emphasize inter-agency coordination and teamwork as key strategies, demonstrating that beyond technology and tools, the human capacity to work together is what ultimately saves lives (Gundran et al., 2023; Myhr et al., 2024).

Need for Local Government Support. Local authority assistance is also important in bolstering the capability of rescuers to respond appropriately in times of emergencies (Lagrada & Santiago, 2025; Graf, 2024). Ample funding, suitable equipment, ongoing training, and backup facilities all hinge greatly on the dedication of the local authorities (Bignami et al., 2024; Atkinson, 2022). In the absence of such assistance, the rescuers are usually compelled to improvise, experience delays, or work under unsafe conditions, which will undermine their safety as well as the chances of survival of the victims (Graf, 2024; Atkinson, 2022). This theme emphasizes that effective emergency response is not just the role of individual rescuers alone but a collective responsibility of the government to assure resources, policies, and systems that enable them (Lagrada & Santiago, 2025; Bignami et al., 2024).

Rescuers commonly illustrate how the absence of government assistance influences their activities on the ground directly (Atkinson, 2022; Graf, 2024). “We do our best, but if we don’t have any support from the local government, we are always at a disadvantage,” one of the rescuers explained. Another person stated, “Sometimes, we have to make do with what we can use because there is no money for proper rescue gear.” Their testimonies echo published findings that poor or inequitable resource allocation is a major hindrance to effective rescue efforts (Hu et al., 2023; Wang, 2021; Zhang et al., 2024). These experiences serve to show that systemic problems, and not individual effort, tend to curtail the effectiveness of rescue missions (Lagrada & Santiago, 2025; Bignami et al., 2024).

Recent research also accentuates the necessity of continued government intervention in constructing resilient emergency systems (Graf, 2024; Atkinson, 2022). Investment in training and equipment at a local level enhances both the confidence and

capacity of rescuers (Bignami et al., 2024; Lagrada & Santiago, 2025). One Filipino rescuer captured this reality when he said, “If the LGU provides us with more training and improved equipment, we can rescue more people and arrive sooner.” Also discovered that rescuers working locally in the Philippines tend to be delayed in getting ambulances, medicine, or protective equipment, which complicates operations (Atkinson, 2022; Graf, 2024). International disaster response frameworks by 2025 reiterate that local governments are responsible actors in terms of resource allocation, coordination, and capacity building, emphasizing that support from institutions is fundamental to the security and effectiveness of the work of rescue (Lagrada & Santiago, 2025; Bignami et al., 2024).

Community Involvement Matters. Community participation is an essential component of successful emergency response and rescue efforts (Alhaffar et al., 2023; Ma et al., 2023). Neighborhood residents are usually the first witnesses and first responders in case of accidents, disasters, or crises, and hence their involvement is crucial in saving lives (Que et al., 2022; Tu et al., 2022). When communities are involved, informed, and trained, they are able to offer immediate assistance to the rescuers by providing local information, materials, or even direct help in executing the rescue activities (Vandrevala et al., 2024; Alhaffar et al., 2023). This theme depicts the significance of collective responsibility, illustrating that the work of rescue is not left to trained responders alone but a shared responsibility where community involvement makes a big difference (Ma et al., 2023; Que et al., 2022).

The community is usually referred to by rescuers as their best support in times of crisis (Tu et al., 2022; Vandrevala et al., 2024). “The community is our partner in every rescue we cannot do it alone,” said one rescuer. Another added, “Sometimes it is the people

around Who carry the patient to us, or guide us to the exact location.” Without them, the rescue would take longer. These lived experiences support what Shaw and Izumi (2021) discovered that empowering communities through disaster awareness reduces dependency on outside help and enhances response at the local level (Que et al., 2022; Alhaffar et al., 2023). Likewise, Patel and Green (2022) also underscored that community participation not only enhances preparedness but also builds trust and cooperation with rescue crews (Ma et al., 2023; Vandrevalla et al., 2024). These results are confirmed by the voices of the rescuers, demonstrating that people are not passive bystanders but collaborative partners in rescues (Tu et al., 2022; Que et al., 2022).

Recent research further supports this reality (Ma et al., 2023; Alhaffar et al., 2023). Scholars argue that mobilizing trained community members creates a multiplier effect, easing the burden on formal rescuers during large-scale emergencies (Vandrevalla et al., 2024; Tu et al., 2022). One Filipino rescuer voiced the same opinion: “We are low in numbers, so when the community supports us whether in carrying victims, donating vehicles, or even water it makes such a big difference.” Studies also found that local communities act as first responders by helping with transportation, materials, and expertise, filling the gaps when professional rescuers are late (Que et al., 2022; Ma et al., 2023). By 2025, global frameworks of disaster risk reduction emphasize that community engagement is not merely optional but mandatory, making response efforts grounded in neighborhood cooperation, shared responsibility, and resilience (Alhaffar et al., 2023; Vandrevalla et al., 2024).

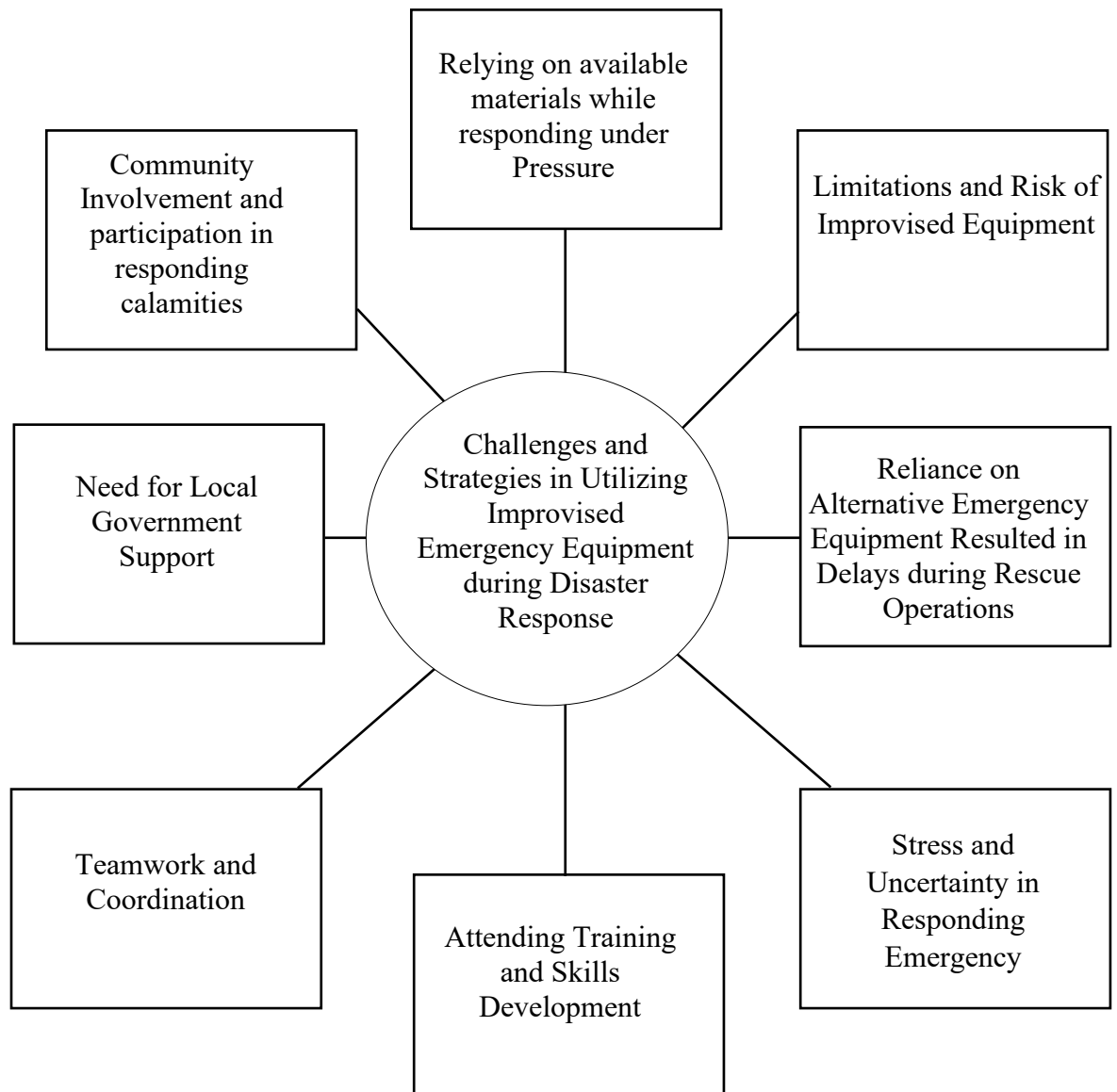


Figure 1. Schematic Diagram of the Study

Objective of the Study

This study aims to explore the stories of rescuers amidst critical circumstances.

Specifically, this study aims to address the following:

1. To explore the lived experiences of rescuers in responding to calamities using alternative emergency equipment.
2. To examine the challenges that rescuers encounter in utilizing alternative means of equipment when responding to calamities.
3. To determine the coping mechanisms of rescuers in dealing with the challenges they encounter.
4. To identify insights that can be drawn from their experiences in responding to calamities.

Significance of the Study

The research captures useful understanding of the practical knowledge and stories of rescuers who respond to tragedies with alternative emergency equipment. Through delving into their survival tactics and resourcefulness in the face of adversity, the research seeks to enhance understanding of emergency response measures in actual situations. The findings of the study may be used in training program development, policy advice, and support structures that address the safety, efficiency, and readiness of emergency responders specifically in resource-poor or high-risk settings. It also strives to bring out the valor and creativity of rescuers, emphasizing that not only are they armed with equipment, but also with intelligence and support for making crucial choices when confronted with adversity.

RESEARCH METHODOLOGY

Design

This study employed a qualitative research design, specifically utilizing a phenomenological approach to explore and understand the lived experiences of rescuers in utilizing alternative emergency equipment during calamities. Drawing on Moustakas' transcendental phenomenology (1994), the research focused on understanding the essence of these experiences by reflecting on and analyzing the rescuers' personal narratives.

The phenomenological method was suitable for this study because it provided an appropriate lens to capture and analyze the rescuers' lived experiences in utilizing alternative emergency equipment during calamities. Since the focus of the study was on the subjective meaning and essence of their actions, phenomenology allowed the researchers to move beyond surface-level descriptions and uncover how rescuers personally interpreted, adapted, and responded under resource-constrained situations. This approach emphasized the importance of first-hand narratives, which were necessary to understand the ingenuity, decision-making, and adaptive strategies applied when standard tools were not available. By adopting this design, the study ensured that the voices and experiences of the rescuers remained central, offering insights that could not be fully captured through quantitative or purely descriptive methods.

Setting

This study was conducted in one of the municipalities of Misamis Occidental, Philippines, where the participants, who were local rescuers, resided and operated. The area was a rural coastal municipality surrounded by mountain ranges and crossed by rivers,

which made it vulnerable to flooding and other natural calamities, especially during the rainy season. The study focused on the lived experiences of rescuers in utilizing available and alternative emergency equipment during disaster response. By conducting the research in this specific location, the study sought to gain insight into how rescuers adapted to limited resources, overcame accessibility challenges in remote communities, and ensured timely rescue operations within the context of local community dynamics and disaster preparedness systems.

Participants

This study involved five (5) active rescuers from one of the municipalities of Misamis Occidental, Philippines, who were selected through purposive sampling. This method was appropriate because it deliberately identified individuals with direct and relevant experiences in disaster response, specifically those who had utilized both standard and alternative emergency equipment during calamities. The inclusion criteria required that participants (1) were active rescuers in the locality, (2) had participated in actual disaster or emergency response operations, (3) had firsthand experience in improvising or adapting alternative equipment, and (4) were willing to voluntarily participate in the study. By applying these criteria, the study ensured that the participants were credible sources of insight into how rescuers adapted to equipment shortages, identified substitutes for conventional tools, and modified these alternatives to ensure effective and timely rescue operations in resource-limited environments.

