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## DISASTER PREPAREDNESS OF EMPLOYEES OF HOSPITALITY INDUSTRY IN ZAMBOANGA CITY

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### Abstract

*This study examined the disaster preparedness of employees in the hospitality industry of Zamboanga City. It aimed to determine the demographic profile of the respondents in terms of sex, position and employment status; assess their level of disaster preparedness; identify the significant differences in preparedness across demographic groups; and propose an action plan based on the findings. The study used a descriptive comparative design involving 250 employees from selected hotels, restaurants and resorts. Data were gathered using validated questionnaire with a Cronbach's alpha of 0.929 analyzed through mean, standard deviation, t-test and ANOVA. Results revealed that the respondents represented a balanced workforce, with most employed full - time in frontline and support positions. Overall, employees exhibited a very high level of disaster preparedness ( $x = 4.48$ ), showing strong awareness and readiness. A significant difference was found across positions with frontline and supervisory staff showing higher preparedness than support and management employees. Based on the results, a proposed action plan was developed emphasizing continuous training, equal participation and improved monitoring to enhance disaster readiness in the hospitality industry of Zamboanga City.*

**Keywords:** Disaster preparedness, hospitality industry, employee training, descriptive comparative design, Philippine

## INTRODUCTION

### Background of the Study

Disaster preparedness is a major problem in the hospitality sector, particularly in terms of employers and employees' ability to successfully reduce and respond to emergencies. A notable issue recognized in the context is the scarcity of comprehensive disaster preparedness plans adapted specifically to the operational settings of hospitality organization (Hur & Choi, 2023). For instance, Xie and Johns (2017) emphasized that many hotels and resorts have emergency plans in place, however, they frequently lack specificity and fail to cover the full range of potential disasters, such as natural disasters or terrorism threats. Hence, Papadopoulos et al., (2019) articulated that this gap in preparedness not only jeopardizes the safety of the employees and guests but also compromises the ability of hospitality business to swiftly recover and resume operations post-disaster.

Zamboanga City's coastal barangays in the Philippines are at risk from numerous natural hazards, leaving them vulnerable to disasters such as typhoons, floods, and coastal erosions. The regions' geographic location, combined with the rising frequency and severity of natural disasters, highlights the importance of understanding disaster risk management. It is essential to analyze the factors that influence both vulnerability and resilience in order to build effective strategies for reduction and community preparedness. (Tang & Ann 2023). Due to the country's vulnerability to natural disasters, Zamboanga City was recently hit by a flood after a continuous heavy rain, Alipala (2023). An Inquirer report (2022) presented guests and employees who were stranded in hotel due to floods brought by tropical storm Paeng. In addition, (2022) in an article of Visaya, hotels in Banaue were temporary closed due to flashfloods and landslides in the city. A study in Zamboanga del Sur also identified various risk categories, including natural disasters and related challenges, as well as strategies for managing these issues. Beach resorts faced threats such as drowning, sharp objects, falling branches or coconuts, guest possession of weapons, and natural disasters like typhoons and earthquakes. (Abapo et.al., 2023).

Disaster preparedness is crucial for mitigating the impact of disasters and saving lives, as it ensures preparedness for response and management of the serious threats posed by disasters (Labrague & Hammad, 2023). This prompted the industry leaders to seek solutions to safeguard business viability and clients' safety (Carreon et al., 2022). Communities' involvement in Disaster Risk Reduction (DRR) reduces government and administration burdens, promoting self-reliance in emergencies and building capacities for efficient disaster response (Bali 2022).

Disaster preparedness varies significantly by age, gender, position and employment status, indicating major variations in readiness levels across groups. For example, research show that younger persons are generally less prepared for disasters than older adults, which is influenced by characteristics such as experience, responsibilities, and risk awareness (FEMA 2020). Gender variations also come into play, with women generally displaying higher levels of readiness than males, possibly due to societal duties, caregiving responsibilities, and differing risk perceptions (Enarson & Morrow, 2021). Furthermore, persons in managerial or leadership roles demonstrate higher levels of preparation, which can be linked to their involvement in organizational decision-making and planning (Ritchie et al., 2019). Frontline personnel, on the other hand, may demonstrate variable levels of preparedness

based on their individual tasks and availability to training (Ritchie et al., 2019). Employment status also effects readiness, as people in secure, full-time positions frequently have greater access to resources and training than those in temporary or part-time roles, affecting their ability to respond effectively during catastrophes (Bolin & Bolton, 2017).