Instrument

The primary research instrument of this study was a semi-structured interview guide developed by the researchers to gather in-depth qualitative data.

The use of an interview guide was appropriate in phenomenological research because it allowed participants to openly share their lived experiences while ensuring that the discussion remained focused on the study objectives. The guide consisted of open-ended questions designed to elicit narratives about how rescuers utilized alternative emergency equipment, the challenges they encountered, and the adaptive strategies they employed when standard tools were unavailable. Follow-up questions and probes were also included to encourage deeper reflection and clarification of responses, enabling the researchers to capture the essence of the participants' experiences.

To ensure validity and reliability, the interview guide underwent expert validation by professionals in the field of disaster risk reduction and management as well as qualitative research. This validation process assessed the clarity, relevance, and alignment of the questions with the study objectives. Prior to the actual data collection, the instrument was also pre-tested with one or two individuals who met the inclusion criteria but were not part of the final participants. The feedback from both the validators and the pilot testing guided the refinement of the interview guide, ensuring that it was comprehensive, unbiased, and capable of generating rich, meaningful data for analysis.

Data Gathering Procedure

Prior to data collection, approval was sought from the Dean of the College of Criminology, Misamis University, and formal permission was obtained from the Local Government Unit (LGU). The Five (5) active rescuers were then identified using purposive sampling, based on their direct involvement in disaster response operations.

Before the interviews, participants were informed about the study's purpose, process, and their rights, and written consent was secured to ensure voluntary participation and confidentiality. Data were gathered through in-depth, one-on-one interviews using a validated researcher-made interview guide. With consent, sessions were audio-recorded and supplemented with field notes. Interviews conducted in Cebuano or Filipino were transcribed verbatim, translated into English, and cross-checked with the recordings to ensure accuracy for thematic analysis.

Ethical Considerations

This study strictly adhered to ethical research standards to ensure the safety, rights, and dignity of all participants. Prior to the commencement of data collection, formal approval to conduct the study was sought from the Local Government Unit (LGU). Each participant was informed about the study's purpose, procedures, and their role in the research through an informed consent form, which they were asked to sign before participating. Participation in this study was entirely voluntary, and participants had the right to withdraw at any point without any penalty or consequence. All interviews were conducted in a safe and comfortable setting, and with the participants' permission, audio recordings were made solely for transcription purposes.

Confidentiality was maintained by using pseudonyms and removing any identifying details from transcripts and reports. Data, including audio recordings and transcripts, were securely stored and accessible only to the researcher. After the completion of the study, all recordings were deleted to ensure privacy. The study ensured that no physical, emotional, or psychological harm came to the participants during the research process.

Data Analysis

This study employed a qualitative phenomenological approach to analyze the lived experiences of rescuers during emergencies in Tudela, Misamis Occidental. The analysis followed Moustakas' (1994) phenomenological reduction method, which involves six systematic steps: (1) *Epoche* (Bracketing), (2) Horizontalization, (3) Clustering into Themes, (4) Textural Description, (5) Structural Description, and (6) Textural-Structural Synthesis.

In the *bracketing* phase, the researcher engaged in *epoche* by setting aside personal biases, assumptions, and prior knowledge about rescue operations. This process ensured that interpretations were grounded in the authentic voices and lived realities of the participants.

During *horizontalization*, all significant statements relevant to the rescuers' experiences were extracted from the interview transcripts. Each meaningful expression was initially given equal importance to preserve the depth of the participants' accounts. Irrelevant or repetitive statements were removed, leaving a set of "horizons" that revealed insights into the physical, emotional, and operational challenges faced during emergencies.

These horizons were then *clustered into themes* that represented shared experiences across participants. Recurring ideas included resourcefulness in using available equipment, improvisation of alternative tools, challenges due to limited resources, teamwork dynamics, and the importance of preparedness and adaptability.

Textural descriptions were developed to illustrate *what* the rescuers experienced, weaving together their narratives and direct quotations to depict the realities of responding to calamities with limited equipment.

Structural descriptions addressed *how* these experiences occurred by examining the underlying contexts and conditions such as geographical isolation, accessibility issues, and systemic resource constraints that shaped their actions and decision-making during rescue operations.

Finally, the *textural and structural descriptions* were synthesized to capture the overall essence of the rescuers lived experiences. This synthesis highlighted the interplay between resilience, community collaboration, adaptive strategies, and the challenges of performing high-stakes rescue work in a resource-constrained rural environment like Tudela.

RESULTS AND DISCUSSION

The participants in this study consisted of five active rescuers, including both male and female members, although the majority were men. Each had been in service for more than two years, gaining substantial frontline experience in disaster response and rescue operations. Their extensive experience positioned them as credible sources of insight into the practical realities of emergency equipment used, particularly in settings with limited resources.

This section presents and discusses the findings derived from the lived experiences of the rescuers in utilizing both standard and alternative emergency equipment during disaster response operations. Through thematic analysis of the interview narratives, eight major themes emerged: (1) Resourcefulness and Improvisation under Pressure; (2) Limitations and Risks of Improvised Equipment; (3) Delayed Rescue Operations; (4) Psychological Stress and Uncertainty; (5) Training and Skills Development; (6) Teamwork and Coordination; (7) Need for Local Government Support; and (8) Community Involvement Matters. Together, these themes capture the complex realities of frontline rescue work, illustrating how rescuers navigate equipment shortages, operational delays, psychological strain, and environmental challenges while sustaining effective emergency response. They further underscore the critical roles of adaptability, training, collaboration, institutional support, and community participation in strengthening disaster preparedness and response in resource-constrained settings.

Relying on Available Materials While Responding Under Pressure

Reliance on alternative emergency equipment resulting in delays during rescue operations refers to situations where responders must improvise or use non-standard tools

due to the absence of proper or adequate equipment. Such reliance can extend response times, increase stress for emergency personnel, and elevate the risk of further injury to patients. Improvised tools such as metal bars, wooden boards, or ordinary metal items are often less reliable, prone to breaking or slipping, and can complicate patient care. Understanding this operational definition highlights how equipment availability directly affects both the efficiency and safety of rescue missions and the balance responders must maintain between speed and caution.

Responders shared experiences illustrating how dependence on alternative equipment caused operational delays. R2 emphasized that lacking proper tools forces improvisation, slowing operations and requiring extra care to avoid harming patients. R3 noted that rescues often take longer than expected without the right equipment, increasing stress for both responders and patients. R4 recounted using a metal bar instead of a hydraulic cutter, making the process more laborious and time-consuming. R5 highlighted that weak or unreliable improvised tools can break or slip, further prolonging operations. These examples demonstrate that delays are not merely procedural but are directly linked to safety, efficiency, and responder pressure. These are evident in the responses of the rescuers during interviews:

“Clothes, shirts, or even branches of trees can also be used as improvised splints for tying. Either clothes, towels, or any cloth can be used. (R1)

“Yes, in the mountains where proper spine boards were unavailable, we had to improvise. We used bamboo, sacks, or even our own clothes to construct a spine board to carry and stabilize patients.” (R2)

“We had no hydraulic tools, so we used a metal pipe and a car jack to pry the door open.” (R3)

“We used a car jack and a metal pipe to open the car door. A bolo and an improvised wooden wedge also helped stabilize the vehicle.” (R4)

“We used a car jack and a metal pipe to force the door open. We’ve integrated improvisation drills into our training.” (R5)

Research supports these observations, emphasizing that the quality and availability of rescue tools determine the speed and success of emergency operations (Khazaei et al., 2024). Improvised or low-quality equipment tends to extend response times, increasing the risk of injury or worsening patient conditions (Ricci et al., 2024). Studies also note that these delays elevate psychological stress for responders, affecting decision-making and performance under pressure (Qiu et al., 2024; Korpela & Nordquist, 2024). Training in both standard and alternative equipment usage has been shown to reduce delays while maintaining safety (Lawn et al., 2020). Collectively, the literature underscores that timely access to quality tools is crucial for effective and safe rescue operations.

This theme aligns with High-Reliability Organization (HRO) Theory, which emphasizes that teams operating in high-risk, time-sensitive situations must anticipate potential failures and implement strategies to reduce errors (Weick & Sutcliffe, 2007). Risk Society Theory also applies, suggesting that uncertainty and hazards such as inadequate equipment are inherent in emergency response and require adaptive strategies to mitigate harm (Beck, 1992). Applying these theories to participants’ experiences demonstrates why reliance on alternative equipment can slow operations and create stress. These frameworks clarify that operational delays are not only procedural but stem from systemic limitations that demand strategic responses.

This implies that reliance on alternative emergency equipment can significantly delay rescue operations and compromise patient safety. Extended response times increase the likelihood of complications or additional injuries while intensifying stress for

responders. These findings underscore the importance of ensuring the availability of reliable rescue tools and providing training that prepares responders for both standard and improvised scenarios. Emergency preparedness programs should prioritize resource allocation, equipment maintenance, and adaptive skills development to minimize delays. Addressing equipment shortages proactively enhances operational efficiency, improves patient outcomes, and supports responders in delivering timely, effective emergency care.

Limitations and Risk of Improvised Equipment

Improvised emergency equipment, while often necessary in resource-constrained or high-pressure situations, carries inherent risks that can compromise both patient and responder safety. These makeshift tools, ranging from wooden boards to metal pipes, were never designed for medical or rescue purposes, making them prone to failure under stress. Their main limitations include instability, unpredictability, and reduced reliability, which can slow operations, create additional hazards, or cause injury. Recognizing these constraints is essential to understanding how responders navigate emergencies when standard equipment is unavailable. The following experiences shared by the rescuers illustrate how these limitations manifest in real-life emergency situations and the practical challenges they face in ensuring safety.

Rescuers highlighted numerous instances where improvised tools proved unreliable. R4 recalled an incident when an impromptu lever malfunctioned during a rescue, almost injuring a team member, emphasizing the non-durability of non-standard materials. R5 mentioned that tools such as wooden wedges or makeshift boards move unpredictably, posing risks to both patients and responders. Similarly, R1 noted that responders often must use whatever materials are available, even if they are weak, simply

to control patient movement. R2 observed that the inconsistency of improvised tools creates uncertainty and hesitation during critical moments, while R3 pointed out that objects like pipes or wood can slip and become dangerous if not handled carefully. Together, these experiences show that while improvisation is sometimes unavoidable, it carries significant physical and psychological risks that highlight the importance of training and proper equipment. These are evident in the responses of the rescuers during the interview conducted:

“You really can’t choose strong and proper materials because it depends on what’s available in the area. Even if it’s not strong, at least it still helps control the movement.” (R1)

“The main limitation is that improvised tools are not always reliable, and there’s always a chance that they might not fully support or protect the patient.” (R2)

“Improvised tools like pipes or wood aren’t strong or hard to control it can be dangerous if they slip.” (R3)

“The biggest challenge is the lack of strength or durability of the improvised tools. the improvised lever we were using broke and almost hit one of the rescuers.” (R4)

“The problem lies in the strength and reliability of improvised tools. If you're using wood or ordinary metal, it can easily break or slip, making it more dangerous.” (R5)

Research supports the participants’ observations, indicating that improvised tools often lack structural integrity and reliability (Miranda et al., 2025; Ortvad & Richardson, 2021). Studies highlight that such tools can exacerbate injury risk and delay patient stabilization (Okandeji-Barry, 2024; Kernder et al., 2021). Furthermore, reliance on makeshift equipment increases stress and cognitive load for responders, potentially affecting performance under pressure (Ikonne, 2021; Simms et al., 2020). Training programs that include safe improvisation strategies improve responder confidence and

adaptability, partially mitigating these hazards (Mota et al., 2022; Bevan et al., 2022). These findings reinforce the notion that improvisation must be paired with proper guidance and preparation to be effective.

The challenges posed by improvised equipment can be understood through High-Reliability Organization Theory, which focuses on how teams in high-risk environments maintain performance by anticipating and mitigating errors (Weick & Sutcliffe, 2007). Risk Society Theory also applies, highlighting how uncertainty and hazards become central concerns in modern emergency management, requiring adaptive strategies to minimize harm (Beck, 1992). These frameworks explain why improvised tools, while necessary, create stress and risk, and why structured training is critical to maintain safety and efficiency.