While there are studies on disaster preparedness in hospitality industry, they do not specifically use a descriptive comparative method to analyze preparedness across different sectors such as hotels, restaurants and resorts. The city government of Zamboanga is actively engaged in a range of disaster preparedness initiatives, which include conducting regular drills, providing training sessions, and implementing geo-hazard mapping. These efforts are designed to enhance the community's resilience and ensure a coordinated response during emergencies. This gap emphasizes the need for tailored contingency plans and communication strategies, as current research tends to focus more on response and recovery rather than the proactive preparedness measures (AlBattat & Som, 2014; Ritchie, 2014). Addressing this gap aligns with the Zamboanga Peninsula Regional Development and Innovation Research Agenda 2023-2028, which prioritizes "Risk Management and Crisis Preparedness in Tourism" (Zamboanga Peninsula Regional Development and Innovation Research Agenda 2023-2028, 2024). Moreover, integrating these strategies supports Sustainable Development Goal 11, which aims to create inclusive, safe, resilient, and sustainable communities, emphasizing the disaster importance of disaster risk reduction and preparedness in enhancing community resilience and tourism sustainability in Zamboanga City (Goal 11 / Department of Economic and Social Affairs). In Zamboanga City, the level of awareness and training among the employees in the hospitality industry regarding disaster preparedness and response varies significantly. The City Disaster Risk Reduction Management Office (CDRRMO) conducts regular training seminar focused on disaster preparedness, covering topics like evacuation procedures and emergency communication protocols. However, while larger hotels often have structured training programs, smaller establishments may lack comprehensive training due to resource constraints (Garcia 2017). By focusing on proactive measures tailored to the hospitality sector, researchers can enhance the resilience of both the industry and the community, aligning with regional and global sustainability goals.

The results of this study will be disseminated to hotels, restaurants and resort owners and employees in Zamboanga City who took part in this study so they can be better understand the level of disaster preparedness of hospitality industry in the city. This may help them improve their strategies and planning for emergencies and disasters. The study's result may also be presented in the local or national and research conferences. Moreover, copies of the research output will be given to hospitality industry in Zamboanga City and the library of the University of the Immaculate Conception.

### Statement of the Problem

The primary objective of this study was to determine the disaster preparedness of hotel employees in Zamboanga City and assess if their preparedness levels differ based on their profile. Specifically, it sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of
  - 1.1 Sex;
  - 1.2 Position; and

### 1.3 Employment Status?

2. What is the level of disaster preparedness of the hotel employees in Zamboanga City?
3. Do the hotel employees' disaster preparedness levels significantly differ when they are grouped according to their demographic profile?
4. Based on the findings of the study, what action plan can be proposed?

### Theoretical Framework

This study was anchored on the Modern Disaster Theory of Chen (2011). According to this theory, disasters are not merely natural events, but rather the consequences of human actions and societal vulnerabilities. In the context of disaster preparedness in hotels, this theory suggests that employers and employees in Zamboanga City must acknowledge their role mitigating the impact of disasters. For instance, hotels can reduce their vulnerability to disasters by implementing emergency response plans, conducting regular drills, and providing employees with training on disaster risk reduction and management (Chen 2011).

Modern Disaster Theory effectively addresses the complexities of human-induced vulnerabilities by emphasizing the interplay between societal factors, such as socioeconomic status, governance, community resilience, and disaster outcomes. This theory highlights that disasters are not just natural events but are influenced by human decisions and societal structures. Hospitality businesses must integrate disaster risk management into their operational frameworks. This includes conducting vulnerability assessments, implementing emergency response plans, and ensuring compliance with local regulations. Raining programs should focus on fostering a culture of safety, encouraging proactive behavior among employees, and enhancing their understanding of emergency protocols. This empowerment can lead to more effective responses during crises.

Another theory is Protection Motivation Theory (PMT). This theory, proposed by Ronald W. Rogers in 1975, suggests that individuals are motivated to protect themselves based on four factors: the perceived severity of a threatening event, the perceived probability of the occurrence, the efficacy of the recommended behavior and the perceived self-efficacy (the belief in one's ability to perform the behavior). It is widely used to understand why people decide to take preventive measures in the face of disasters.

These theories provide frameworks for understanding and improving disaster preparedness at both individual and community levels. Furthermore, employers can foster a culture preparedness by encouraging employees to take ownership of disaster risk reduction efforts, promoting a sense of community and shared responsibility (Tierney, 2014). By adopting a proactive approach to disaster preparedness, hotels in Zamboanga City can minimize the disruption to their operations and ensure safety of their guests and employees.