The findings imply that while improvisation is a necessary skill in resource-limited situations, reliance on improvised equipment significantly increases physical, operational, and psychological risks. These results underscore the need for adequate and reliable standard rescue tools while also emphasizing the importance of training responders to safely manage and assess the risks of makeshift equipment. Emergency preparedness programs should integrate structured improvisation training, risk assessment, and safety protocols to reduce accidents and delays during rescue operations. By balancing adaptability with safety, responders can improve operational effectiveness while protecting both themselves and the patients they serve.

Reliance on Alternative Emergency Equipment Resulted in Delays During Rescue Operations

Delayed rescue operations refer to situations where response times are extended due to the absence of proper or adequate equipment, forcing responders to improvise with

makeshift tools. Such delays can increase the risk of additional injury to patients and heighten stress for emergency personnel. Improvised tools like metal bars, wooden boards, or ordinary metal items are often unreliable, prone to breaking or slipping, and can complicate patient care. Understanding this operational definition highlights the critical role that equipment availability plays in the efficiency and safety of rescue missions. It also provides context for evaluating how responders balance speed and safety under pressure.

Responders shared experiences illustrating how equipment shortages cause delays. R2 emphasized that the lack of proper tools forces improvisation, slowing operations and requiring extra care to avoid harming patients. R3 noted that rescues often take longer than expected without the right equipment, adding stress for both responders and patients. R4 recounted using a metal bar in place of a hydraulic cutter, making the process more laborious and time-consuming. R5 highlighted that weak or unreliable improvised tools can break or slip, further prolonging operations. These examples demonstrate that delays are not simply procedural but are directly linked to safety, efficiency, and the pressure experienced by responders. These are evident in the responses of the rescuers during the interview conducted:

“The lack of proper equipment makes rescues riskier and more stressful. Sometimes, we are forced to improvise, which slows us down and requires extra care to avoid harming the patient further.” (R2)

“Without the proper tools, I notice that the rescue usually takes much longer than expected, and it makes the situation more stressful for both us responders and the patient.” (R3)

“Using a metal bar instead of a hydraulic cutter makes the process harder and slower.” (R4)

“Sometimes, the problem lies in the strength and reliability of improvised tools. If you're using wood or ordinary metal, it can easily break or slip, making it more dangerous. It can really delay the operation.” (R5)

Research supports the participants’ observations, emphasizing that the quality and availability of rescue tools determine the speed and success of emergency operations (Khazaei et al., 2024). Improvised or low-quality equipment tends to extend response times, increasing the risk of injury or worsening patient conditions (Ricci et al., 2024). Studies also note that these delays elevate psychological stress for responders, affecting decision-making and performance under pressure (Qiu et al., 2024; Korpela & Nordquist, 2024). Training in both standard and alternative equipment usage has been shown to reduce delays while maintaining safety (Lawn et al., 2020). Collectively, the literature emphasizes that timely access to quality tools is crucial for effective and safe rescue operations.

This theme aligns with High-Reliability Organization (HRO) Theory, which emphasizes that teams operating in high-risk, time-sensitive situations must anticipate potential failures and implement strategies to reduce errors (Weick & Sutcliffe, 2007). Risk Society Theory also applies, suggesting that uncertainty and hazards like equipment inadequacy are inherent in emergency response, requiring adaptive strategies to mitigate harm (Beck, 1992). Applying these theories to the participants’ experiences explains why improvisation under pressure can slow operations and create stress. These frameworks clarify that delays are not solely procedural but result from systemic limitations that require strategic response.

The findings imply that delayed rescue operations can negatively affect patient outcomes and reduce responder efficiency. Prolonged response times increase the likelihood of complications or additional injuries for patients while intensifying stress and

pressure on rescuers. These results underscore the importance of ensuring the availability of reliable rescue equipment and providing training that prepares responders for both standard and improvised scenarios. Emergency preparedness programs should prioritize adequate resource allocation, equipment maintenance, and adaptive skills training to minimize delays. Addressing equipment shortages proactively can enhance operational efficiency, improve patient safety, and support responders in delivering timely and effective emergency care.

Stress and Uncertainty in Responding Emergency

Stress and uncertainty in responding emergency refer to the psychological and emotional pressures experienced by rescuers during emergency operations, especially in high-risk situations with limited resources. These pressures arise from unpredictable conditions, insufficient equipment, and the urgency of providing immediate care. Stress may manifest as anxiety, panic, or hesitation, while uncertainty stems from doubts about the safety and effectiveness of improvised tools. Such conditions place an added cognitive burden on responders who must act quickly despite unclear outcomes. Understanding this concept is essential for explaining how emotional strain influences decision-making, performance, and patient safety during rescue operations.

Responders shared experiences illustrating the intensity of stress and uncertainty during emergencies. R1 explained that nervousness and panic are natural initial reactions, with differences observed depending on a responder's experience and ability to remain calm. R2 described moments when uncertainty caused mental blankness, particularly when using improvised tools, raising doubts about whether their actions were helping or worsening the situation. R3 emphasized that prolonged rescue operations due to inadequate

tools increased stress but also contributed to improved mental readiness over time. R5 recalled initial anxiety when improvised tools failed, causing panic within the team. Collectively, these experiences show that while stress and uncertainty are unavoidable, they can be managed through experience, adaptability, teamwork, and proper training. These are evident in the responses of the rescuers during interviews:

“As a rescuer, at first there’s always nervousness. Sometimes we still get rattled or panic depending on what’s happening. You can see the difference between responders who panic and those who don’t.” (R1)

“Sometimes my mind even went blank because it felt very risky. There were times when we felt uncertain and even went blank during operations because the improvised tools made us doubt whether we were really helping or making things worse.” (R2)

“Without the proper tools, I notice that the rescue usually takes much longer than expected, and it makes the situation more stressful for both us responders and the patient. Now I’m mentally more prepared. I don’t rely only on standard tools.” (R3)

“At first, we were anxious. Sometimes, the problem lies in the strength and reliability of improvised tools. If you’re using wood or ordinary metal, it can easily break or slip, making it more dangerous.” (R5)

Research supports these observations, indicating that psychological stress and uncertainty are common in high-risk, resource-limited emergency environments (Keating et al., 2025). Responders frequently encounter emotionally intense situations where inadequate equipment necessitates improvisation, increasing anxiety and fear of causing further harm. Such uncertainty can lead to mental blockage, self-doubt, and heightened perception of risk, particularly during complex rescue scenarios (Wild et al., 2020). The need to continuously evaluate the safety of improvised tools alongside patient care contributes to cognitive overload. These findings demonstrate that psychological preparedness is as critical as technical competence for effective rescue operations.

This theme is supported by Stress and Coping Theory, which explains how individuals respond to demanding situations and develop strategies to manage psychological pressure (Lazarus & Folkman, 1984). Resilience Theory further clarifies how responders adapt and recover when exposed to repeated stress and uncertainty (Holling, 1973). Applied to emergency response, these theories show why stress reactions such as panic, hesitation, or mental blankness occur, especially during resource scarcity. They also highlight how experience, structured training, and support systems strengthen emotional regulation over time. Together, these frameworks emphasize that stress is a natural and manageable response to extreme conditions rather than a personal shortcoming.

This implies that psychological stress and uncertainty significantly influence responder performance and patient outcomes. Excessive stress can impair judgment, slow decision-making, and increase the likelihood of errors during operations. These conditions may also place responders at risk of long-term psychological consequences, including burnout and anxiety. Emergency response systems should therefore prioritize psychological preparedness, resilience training, and mental health support alongside technical instruction. By addressing stress and uncertainty proactively, responders can sustain effective, safe, and timely emergency operations while maintaining personal well-being.

Attending Training and Skills Development

Attending training and skills development refers to the ongoing process of equipping rescuers with the knowledge, practical competencies, and adaptive abilities needed to respond effectively during emergencies, particularly under resource-limited or high-pressure conditions. This includes formal instruction, hands-on drills, and scenario-

based exercises that simulate real-life rescue situations. Through such training, responders gain confidence in applying proper first aid techniques while adapting to limited or improvised resources. Continuous skill development reduces uncertainty, enhances decision-making, and strengthens overall performance in critical situations.

Respondents consistently emphasized that training is a crucial factor in preparedness during emergency operations. R2 highlighted that structured instruction eliminates guesswork and enables correct application of first aid, even when improvised tools are necessary. R3 explained that training sessions involving alternative materials improved their ability to adapt quickly to varying situations. R4 noted that scenario-based drills incorporating improvisation bridged the gap between theoretical knowledge and actual field demands. These experiences demonstrate that training enhances confidence, adaptability, and operational decision-making among rescuers. These are evident in the responses of the participants during interviews:

“Our trainings really helped a lot. Without them, we would just be guessing what to do. Listening carefully to our trainers gave us the skills to apply first aid correctly, even with improvised tools.” (R2)

“We now make it a point to include training sessions where we practice using basic materials as alternatives to standard rescue equipment. These kinds of trainings are very useful because they teach us to be resourceful and to adapt quickly, no matter what the circumstances are.” (R3)

“Yes, during our training, we conduct scenario-based drills where we are taught how to use available materials also including improvisation techniques.” (R4)

Research emphasizes that training and skill acquisition are fundamental components of effective emergency response, particularly when standard equipment may be unavailable (Roud, 2021). Routine training and simulation exercises improve responders' ability to remain calm, decisive, and competent during high-pressure

emergencies. Scenario-based learning allows responders to practice adaptability and critical thinking under realistic constraints, while repeated exposure enhances both technical proficiency and psychological readiness (Pongtriang et al., 2024). These findings affirm that structured and continuous training is essential for operational efficiency and patient safety.

This theme is supported by Experiential Learning Theory, which posits that learning is most effective when individuals actively engage in experience, reflection, and application (Conner, 2022). Scenario-based drills allow rescuers to learn through direct exposure to realistic challenges, reinforcing skill retention and adaptability. Additionally, Competency-Based Training Models emphasize mastery of practical skills and measurable performance outcomes rather than theoretical knowledge alone (Hao, 2024). These frameworks explain why ongoing, hands-on training strengthens responder confidence, decision-making, and performance under pressure. Together, they provide a theoretical basis for prioritizing practical training within emergency response systems.

This implies that attending continuous training and skills development is a key determinant of effective rescue performance. Well-trained responders demonstrate reduced hesitation, improved adaptability, and greater confidence when managing emergencies involving limited resources. Strengthening training systems ensures safer operations, protects both responders and patients, and contributes to faster, more effective emergency response outcomes. Prioritizing practical, scenario-based, and adaptive training ultimately enhances both individual competence and overall system resilience.

Teamwork and Coordination

Teamwork and coordination refer to the organized collaboration among rescue responders to ensure efficient, safe, and timely emergency operations (Landon, 2025). This involves clear communication, defined leadership, shared responsibilities, and synchronized actions during high-pressure situations. Effective coordination enables teams to function cohesively, particularly when resources are limited or when improvisation is required. Through collective effort, responders are able to manage risks and deliver life-saving interventions despite operational constraints.

The experiences shared by the rescuers highlight teamwork as a central factor in managing emergency situations effectively. R1 emphasized the importance of a clear command structure, where a designated leader directs operations to maintain order and coherence. R2 noted that teamwork combined with creativity allows responders to adapt calmly when standard equipment is unavailable. R3 underscored the role of planning and role distribution, explaining that shared responsibility compensates for equipment shortages. Meanwhile, R4 and R5 described practical coordination strategies such as rotating tasks, double-checking tool stability, and requesting backup, all of which enhanced safety and continuity during operations. These are evident in the responses of the rescuers during the interview conducted:

“As a responder, teamwork is really important. In the team, there’s always a commander who gives instructions, decides what should be done, and directs the flow of the response.” (R1)

“We adjust by relying on teamwork and creativity. Teamwork is also important, because coordinating with each other lessens the risk.” (R2)

“We plan carefully, check if the tool is safe to use, and make sure every team member knows their role. Many times, especially when equipment is lacking, it’s teamwork and training that save the day.” (R3)

“However, due to our experience and teamwork, we were able to build the confidence that even improvised tools if used properly can still be safe and effective. To address such issues, we now double-check the stability of tools, rotate responders to prevent fatigue, and rely on teamwork to support each other in case a tool fails.” (R4)

“We now implement team rotation, double-check the stability of our tools, and when necessary, we request backup from other teams.” (R5)

Teamwork and coordination are consistently identified as core elements of effective emergency response, particularly in high-stress and resource-limited environments (Esmaeili et al., 2025). Research indicates that coordinated teams communicate more effectively, divide labor efficiently, and maintain situational awareness during critical incidents (Gooding et al., 2022; Parry et al., 2023). A clear chain of command and mutual monitoring of safety practices reduce operational risks, especially when improvised tools are used (Bearman et al., 2023). These coordinated practices contribute to smoother operations and improved patient and responder safety.

This theme aligns with Team-Based Systems Theory, which emphasizes interdependence, shared goals, and structured communication as foundations of effective group performance (Deb, 2025). In emergency contexts, the theory explains how coordinated roles and leadership improve collective decision-making under pressure. Additionally, High-Reliability Organization Theory supports the idea that teams operating in hazardous environments rely on constant communication, redundancy, and mutual support to prevent failure (Ghaith & Huimin, 2024). These frameworks help explain why strong coordination mitigates risk and enhances operational resilience during emergencies.

The findings imply that teamwork and coordination serve as critical safeguards in emergency response, especially when standard resources are limited. Effective coordination reduces confusion, prevents fatigue, and ensures consistent safety practices.

Strengthening team dynamics through regular drills and leadership development enhances responder resilience, improves patient outcomes, and supports reliable emergency operations.

Need for Local Government Support

Local government support refers to the provision of funding, equipment, policy direction, and institutional training that strengthens the capacity of responders to manage disaster and emergency situations effectively. This support plays a crucial role in ensuring preparedness, safety, and coordination at the community level. When local authorities actively invest in emergency response systems, responders are better positioned to act decisively and safely. In contrast, insufficient local backing often results in delayed responses and reliance on improvised solutions.

The rescuers consistently identified local government involvement as a decisive factor in improving emergency response performance. R1 emphasized the need for advanced and specialized training, noting that basic instruction alone limits responders' ability to handle complex emergencies. R4 highlighted the importance of integrating improvisation training into routine drills and maintaining equipment inventories per area to guide responders during shortages. Meanwhile, R5 stressed the urgency of providing barangay-level rescue kits, explaining that lack of tools directly contributes to delayed response times. Collectively, these accounts reveal that responders view structured training, equipment provision, and logistical planning by local authorities as essential to effective disaster response. These are evident in the responses of the rescuers during the interview conducted:

“My recommendation is for the MDRRMO and MDRRMC to provide more trainings advanced trainings, because there are different types. There’s Emergency Life Training, Emergency Search and Rescue, and the highest level is Urban Search and Rescue. If you only have basic training, then you’ll only be able to apply the basic skills.” (R1)

“My recommendation is to integrate improvisation training into regular drills and to establish equipment inventories per area, so responders will know where to seek additional tools or assistance when needed.” (R4)

“The local government should provide basic rescue kits for each barangay. Sometimes, the lack of tools is the reason why response time is delayed. I recommend conducting regular team-based improvisation training and documenting best practices so they can be shared with others.” (R5)

Local government assistance is widely recognized as a foundational element of effective disaster response systems (Ishiwatari, 2020). Studies indicate that inadequate access to rescue equipment, delayed logistical support, and limited advanced training significantly hinder operational efficiency and compromise patient safety (Basnawi, 2023). When responders lack essential tools such as trauma kits or rescue boards, improvisation becomes unavoidable, increasing operational risks and response time. Research also emphasizes that routine training and community-level preparedness initiatives supported by local governments can reduce uncertainty and improve field performance (Ma et al., 2023). These findings affirm that institutional support is necessary to sustain safe and effective emergency operations.

This theme is supported by Disaster Governance Theory, which underscores the responsibility of local authorities in coordinating resources, training, and response mechanisms at the community level (Krogh & Røiseland, 2023). The theory explains that decentralized preparedness allows frontline responders to act more efficiently during emergencies. In addition, Capacity-Building Theory highlights how sustained investment

in training, equipment, and institutional systems enhances responder competence and organizational resilience (Okyere et al., 2024). Together, these frameworks clarify why local government engagement is pivotal in strengthening emergency response outcomes.

The implications of this study strongly suggest that local government support must be treated as a continuous and proactive responsibility rather than a reactive measure. Providing barangays with basic rescue kits, institutionalizing advanced and improvisation-based training, and maintaining accessible equipment inventories can directly improve the effectiveness, safety, and confidence of emergency responders. Prioritizing preparedness enables teams to act decisively under pressure, even when resources are limited. Furthermore, consistent investment in training, coordination, and logistics fosters stronger teamwork, operational efficiency, and resilience among responders. Ultimately, these measures not only enhance the capability of rescue personnel but also cultivate a community-wide culture of resilience, ensuring that both responders and citizens are better protected during emergencies.

Community Involvement and Participation in Responding Calamities

Community involvement and participation in emergency response refer to the active engagement of local residents, bystanders, and grassroots members in assisting rescue operations. This includes providing immediate support such as first aid, facilitating evacuation, or assisting trained responders with available resources. Effective community participation ensures that emergencies are addressed more quickly and efficiently, particularly in resource-limited situations, by complementing formal rescue systems (Olorunfemi et al., 2024). Structured integration of communities into preparedness

programs, including training and resource management, enhances both individual and collective readiness for disaster scenarios.

The rescuers emphasized the importance of community support during emergency operations. Rescuer 1 noted the utility of calling for assistance from bystanders to make first aid delivery easier and more effective (R1). Rescuer 4 highlighted the need for additional local government support to provide basic rescue tools for grassroots responders (R4). These experiences reveal that active community involvement not only facilitates immediate rescue efforts but also strengthens the capacity of responders to manage emergencies more effectively, especially when professional equipment or personnel are limited. These are evident in the responses of the rescuers during the interview conducted:

“Sometimes you also think of asking for help from standby people or bystanders around the area. You can request their help so your delivery of first aid service becomes easier and more effective.” (R1)

“There should be more community or local government support to provide even basic rescue tools for grassroots responders.” (R4)

Research consistently emphasizes the critical role of community participation in effective emergency response (Pasamonte, 2025). Involving bystanders and standby individuals can provide immediate assistance, speeding up first aid and supporting trained responders in resource-scarce situations (Guingab et al., 2025). Institutional support, such as local government programs that supply basic rescue equipment and integrate citizens into routine training, enhances grassroots readiness (Tang et al., 2024). Additionally, establishing equipment inventories and clear communication channels improves coordination and ensures that responders can quickly access resources when necessary (Grabmaier et al., 2025). These measures collectively strengthen response capacity, reduce delays, and promote a culture of preparedness.

This theme aligns with the Community Resilience Theory, which posits that the active engagement of local populations enhances a community's capacity to withstand, respond to, and recover from disasters (Cruz, 2022). By participating in rescue operations, communities develop adaptive skills, resourcefulness, and confidence, contributing to a collective ability to manage emergencies effectively. Additionally, Social Capital Theory underscores that networks of trust, collaboration, and shared knowledge within communities facilitate faster, coordinated, and safer responses during crises (Al-Omoush et al., 2022). Together, these frameworks explain why community engagement is not only supportive but essential for sustainable emergency management.

This implies that active community involvement is vital for enhancing the effectiveness, speed, and safety of emergency response operations. Engaging local residents and bystanders not only provides immediate assistance but also helps fill gaps when professional responders or equipment are limited. Structured training, access to basic rescue tools, and clear communication systems empower communities to act confidently and collaboratively during emergencies. Prioritizing community participation reduces the burden on formal responders while fostering resilience, preparedness, and collective responsibility. Ultimately, integrating community engagement into disaster management strengthens both individual and collective capacity to respond to crises effectively.

CONCLUSION AND RECOMMENDATION

The research confirms that rescuers from one of the municipalities of Misamis Occidental, Philippines, are ever resourceful, always able to improvise, work together in teams, and persevere in the face of meager equipment and backup. Their experiences map out the ways in which creativity, cooperation, and community action become lifelines during crises. Meanwhile, the testimonies emphasize resource and training deficits that will hamper rescue efforts if not remedied. All in all, the research confirms that an efficient emergency response depends not only on equipment and policies but also on rescuers' ingenuity, commitment, and flexibility when they operate under duress.

According to the conclusion, local government units are recommended to intensify logistical and fiscal support for rescue activities through provision of adequate equipment and recurrent training involving improvisation exercises. Rescue teams should continue to foster collaboration and community involvement to improve coordination responses in emergencies. In addition, collaborations with non-governmental organizations, academic institutions, and private players can augment resources and establish long-term support systems for disaster preparedness. Incorporating resourcefulness, flexibility, and ongoing learning into formal training programs will guarantee that rescuers are thoroughly equipped to respond well, even under resources-limited and high-stress environments.

DECLARATION OF THE USE OF AI TOOLS

I acknowledge the use of ChatGPT and [<https://chatgpt.com/>] to help create the interview guide of the study.

I entered the following prompt: “Create interview guide that can answer the statement of the problem.”

I used the output as a questionnaire during the interview

I acknowledge the use of ChatPDF and [<https://www.chatpdf.com/>] to help create the theoretical framework of the study.

I entered the following prompt: “List 2 theories with author and year that could support the study.”

I also acknowledge the use of QuillBot [<https://quillbot.com/>] to help check grammar, improve sentence structure, and enhance clarity in the writing of the study, including the interview guide, theoretical framework, and other written sections.

Furthermore, I confirm that all outputs generated by these AI tools were carefully reviewed, interpreted, and revised by me to ensure accuracy, relevance, and alignment with the objectives of the study. All ideas, conclusions, and analyses presented in the study remain my own and were not solely created by AI tools.

This declaration ensures transparency in the use of AI-assisted resources while maintaining the integrity of the research process.

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APPENDIX A

INTERVIEW PROTOCOL

Introduction

1. Introduce self as the researcher.
2. Explain the purpose of the study.
3. Provide informed consent and clarify participation rights.
4. Explain the structure of the interview, including audio recording and note-taking for accuracy.
5. Ask if the participant has any questions or concerns before starting.
6. Before we proceed, do you have any questions or concerns about this interview or the study?
7. Test the audio recording equipment.
8. Make the respondent feel comfortable and emphasize that their story and insights are valuable.

Opening Questions

1. Can you tell me a bit about your experience working as a rescuer? (*Pwede nimo ikatambag kung unsay imong experience isip rescuer?*)
2. How long have you been involved in emergency response? (*Pila na ka tuig ka nga naapil sa emergency response?*)
3. What kind of emergency situations do you most frequently respond to? (*Unsang klase nga emergency situations ang kasagaran nimo giatubang?*)
4. Can you describe the standard emergency equipment typically used during response operations? (*Pwede nimo i-describe unsa ang mga standard nga gamit o equipment nga pirme gamiton sa response operations?*)

Core Questions

1. What are the lived experiences of rescuers in responding to calamities utilizing alternative emergency equipment? (*Unsa ang mga kasinatian sa mga rescuers sa ilang pagresponde sa mga kalamidad gamit ang alternatibong emergency nga kagamitan?*)

1.1 Can you describe a specific incident where you had to use improvised or alternative equipment during a rescue? (*Maka-describe ba ka ug usa ka espesipikong insidente diin kinahanglan nimo gamiton ang na-improvised o alternatibong kagamitan sa usa ka rescue?*)

1.2 How did using this alternative equipment affect your confidence and decision-making during the operation? (*Giunsa pag-apekto sa paggamit sa alternatibong kagamitan ang imong kumpiyansa ug paghimo og desisyon sa operasyon?*)

1.3 How do you feel your experiences with alternative equipment influence your overall approach to rescue missions? (*Sa imong tan-aw, giunsa pag-usab sa imong kasinatian sa paggamit og alternatibong kagamitan ang imong kinatibuk-ang pamaagi sa pag-rescue?*)

2. What challenges do rescuers encounter when utilizing alternative means of equipment in responding to calamities? (*Unsa nga mga hagit ang masinati sa mga rescuer kung mogamit sila og alternatibong kagamitan sa pagresponde sa mga kalamidad?*)

2.1 What kinds of problems or limitations have you faced when using improvised tools during rescue efforts? (*Unsa nga matang sa problema o limitasyon ang imong naatubang diha sa paggamit og improvised nga mga gamit sa panahon sa rescue?*)

2.2 How do resource constraints, such as availability or reliability of alternative equipment, impact your rescue procedures? (*Giunsa pag-apekto sa kakuwang sa*

mga kagamitan sama sa kalisud sa pagkuha o kasaligan sa alternatibong kagamitan ang inyong mga proseso sa rescue?)

2.3 Can you share any situations where using alternative equipment led to unforeseen difficulties? *(Makaambit ka ba og sitwasyon diin ang paggamit sa alternatibong kagamitan miresulta og dili gilauman nga kalisdanan?)*

3. How do rescuers cope with the challenges they encounter when using alternative emergency equipment? *(Giunsa sa mga rescuer pag-atubang ang mga hagit nga ilang masinati kung mogamit sila og alternatibong emergency nga kagamitan?)*

3.1 What strategies do you employ to overcome the limitations of improvised tools during operations? *(Unsa nga mga pamaagi ang inyong gigamit aron malampasan ang mga limitasyon sa improvised nga mga gamit sa operasyon?)*

3.2 How do you adapt your approach when standard equipment is unavailable? *(Giunsa nimo pag-adjust ang imong pamaagi kung wala ang standard nga kagamitan?)*

3.3 Can you share experiences where teamwork or prior training helped you manage these challenges? *(Makaambit ka ba og kasinatian diin ang panaghiusa sa team o pre-training makatabang sa pagdumala sa mga kalisdanan?)*

4. What insights can be drawn from the experiences of rescuers responding to calamities with alternative equipment? *(Unsa nga mga pagtulun-an ang makuha gikan sa kasinatian sa mga rescuer nga mitubag sa kalamidad gamit ang alternatibong kagamitan?)*

4.1 In your view, what lessons have you learned from improvising in critical situations? *(Para nimo, unsa nga mga leksyon ang imong nahibal-an sa pag-improvise sa mga kritikal nga sitwasyon?)*

4.2 How do these experiences shape your preparedness and training for future emergencies? *(Giunsa sa mga kasinatian nga ini paghulma sa imong preparasyon ug training para sa umaabot nga emerhensya?)*

4.3 What recommendations would you give to other rescuers regarding the use of alternative equipment? *(Unsa ang imong mga rekomendasyon para sa ubang rescuer bahin sa paggamit sa alternatibong kagamitan?)*

Closing Question

1. In your opinion, what can be improved in terms of equipment accessibility or readiness for rescuers like yourself? *(Sa imong opinyon, unsa pa ang dapat ma-improve in terms sa accessibility o readiness sa equipment para sa mga rescuer sama nimo?)*

2. What recommendations would you give to improve the use of both standard and alternative equipment during emergencies? *(Unsay imong ikarekomendar aron ma-improve pa ang paggamit sa standard ug alternative equipment inig-emergency?)*

APPENDIX B

TRANSMITTAL LETTER

 **Misamis University**
Ozamiz City
College of Criminology 

August 22, 2025

HON. ESTELA OBUT ESTANO
Mayor's Office
Tudela, Ozamiz City

*Please coordinate to the
the Barangay Captain
of Upper Centro, Tudela*

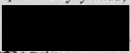
Dear Hon. Estano,

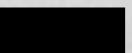
Greetings of Peace!

We, the Bachelor of Science in Criminology students of Misamis University, Ozamiz City are currently working on our Thesis study entitled, **"Utilization of Alternative Emergency Equipment in Responding Calamities; The Stories of Rescuers Amidst Critical Circumstance,"** as a requirement for the course **Criminological Research 1 and 2.**

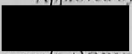
In connection with our ongoing research study, we respectfully seek your permission to conduct face-to-face surveys with selected rescuers of Brgy, Upper Centro, Tudela, Ozamiz City, Misamis Occidental. These surveys will serve as a vital component of our data-gathering process. We assure you that informed consent will be secured from all participants prior to the surveys, and all information gathered will be treated with the highest degree of confidentiality. The data collected will be used strictly for academic research purposes and will not be disclosed beyond the scope of this study.

Your approval to this request will contribute to the success of our educational endeavors. God bless and more power. For more details, you may contact this number 09639259075.

Respectfully yours,

PRINCESS JOY D. GIO
Team Leader

Noted:

MARKDY O. ORONG, DIT
Instructor


JOSE F. CUEVAS JR., RCrim, PhD
College Dean

Approved by:

HON. ESTELA OBUT ESTANO
Municipal Mayor



Misamis University
Ozamiz City
College of Criminology



August 26, 2025

HON. JOSE CONSTANTINO T. JULO
Operation Center of LDRRMO II
Brgy. P-2, Upper Centro, Tudela, Ozamiz City
Misamis Occidental

Dear **HON. Julo**,

Greetings of Peace!

We, the Bachelor of Science in Criminology students of Misamis University, Ozamiz City are currently working on our Thesis study entitled, **"Utilization of Alternative Emergency Equipment in Responding Calamities; The Stories of Rescuers Amidst Critical Circumstance,"** A Phenomenological Study as a requirement for the course **Criminological Research 1 and 2**.

In connection with our ongoing research study, we respectfully seek your permission to conduct face-to-face surveys with selected rescuers of Brgy. Upper Centro, Tudela, Ozamiz City, Misamis Occidental. These surveys will serve as a vital component of our data gathering process. We assure you that informed consent will be secured from all participants prior to the surveys, and all information gathered will be treated with the highest degree of confidentiality. The data collected will be used strictly for academic research purposes, and will not be disclose beyond the scope of this study.

Your approval to this request will contribute to the success of our educational endeavors. God bless and more power. For more details, you may contact this number 09639259205.

Res

PRINCESS JOY D. GIO,
Team Leader

Noted:

MARKDY Y. ORONG, DIT
Instructor

JOSE F. CUEVAS JR., RCrim, PhD
College Dean

Approved by:

HON. JOSE CONSTANTINO T. JULO,
Barangay Captain

APPENDIX C

TRANSCRIPT OF THE INTERVIEW

RESCUER 1 (Volunteer Rescuer, ~1 year in emergency response, MDRRMO-affiliated)

As a rescuer, at first there's always nervousness. Sometimes when responding, it depends on the situation. If there's a call for response, what comes to your mind is that it might be a very serious case, but when you arrive, it turns out to be just mild. That's how it usually goes. From the training we had, we are able to apply it in real situations, but sometimes we still get rattled or panic depending on what's happening. What's really important is that we can give the patient the standard of care in our response. I've only been part of emergency response for a short time around a year, maybe just months. My other companions have been in service longer, around 3 to 5 years already. The common types of emergency situations I've faced are vehicular incidents. I also once responded to a case where the secretary at the upper Centro Barangay Hall had an attack. I was one of those who first responded. In training, we are taught how to position ourselves when responding on the ground, not to just say whatever we see in the patient (like saying a bone is broken). Instead, we reassure the patient so that their emotional pain won't worsen when they learn about their injury. The standard equipment we usually use are spine boards, triangular bandages, splints, and other immobilizing tools. We also have gloves and masks. In actual rescue, I haven't used an AED (Automated External Defibrillator). I only tried it during training in Red Cross. AEDs are usually inside ambulances. They serve as a guide on when to start CPR. Clothes, shirts, or even branches of trees can also be used as improvised splints for tying. Either clothes, towels, or any cloth can be used. That's where resourcefulness comes in when you don't have the equipment, you find a way to apply first aid using whatever is available, like I mentioned earlier about branches, clothes, or towels. In those moments, you can see the difference between responders who panic and those who don't. Without proper equipment, you can see how a responder uses resourcefulness to look for alternatives to apply first aid. You really can't choose strong and proper materials because it depends on what's available in the area. You use what you can find there. Sometimes you also think of asking for help from standby people or bystanders around the area. You can request their help so your delivery of first aid service becomes easier and more effective. That's really how it is, like I said earlier, we don't always have strong and reliable equipment. But you just apply what you can, even if it's temporary, as long as it prevents the patient from moving too much. For example, if it's a fracture, the splint is meant to stop movement and prevent the injury from worsening. Even if it's not strong, at least it still helps control the movement. As a responder on duty, the standard of care is always applied. We follow what we were trained to do and what should be done. The methods we use are also similar to what I mentioned earlier. We make sure to give the standard of care and not just handle the patient carelessly. In applying first aid, we always go back to the standard, but we can also rely on alternative equipment when necessary. It may not always be enough, but depending on the area and the type of injury, it still helps. As a responder, teamwork is really important. In the team, there's always a commander who gives instructions, decides what should be done, and directs the flow of the response. We also gain improvement because we learn not to just rely on equipment. For example, if we don't bring tools, we use our resourcefulness and common sense, depending on the area

and the type of incident whether it's a vehicular accident, a home emergency, or if the patient needs CPR. The lesson here is that being a responder really improves your ability to use resourcefulness. My recommendation is for the MDRRMO and MDRRMC to provide more trainings advanced trainings, because there are different types. There's Emergency Life Training, Emergency Search and Rescue, and the highest level is Urban Search and Rescue. If you only have basic training, then you'll only be able to apply the basic skills.

RESCUER 2 (Volunteer Rescuer, 6+ years in service, Municipal Rescue Team)

I already have a lot of experiences as a rescuer. For example, during the 2022 flood the biggest we've ever experienced in Misamis Occidental it wasn't only our province that was affected but almost the whole Philippines. At that time, people were hesitant to evacuate despite our repeated warnings. Many would only move when the water was already dangerously high. I've been serving as a rescuer for more than six years now. Here in Tudela, the most common emergencies we respond to are vehicular accidents. Most of the time, they are road-related accidents, and in one particular year, there were really a lot of damages and casualties from these incidents. In vehicular accidents, the equipment we usually bring are splints, bandages, triangular bandages for tying, a spine board, and a stretcher. We also carry a trauma bag for our medical kit. Sometimes, especially in mountainous areas, we don't have complete equipment like a spine board. In those cases, we improvise using clothes, bamboo, or sacks to create an improvised spine board. At least with these improvised tools, we can still provide first aid. They are not perfect, but they work somehow the improvised equipment failed. Sometimes my mind even went blank because it felt very risky. These experiences made me more careful and focused on handling patients properly. I learned that even without complete tools, what matters is that we provide first aid and transport the patient safely. One challenge is the risk of worsening the victim's pain due to the improvised tools. Another problem is when rescue vehicles are already responding to another case and all the standard equipment is loaded there, leaving the second team without the necessary tools. The main limitation is that improvised tools are not always reliable, and there's always a chance that they might not fully support or protect the patient. This adds pressure to us as responders. The lack of proper equipment makes rescues riskier and more stressful. Sometimes, we are forced to improvise, which slows us down and requires extra care to avoid harming the patient further. Yes, there were times when we felt uncertain and even went blank during operations because the improvised tools made us doubt whether we were really helping or making things worse. We cope by focusing on the rescue and staying calm. Even without complete tools, we make sure to handle the patient carefully and transport them safely. We maximize what we have by improvising with available materials and making sure that the patient is at least immobilized or stabilized before transport. We adjust by relying on teamwork and creativity. Improvised materials like bamboo or sacks are used, but we always remember to move cautiously to prevent further injury. Yes, our trainings really helped a lot. Without them, we would just be guessing what to do. Listening carefully to our trainers gave us the skills to apply first aid correctly, even with improvised tools. Teamwork is also important, because coordinating with each other lessens the risk. The main insight is that training and preparedness are more important than the equipment itself. Tools may not always be available, but resourcefulness, presence of mind, and proper handling make a big

difference. I learned that improvising is sometimes the only option, and it teaches us to be resourceful. However, it also reminded me that proper equipment is always safer and should be prioritized. These experiences pushed me to take training more seriously. They made me realize the importance of being careful, resourceful, and mentally prepared for future emergencies. My advice is to stay calm, be resourceful, and use improvisation wisely. But whenever possible, always aim to have complete standard equipment ready. I think there should be better access to complete equipment so that responders won't need to improvise too often. Having equipment ready and available would reduce the risks we face in the field. For standard equipment, authorities should ensure enough supply and proper maintenance. For alternative equipment, rescuers should be trained more on improvisation techniques so that even in resource-limited situations, we can still provide safe and effective first aid.

RESCUER 3 (Rescuer, ~6 years of experience, Road Emergency Response)

I have been working as a rescuer for around six years now, and during that time I have gained a lot of experiences in different kinds of emergencies. Most of the cases we respond to are road-related accidents, which are very common in our area. Through the years, these experiences have taught me how important it is to stay prepared, focused, and resourceful in every rescue operation. Mostly vehicular accidents collisions, trapped passengers, or injured persons on the road. We usually use spine boards, stretchers, trauma kits, neck collars, and if someone is trapped, we use crowbars or hydraulic spreaders if available. Yes, in one road accident, the car door couldn't be opened. We had no hydraulic tools, so we used a metal pipe and a car jack to pry the door open. It was risky, but we had to decide quickly. I trusted the team since we knew how to use it safely. Now I'm mentally more prepared. I don't rely only on standard tools. I know how to adjust when needed. Sometimes improvised tools like pipes or wood aren't strong or hard to control it can be dangerous if they slip. Without the proper tools, I notice that the rescue usually takes much longer than expected, and it makes the situation more stressful for both us responders and the patient. Sometimes we try to improvise with whatever is available, but it doesn't always work as effectively as standard equipment. Because of these delays, there's always a risk that the patient's condition might worsen, especially if they are already in serious pain or need urgent care. That's why I believe having complete and reliable equipment is really important to make rescues faster and safer. Yes, there was one time when we had to use a wooden board instead of a proper spine board during a rescue. Since the board was not really designed for medical use, it wasn't completely flat or supportive, and unfortunately, the patient experienced back pain while being transported. I could really feel the difference compared to when we use the standard spine board, because the improvised one made the patient more uncomfortable and harder to stabilize. That experience reminded me how risky it can be when we lack the proper tools, and it showed me the importance of always having the right equipment available during emergencies. We plan carefully, check if the tool is safe to use, and make sure every team member knows their role. We shift to manual methods rely on teamwork and assess the situation well. We always prioritize safety. Many times, especially when equipment is lacking, it's teamwork and training that save the day. Not all the time you have complete tools, but if you know how to improvise and assess risks, you can still save lives. We now make it a point to include training sessions where we practice using basic materials as alternatives to standard rescue equipment. This helps

us prepare for situations where proper tools are not available, especially in remote areas. By learning how to use everyday items effectively, like bamboo, sacks, or even clothing, we gain the confidence to improvise safely while still protecting the patient. These kinds of trainings are very useful because they teach us to be resourceful and to adapt quickly, no matter what the circumstances are. We don't focus only on standard equipment during our training and response operations, because we know that in real situations, these tools are not always available. Sometimes emergencies happen in remote areas or at times when the equipment we need is already being used in another incident. That's why we also train ourselves to be flexible and to make use of alternative or improvised materials whenever necessary. For me, it's important to be prepared not just with the proper tools, but also with the skills and mindset to adapt when those tools are missing. Practice alternate methods. Don't wait for an emergency to learn. You should always be ready for anything. I believe there should really be a bigger budget allocated for rescue tools, especially because road incidents are the most common emergencies we respond to. Having the right equipment can make a big difference in saving lives and preventing further injuries, but unfortunately, not all teams are fully equipped. I've seen situations where responders struggle because they lack even the basic tools needed for proper first aid and safe transport of patients. If more funds were provided, it would help ensure that every rescue team has the standard and reliable equipment they need to respond quickly and effectively. There should be regular training for both standard and alternative equipment. Also, have clear guidelines on safe improvisation.

RESCUER 4 (Volunteer Rescuer, 3+ years in local emergency response team)

Yes, as a volunteer rescuer in a local emergency response team. I have been actively involved for over three (3) years. I began this work because of my strong interest in helping people, especially during road-related accidents and emergencies. The majority of the incidents we respond to are vehicular accidents involving motorcycles, multicabs, and four-wheel vehicles. Occasionally, we deal with truck rollovers or vehicular entrapments. Our standard equipment usually includes spine boards, cervical collars, hydraulic cutters and spreaders (if available), trauma kits, and portable radios. Our team is small and our resources are limited, but we do our best to prepare adequately. Yes, in 2023, we responded to a collision on the highway where a man was trapped inside a vehicle. At that time, we did not have a hydraulic cutter available, so we used a car jack and a metal pipe to open the car door. A bolo and an improvised wooden wedge also helped stabilize the vehicle. At first, it was quite nerve-wracking because we weren't using standard equipment. However, due to our experience and teamwork, we were able to build the confidence that even improvised tools if used properly can still be safe and effective. That experience helped us develop critical thinking and adaptability. We no longer rely solely on standard tools; we've learned how to assess and utilize what's available in the environment. The biggest challenge is the lack of strength or durability of the improvised tools. For example, using a metal bar instead of a hydraulic cutter makes the process harder and slower. The extrication took longer, which in some cases could negatively affect the patient's condition. That's why we had to work in full coordination to speed up the process. Yes, there was one incident where the improvised lever we were using broke and almost hit one of the rescuers. The tool wasn't designed for heavy use, and that was a major lesson for us. To address such issues, we now double-check the stability of tools, rotate responders to prevent

fatigue, and rely on teamwork to support each other in case a tool fails. I shift my mindset to “maximize what you have.” I conduct faster on-site assessments to identify available materials even if they’re non-traditional for possible use. Yes, during our training, we conduct scenario-based drills where we are taught how to use available materials. So in actual incidents, our team is coordinated and ready. Resourcefulness is key. It’s not about having complete equipment, but about knowing how to use whatever is available around you. We now focus on low-cost solutions and regular skills training not just with standard equipment, but also including improvisation techniques. Don’t be afraid to use alternative tools, as long as you understand the risks and follow safety protocols. It’s better if this is practiced beforehand during training. There should be more community or local government support to provide even basic rescue tools for grassroots responders. My recommendation is to integrate improvisation training into regular drills and to establish equipment inventories per area, so responders will know where to seek additional tools or assistance when needed.

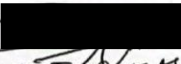
RESCUER 5 (Volunteer Rescuer, 5+ years in emergency response, Barangay to Municipal Level)

Yes, as a volunteer rescuer, I have encountered numerous vehicular accidents. Most of these involve collisions between motorcycles and cars, and in some cases, passengers were trapped. I have learned how to coordinate with the team and respond effectively even when equipment is lacking. I’ve been actively involved in emergency response for over five (5) years. I started as a barangay volunteer until I was eventually assigned to the municipal rescue team. The most common emergencies we respond to are vehicular accidents, medical emergencies, and at times, fires and floods. However, road-related accidents remain the most frequent. Our standard tools include spine boards, trauma kits, cervical collars, rescue ropes, flashlights, radios, and when available hydraulic tools. But there are times when we lack these, which is why we often resort to improvised tools. Yes. In one incident, we couldn’t open a vehicle door and we didn’t have a hydraulic spreader. We used a car jack and a metal pipe to force the door open. It loosened, and the patient was able to breathe better. At first, we were anxious. But over time, we learned that if you know how to properly use alternative tools, you can still solve the problem. It helped increase our confidence. That experience changed our mindset. Now, we no longer rely solely on standard equipment. We’ve learned how to find solutions using the materials available around us. Sometimes, the problem lies in the strength and reliability of improvised tools. If you’re using wood or ordinary metal, it can easily break or slip, making it more dangerous. It can really delay the operation. Extractions are supposed to be done quickly, but due to the lack of proper tools, it takes more time which can sometimes be critical for the patient. Yes, there was one time when our improvised wedge wasn’t properly secured. The vehicle shifted and startled the team. Fortunately, no one was hurt, but it was a major lesson for us. We now implement team rotation, double-check the stability of our tools, and when necessary, we request backup from other teams. We adapt to the situation. Safety is our top priority, so we create plans based on whatever resources are available. Yes, even during training, we are already prepared for worst-case scenarios. That’s why in real incidents, even with limited equipment, the team remains coordinated. The key lessons are presence of mind, teamwork, and resourcefulness. If you know how to use what you have, that’s already a huge advantage. We’ve integrated improvisation drills into our training.

This has helped us be better prepared for real-life situations. It's important to practice using non-standard tools. Don't just rely on high-end equipment. It's better to be skilled in using both standard and alternative tools. The local government should provide basic rescue kits for each barangay. Sometimes, the lack of tools is the reason why response time is delayed. I recommend conducting regular team-based improvisation training and documenting best practices so they can be shared with others.

APPENDIX D

THESIS/RESEARCH DATA GATHERING APPROVAL FORM

	Misamis University Ozamiz City	
MISAMIS UNIVERSITY RESEARCH CENTER CERTIFIED: ISO 21001: 2018 Educational Organizations Management System by DNV ACCREDITED: Philippine Association of Colleges and Universities Commission on Accreditation (PAGUCOA)		
MU-RC-042/13 November 2024		
Thesis/Research Data Gathering Approval Form		
Date: <u>5/5/24</u>		
Name of Authors: <u>Princess Jay D. Gio, Aliandro Dela Cruz, Keith Aljay Marjones, Hans Danny S. Iguia</u>		
College/Department: <u>COLLEGE OF CRIMINOLOGY</u>		
Research Title: <u>UTILIZATION OF ALTERNATIVE EMERGENCY EQUIPMENT RESPONDING CALAMITIES: THE STORIES OF RESCUERS AMIDST CRITICAL CIRCUMSTANCES</u>		
Data Gathering Procedure:		
a. Type of Research: (Kindly check)		
☐ Quantitative	☒ Qualitative	☐ Experimental
☐ Approved Research Title & Problem/Objectives	☐ Approved Data Gathering Procedure	☐ Approved Data Gathering Instrument/Data Sheets
b. Respondents/Participants/Subject/Samples to be Collected: <u>Rescuers of Tudela Local Disaster Risk Reduction Management</u>		
c. Procedure:		
☐ Survey	☒ Interview	☐ Experimentation
☐ Laboratory Testing		
d. Place of Implementation/Study Area: <u>Tudela, Misamis Occidental</u>		
If to be conducted outside the school campus, indicate the nature of transportation to be used:		
☒ Own private vehicle	☐ public utility vehicle	☐ rental
☐ Others, please indicate _____		
e. Date/s of Implementation/Sampling: _____		
Attachments:		
☐ Approved Letter of Consent from the designated authority in the area/place where the study is to be conducted		
☐ Signed Parents' Consent		
The thesis proposal mentioned above is hereby recommended for the commencement of data gathering implementation.		
Recommended by:		
 _____ Thesis/Research Adviser	 _____ Thesis/Research Instructor	
Approved by:  _____ JOSE F. CUEVAS JR. College Dean		

APPENDIX E

INFORMED CONSENT FORM



Misamis University
H. T. Feliciano St., Ozamiz City, 7200 Philippines
MISAMIS UNIVERSITY RESEARCH ETHICS BOARD
Phone: +6388 521 0367 | Fax: +6388 521 2917
Email: muresearchethics@mu.edu.ph

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INFORMED CONSENT FORM (PORMA SA NASABTAN NGA PAGTUGOT)

Name of the Researchers/Investigators

(Mga Nagtuon): Princess Joy D. Gio, Heins Dannyl S. Eguia, Kenth Aljay Majorenos, John Alijandro Balaga

Course: Bachelor of Science in Criminology

College: College of Criminology – Misamis University

Email / Contact Number: 09639259075

Thesis Title: “Utilization of Alternative Emergency Equipment in Responding Calamities; The Stories of Rescuers Amidst Critical Circumstance”

PART I. INFORMATION SHEET

Introduction (Pasiuna)	Good day! I am <u>Princess Joy D. Gio</u>, the principal researcher/investigator of the study entitled <u>“Utilization of Alternative Emergency Equipment in Responding Calamities; The Stories of Rescuers Amidst Critical Circumstance.”</u> We are undergraduate students under the program <u>Bachelor of Science in Criminology</u> at Misamis University in Ozamiz City. I am to conduct the research with <u>Jhon Agustin Malindo</u> as participant. In this vein, I am respectfully seeking your voluntary participation, being qualified to give your informed consent to take part in this study. Before you decide whether to participate or not in this study, please read the succeeding information about the study and feel free to ask questions anytime should there be anything you do not understand or want to clarify. If you agree to answer the interview, you will be asked to affix your name and signature on this form for which you will be given a copy. (Maayong adlaw! Ako si <u>Princess Joy D. Gio</u>, usa sa mga nagpahigayon sa pagtuon kabahin sa <u>“Utilization of Alternative Emergency Equipment in Responding Calamities; The Stories of Rescuers Amidst Critical Circumstance”</u>. Kami mga estudyante sa <u>Bachelor of Science in Criminology</u> sa Misamis University, Ozamiz City. Ako nagapili kanimo isip participant nga maoy mutubag sa gikinahanglang impormasyon niining gihimong pagtuon. Ako matinahurong naghangyo sa inyong bulontaryo nga pag-apil niini nga pagtuon. Gikinahanglan nga ikaw naa sa saktong edad ug naay kakayahan nga mohatag sa pagtugot aron makaapil niini nga pagtuon. Sa dili pa ka mohukom sa pag-apil niini nga interview, palihug sa pagbasa sa mga impormasyon sa ubos ug gawasnon ka nga makapangutana kon adunay wala nimo nasabtan o gusto nimong iklaro. Kung motugot ka sa pagahimoon nga interview, papirmahon ka niini nga porma ug tagaan usab ka ug imong kaugalingong kopya.)
Purpose (Katuyoan)	The purpose of this study is to <u>investigate how rescuers utilize accessible and improvised emergency equipment during calamities, focusing on their experiences, challenges, and adaptive strategies. Specifically, it aims to explore the lived experiences of rescuers, examine the difficulties they encounter in using alternative means, understand their coping mechanisms, and identify insights that can improve disaster response capabilities. The study emphasizes highlighting the resourcefulness and ingenuity of rescuers in resource-limited and high-stress situations, with the ultimate goal of informing better training, policies, and emergency management frameworks.</u> (Ang tumong sa pagtuon mao ang pagsusi kung giunsa sa mga rescuers ang paggamit sa available ug improvised nga emergency equipment panahon sa kalamidad, nga nagpunting sa ilang kasinatian, mga hagit, ug mga pamaagi sa pag-adapt. Labi na, ang pagtuon nagtumong sa pag-explore sa tinuod nilang kasinatian, pagsusi sa mga kalisud nga ilang masinati sa paggamit sa alternatibong kagamitan, pagsabot sa ilang mga coping mechanisms, ug pag-ila sa mga insights nga makatabang sa pagpaayo sa disaster response capabilities. Ang pagtuon naghatag ug pagtagad sa resourcefulness ug pagka-mahimsog sa panghunahuna sa mga rescuers sa mga sitwasyon nga kulang sa resources)



Misamis University
H. T. Feliciano St., Ozamiz City, 7200 Philippines
MISAMIS UNIVERSITY RESEARCH ETHICS BOARD
Phone: +6388 521 0367 | Fax: +6388 521 2917
Email: muresearchethics@mu.edu.ph

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	<i>ug taas ang stress, nga ang katapusang tumong mao ang paghatag og ideya para sa mas maayong training, polisiya, ug emergency management frameworks.)</i>
Type of Research Intervention (Matang sa Interbensyon sa Pagtuon)	This study will be conducted through interviews. The gathering of data will be conducted in person. (Kining pagtuon pagabuhaton pinaagi sa interview. Personal ang pagkuha sa datos.)
Selection of Participants (Pagpili sa mga Partisipant)	The selection of the participants is based on the following inclusion criteria: (1) were active rescuers in the locality, (2) had participated in actual disaster or emergency response operations, (3) had firsthand experience in improvising or adapting alternative equipment, and (4) were willing to voluntarily participate in the study. (Ang pagpili sa mga partisipante gibase sa mosunod nga mga pamantayan: (1) aktibo nga mga rescuers sa lugar, (2) nakapartisipar sa tinuod nga disaster o emergency response operations, (3) adunay firsthand nga kasinatian sa pag-improvise o paggamit sa alternatibong kagamitan, ug (4) andam boluntaryong moapil sa pagtuon.)
Voluntary Participation (Boluntaryo nga Partisipasyon)	Your participation has to be voluntary and will not affect your situation or status in any way, including your relationship with the researcher. You are free to decide if you will take part or not. If you decide to participate, you are free not to answer any questions that you do not prefer to answer. (Boluntaryo ang imong pag-apil ug kini dili makaapekto sa imong sitwasyon o estado apil na imong relasyon sa nagtuon. Gawasnon ka nga modesisyon kung kung moapil ka niini nga pagtoon o dili. Kung mo-decision ka nga moapil, gawasnon ka nga dili motubag sa bisan asa nga pangutana nga dili nimo gusto nga tubagon.)
Procedure (Pamaagi)	The participants will be given ample time when to undertake the interview. The interviews will be undertaken once or several times when necessary. The researcher will transcribe the interviews to be used for the analysis of the data. The information and data provided by you as a participant will be utilized for this study alone and will be treated with the utmost confidentiality. (Ang mga partisipante pagahatagan og igong panahon sa pag-apil sa interview. Ang interview pwedeng himoon kausa nga higayon o sa makadaghan depende sa panginanghalanon. Isulat sa nagtuon ang interviews para sa pag-analisa sa datos. Ang mga impormasyon ug datos nga nakuha gikan kanimo isip ka partisipante gamiton lamang niining research og hatagan og tumang pag-amping nga dili mabutyag.)
Duration (Gidugayon)	The gathering of data through the interview will last for 30 minutes to 1 hour. (Ang pagkuha sa datos pinaagi sa interview mokabat ngadto sa 30 minuto ngadto sa isa ka oras)
Risks and Discomforts (Risiko ug Kahasol)	The respondents will be protected from physical, social, or economic risks. In case the items in the survey instrument are too personal and make you feel uncomfortable, you may decline to answer any or all questions and may terminate your involvement at any time you choose. (Ang mga partisipante ginaprotektahan sa pisikal, sosyal o ekonomikanhong risiko. Kung pananglitan adunay mga pangutana nga personal ra kaayo o kung dili ka komportable, mamahimong dili ka motubag o mobalibad sa pagtubag sa bisan asa o sa tanang mga pangutana ug moatras sa pag-apil sa bisan unsang panahon nga imong gusto.)



Misamis University
H. T. Feliciano St., Ozamiz City, 7200 Philippines
MISAMIS UNIVERSITY RESEARCH ETHICS BOARD
Phone: +6388 521 0367 | Fax: +6388 521 2917
Email: muresearchethics@mu.edu.ph

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Benefits (<i>Kaayohan</i>)	This study aims to provide a deeper understanding of the experiences of rescuers during emergencies, particularly in using available and improvised equipment. Your participation will contribute valuable insights that may help improve training, preparedness, and disaster response efforts. (<i>Ang pagtuon nagtinguha sa paghatag og mas lawom nga pagsabot sa kasinatian sa mga rescuers panahon sa emergencies, labi na sa paggamit sa available ug improvised nga kagamitan. Ang imong pag-apil makatampo og bililhon nga kasayuran nga makatabang sa pagpaayo sa training, preparedness, ug disaster response efforts.</i>)
Reimbursements (<i>Hulip nga bayad</i>)	There will be no monetary expenses or costs on your part as a respondent, nor any monetary compensation for your participation in this study. However, personal protective equipment (PPE) like face masks, alcohol and face shields may be provided during the gathering of the research data. (<i>Wala kay magasto sa imong pag-apil niini nga pagtuon ug dili usab ka bayaran ug kwarta sa imong pag-apil niini nga pagtuon. Apan adunay nga personal protective equipment (PPE) sama sa face masks, alcohol ug face shields nga pwede nga mahatag sa panahon sa pagkuha sa mga datos</i>)
Confidentiality of Data (<i>Pag-amping sa Datos</i>)	Only the researcher will have access to the information and responses of the participants. The personal identifying information of the participants will only be used for research analysis and will be treated with the utmost confidentiality. During the study, all data will be kept in a locked, secure filing cabinet, of which will be discarded 6 months after the publication of the results. (<i>Ang nagtuon lamang ang makakita sa mga impormasyon ug tubag sa respondents. Ang mga datos nga makuha i-analisa ug hatagan og tumang pag-amping aron dili ibutyag. Sa panahon sa pagtuon, ipahimutang sa usa ka selyadong filing cabinet ang tanang datos nga pagagub-on human sa 6 kabulan gikan sa pag-publish sa resulta.</i>)
Sharing of Findings (<i>Pagpaambit sa Nakaplagan</i>)	The results of this study will be presented during the thesis final defense of the researcher. Also, the research findings may be shared through publications and conferences with the assurance that the identities of the respondents will remain confidential. A printed copy of the completed study will be provided to the participants. (<i>Ang mga resulta niini nga pagtuon ipresenta sa panahon sa final defense sa thesis/ dissertation sa nagtuon. Ang mga nakaplagan sa pagtuon posible nga ipaambit pinaagi sa mga publications ug conferences nga adunay kapanigurohan nga dili mabutyag ang pagkatawo sa mga partisipante. Pagahatagan og isa ka giimpronta nga kopya sa kumpleto nga pagtuon ang mga partisipante.</i>)
Rights to Refuse or Withdraw (<i>Katungod sa Pagpalibabad o Pag-undang</i>)	You are free to withdraw or terminate participation at any stage of the study, without the need to give any reason. You will not be penalized in case of termination of participation. (<i>Gawasnon ka nga moatras or moundang sa pag-apil sa bisan asa nga punto sa pagtuon nga dili na magkinahanglan pa ug rason. Dili ka ipamulta sa pag-atras o pag-undang.</i>)
Who to Contact (<i>Kinsa ang Kontakon</i>)	Should there be any queries as a parent, you can contact the researcher through the following details:



Misamis University
H. T. Feliciano St., Ozamiz City, 7200 Philippines
MISAMIS UNIVERSITY RESEARCH ETHICS BOARD
Phone: +6388 521 0367 | Fax: +6388 521 2917
Email: muresearchethics@mu.edu.ph

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	<i>(Kung adunay mga pangutana, mamhimo nga mokontak pinaagi aning mga detalye:)</i> Name of the Researcher (Ngalan sa Nagtuon): <u>Princess Joy D. Gio</u> Cellphone Number/s: <u>09639259075</u> E-mail address: <u>gioprincessjoy@gmail.com</u>
	STATEMENT BY THE RESEARCHER (PAGPADAYAG SA NAGTUON) I will read the Information sheet to the potential participant. With the best of my ability, I make sure that the participant will understand the interview questions and that possible follow-up interviews may be undertaken. <i>(Akong pagabasahon ang mga nasulat niining Information Sheet ngadto sa potensyal nga partisipante. Kutob sa akong mahimo siguroon nako nga masabtan sa partisipante ang mga pangutana sa interview ug ang possible nga follow-up nga interviews.)</i> I can assure that the participant will be given an opportunity to ask questions about the study, and all the questions raised will be answered fully. I can likewise assure that the participant will not be coerced into giving consent that must be free and voluntary. <i>(Gisiguro ko nga ang partisipante mahatagan og panahon sa pagpangutana kabahin niining pagtuon og ang tanang pangutana nga iyang gihatag matubag sa hingpit. Siguroon ko usab ang maong partisipante dili mapugos sa paghatag sa pagtugot nga kinahanglan nga gawasnon og boluntaryo.)</i> A copy of this Informed Consent Form will be provided to the participant. <i>(Ang kopya sa niining Informed Consent Form ihatag ngadto sa respondent.)</i> Print Name of Researcher (Ngalan sa Nagtuon): <u>PRINCESS JOY D. GIO, HEINS DANNYL S. EGUIA, KENTH ALJAY MAJORENOS, JOHN ALIJANDRO BALAGA</u>



Misamis University
H. T. Feliciano St., Ozamiz City, 7200 Philippines
MISAMIS UNIVERSITY RESEARCH ETHICS BOARD
Phone: +6388 521 0367 | Fax: +6388 521 2917
Email: muresearchethics@mu.edu.ph

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PART II. CERTIFICATE OF CONSENT

This research entitled "Utilization of Alternative Emergency Equipment in Responding Calamities; The Stories of Rescuers Amidst Critical Circumstance" by Princess Joy D. Gio, Heins Dannyl S. Eguia, Kenth Aljay Majorenos, John Alijandro Balaga was explained to me clearly. The purpose of the study is to gather information and data pertaining to the personal experiences of rescuers during emergencies, particularly focusing on the challenges they face, their use of available and improvised equipment, and the strategies they employ to adapt and respond effectively. Since the study involves individuals who have firsthand experience in emergency response and are willing to share their experiences, I have been selected as one of the participants in this research.

(Kini nga pagtuon gitulohan, "Utilization of Alternative Emergency Equipment in Responding Calamities; The Stories of Rescuers Amidst Critical Circumstance" nga gihimo nila Princess Joy D. Gio, Heins Dannyl S. Eguia, Kenth Aljay Majorenos, John Alijandro Balaga klaro nga gipasabot sa ako. Ang tumong sa pagtuon mao ang pagkuha og impormasyon ug datos bahin sa personal nga kasinatian sa mga rescuers panahon sa emergencies, labi na sa mga hagit nga ilang masinati, sa paggamit sa available ug improvised nga kagamitan, ug sa mga pamaagi nga ilang buhaton aron maka-adapt ug epektibong makatubag sa sitwasyon. Tungod kay ang pagtuon naglakip sa mga tawo nga adunay firsthand nga kasinatian sa emergency response ug andam mosulti sa ilang kasinatian, napili ako nga usa sa mga participant niini nga pagtuon.)

I have read the foregoing Informed Consent Form, or it has been read to me. I had the opportunity to ask questions, which were subsequently answered fully. I consent voluntarily to be a participant of this study.

(Akong nabasa ang nauna nga Informed Consent Form, o gibasa kini kanako. Natagaan ako og higayon nga makapangutana nga natubag sa hingpit. Ako mosugot nga boluntaryo nga mahimong participant sa niining pagtuon.)

Print Name of Participant (Ngalan sa Partisipante): Jhon Agustin Malindo

Signature of Participant (Pirma sa Partisipante): _____

Date: [MM/DD/YYYY] September 17, 2025

If Illiterate (Kung dili makasulat ug makabasa)

If the respondent is illiterate, a witness who is literate will sign. The respondent will choose him/ her and who is without connection with the researcher or the research group to attest this undertaking. The respondent will affix his thumb print.

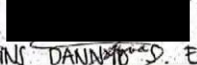
[Kung ang participant kay dili makabasa o makasulat, mopirma ang usa ka makabasa ug makasulat nga testigo. Ang respondent ang mopili kaniya nga walay koneksyon sa nagtuon o sa iyang grupo para mopamatuod sa gimbuhaton. Ang respondent mobutang sa iyang tamlá (thumb print)].

Name and Signature of the Witness
(Ngalan ug Firma sa Testigo)

Thumb mark

APPENDIX F

PARENT'S CONSENT

	MISAMIS UNIVERSITY Ozamiz City Department of Student Affairs & Services	
MU-DSAS-006/02 June 2026		
PARENT'S CONSENT		
_____ Sponsoring Group/Organization		
I am allowing my son/daughter/ward, <u>Heins Dannyl S. Equia</u> , to join the <u>research survey</u> (activity) to be held on <u>September 2025</u> at <u>Tugda Misamis Occidental</u> under the supervision of <u>Bernafior Canape Ronim</u> (Adviser/Faculty).		
I understand that Misamis University exercises the necessary safety precautions in this activity. In consideration of the benefits to be derived from the above activity, I expressly waive any and all claims against the administration or any member of the faculty and staff of the Misamis University on account of any unforeseen accident or injury that my son/daughter/ward might incur in connection with the aforementioned activity.		
 _____ Signature over printed name of Parent/Guardian	<u>5-5-2026</u> _____ Date	
 _____ Signature over printed name of Student	<u>5-5-26</u> _____ Date	
<i>Important: This form shall be submitted to the DSAS Office at least two (2) days before the conduct of the activity.</i> SUBSCRIBED AND SWORN to before me, this <u>05</u> day of <u>MAY 2026</u> at <u>Ozamiz City</u>, Philippines, that the herein affiant personally came and appeared with his/her _____, as evidence of his/her personal identity.		
Doc. No. <u>136</u> Page No. <u>29</u> Book No. <u>171</u> Series of 20 <u>26</u>	 _____ Notary Public Notary Commission No. 2025-18 Notary Public for Ozamiz City and Clarin City Hall Drive, Bernad Subdivision, Aguada, Ozamiz City PTR No. 6007751; 01/05/2026; Ozamiz City IBP C.R. No. 576185; 12/29/2025; Pasig City Attorney's Roll No. 70643 MCLE Compliance No. VIII-0014127; Valid until 04/14/2023	_____ Notary Public Until _____ PTR No. _____ IBP No. _____ TIN No. _____ Roll No. _____

APPENDIX G

DOCUMENTATION



In the first photo, we interviewed Kuya during his free time while on duty.



After the interview, we respectfully asked for his permission to take photo for documentation.



Then next, we interviewed another rescuer from tudela rescue team.

APPENDIX H

CERTIFICATE OF PUBLICATION

 **RSIS INTERNATIONAL**

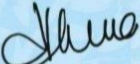
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International Journal of Research and
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ISSN: 2454 -6186

Is hereby awarding this certificate to
PRINCESS JOY D. GIO

In recognition of the publication of the paper entitled
Utilization Of Alternative Emergency Equipment In Responding Calamities; The Stories Of Rescuers Amidst Critical
Circumstances

Published In **IJRIS** Online Journal

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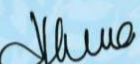
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International Journal of Research and
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ISSN: 2454 -6186

Is hereby awarding this certificate to
BERNAFLOR B. CANAPE

In recognition of the publication of the paper entitled
Utilization Of Alternative Emergency Equipment In Responding Calamities; The Stories Of Rescuers Amidst Critical
Circumstances

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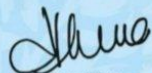
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APPENDIX I

TURNITIN RESULT

PRINCESS JOY D. GIO.docx

 Misamis University

Document Details

Submission ID	trn:oid::28447:137863436	67 Pages
Submission Date	May 6, 2026, 2:06 PM GMT+8	16,356 Words
Download Date	May 6, 2026, 2:21 PM GMT+8	103,517 Characters
File Name	PRINCESS JOY D. GIO.docx	
File Size	108.5 KB	

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CURRICULUM VITAE

PERSONAL INFORMATION

Name: PRINCESS JOY D. GIO
Date of Birth: May 24, 2004
Parents: Joy D. Gio
Religion: Roman Catholic
Residence: Clarin, Misamis Occidental
Contact Number: 09639259075
Email: gioprincessjoy@gmail.com



EDUCATIONAL BACKGROUND

College: Bachelor of Science in Criminology
Misamis University
Ozamiz City
June 2026

Secondary: Senior High School Diploma
Clarin National High School
Población 3, Clarin Misamis Occidental
2020-2022

High School Diploma
Holy Child High School
Población 2, Clarin Misamis Occidental
2019-2020

Elementary: Elementary Diploma
San Roque Elementary School
Población 4, Clarin Misamis Occidental
2014-2015

TRAINING/SEMINAR ATTENDED

- Reserved Officers Training Course
Misamis University, Ozamiz City
2022-2023

- Seminar Workshop in Dactyloscopy
Misamis University, Ozamiz City
November 18, 2023
- United Nations Sustainable Development Goals
Misamis University, Ozamiz City
November 13, 2025
- Water Search and Rescue Training
Misamis University, Ozamiz City
December 12-16, 2025
- Effective Communication in Action: Skills and Strategies
Misamis University, Ozamiz City
February 20, 2026
- Seminar on Police Report Writing
Misamis University, Ozamiz City
February 27, 2026

CURRICULUM VITAE

PERSONAL Information

Name: JOHN ALIJANDRO BALAGA
Date of Birth: July 27, 2003
Parents: Maricel Balaga Liangco
Religion: Roman Catholic
Residence: Baybay San Roque, Ozamiz City
Contact Number: 09187286950
Email: johnbalag725@gmail.com



EDUCATIONAL BACKGROUND

College: Bachelor of Science in Criminology
Misamis University
Ozamiz City
June 2026

Secondary: Senior High School Diploma
Santa Teresita Academy
Aurora, Zamboanga del Sur
2019-2021

High School Diploma
Santa Teresita Academy
Aurora, Zamboanga del Sur
2018-2019

Elementary: Elementary Diploma
Santa Teresita Academy
Aurora, Zamboanga del Sur
2013-2014

TRAINING/SEMINAR ATTENDED

- Reserved Officers Training Course
Misamis University, Ozamiz City
2022-2023

- Seminar Workshop in Dactyloscopy
Misamis University, Ozamiz City
November 18, 2023
- United Nations Sustainable Development Goals
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Misamis University, Ozamiz City
February 20, 2026
- Seminar on Police Report Writing
Misamis University, Ozamiz City
February 27, 2026

CURRICULUM VITAE

PERSONAL INFORMATION

Name: HEINS DANNYL S. EGUAI
Date of Birth: September 18, 2003
Parents: Larrylin S. Eguia
Religion: Iglesia Filipina Independiente
Residence: Centro Hulpa, Tudela
Contact Number: 09516501233
Email: heinseguia5@gmail.com



EDUCATIONAL BACKGROUND

College: Bachelor of Science in Criminology
Misamis University
Ozamiz City
June 2026

Secondary: Senior High School Diploma
San Isidro Academy Inc.
Upper Centro, Tudela
2020-2022

High School Diploma
San Isidro Academy Inc.
Upper Centro, Tudela
2019-2020

Elementary: Elementary Diploma
Ozamiz Elementary School
Ozamiz City
2014-2015

TRAINING/SEMINAR ATTENDED

- Reserved Officers Training Course
Misamis University, Ozamiz City
2022-2023

- Seminar Workshop in Dactyloscopy
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February 20, 2026
- Seminar on Police Report Writing
Misamis University, Ozamiz City
February 27, 2026

CURRICULUM VITAE



PERSONAL INFORMATION

Name: KENTH ALJAY A. MAJORENOS
Date of Birth: April 15, 2004
Parents: Lerrah A. Majorenos
Religion: Roman Catholic
Residence: Purok 5, Gango, Ozamiz City
Contact Number: 09158948455
Email: kenthaljaymajorenos14@gmail.com

EDUCATIONAL BACKGROUND

College: Bachelor of Science in Criminology
Misamis University
Ozamiz City
June 2026

Secondary: Senior High School Diploma
Ozamiz City School of Arts and Trades
Ozamiz City
2020-2022

High School Diploma
Ozamiz City School of Arts and Trades
Ozamiz City
2019-2020

Elementary: Gango Elementary School
Gango, Ozamiz City
2014-2015

TRAINING/SEMINAR ATTENDED

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