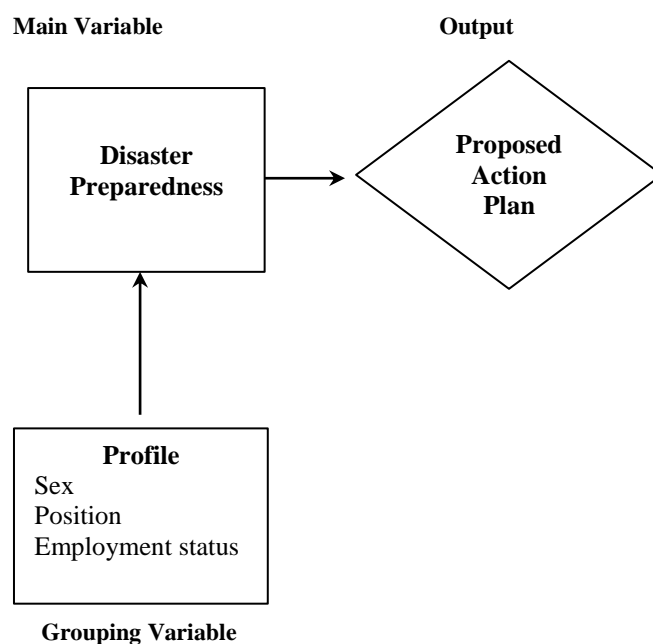
### Conceptual Framework

The conceptual framework of this study, shown in Figure 1, indicates the link between the disaster preparedness of hotel employees and the formulation of a targeted action plan relationship which is crucial for enhancing overall readiness in the face of emergencies. At its core, disaster preparedness is a set of actions that are taken a precautionary measure in the face of potential disasters. Disaster preparedness encompasses the comprehensive planning, and organizational activities require to

mitigate, respond to and recover from disasters. Their definition includes the development of emergency plans risk assessments, resource management and training Perry & Lindell (2021). It stands as the central focus, influenced significantly by a range of demographic factors including age, gender, position and employment status. These demographic profiles act as key grouping variables that have the potential to impact the level of preparedness among employees. The independent variable in this study is the disaster preparedness of and the dependent variable is the targeted action plan.

**Figure 1**

Conceptual Framework



## METHODOLOGY

This chapter aims to discuss the methods and design utilized to gather the data required for the study. It describes the research concept, research setting, participants and tools, data collection process, statistical tools and ethical considerations.

### Research Design

The study employed a quantitative research design specifically descriptive-comparative. Cantrell (2011), describes this type of design as a quantitative approach aimed at identifying the differences among groups within a population. The descriptive aspect of the research focused on detailing the level of disaster preparedness within the hospitality industry.

Descriptive research is a design used to systematically present the characteristics of a population, situation or phenomenon as it naturally occurs. As noted by Formplus Blog (2020), descriptive research focuses on documenting and summarizing what is observed, allowing the researcher to present trends, distributions and patterns based on collected data.

Comparative research, on the other hand, examines whether differences exist between two or more groups based on specific variables. It seeks to compare naturally occurring characteristics to determine how they vary across categories, but without establishing a causal relationship. Formplus Blog (2020) describes comparative research as a process of evaluating unmanipulated variables to identify which groups shows a higher or lower level of



a given trait. Consistent with Polit and Beck's (2018) explanation, the comparative aspect of this study was applied to analyze variations in disaster preparedness across demographic variables.

### Research Locale

This study was conducted in Zamboanga City, Philippines. Zamboanga City in terms of disaster preparedness has demonstrated strong efforts, with a focus on improving resilience across various sectors, including the hospitality industry. The hospitality industry was the setting of the study. It consisted of one resort, three hotels, and the three restaurants in the city. The total number of accredited restaurants are fifteen (15), resort is one (1), and hotels are nineteen (19) was determined and provided by the Department of Tourism based on the researcher's request. To be included in the study, establishments met the following criteria: they should have been in operation for a minimum of three years, be classified as large-scale businesses, and hold the accreditation from the Department of Tourism.

### Research Respondents

The research employed a stratified quota data sampling. The target respondents consist of 250 that was selected from a diverse range of establishments, including restaurants, resorts and hotels in Zamboanga City. The participants represented a diverse group encompassing both employers and employees within the hospitality sector all of whom had at least one (1) year of tenure in the establishments. Middle administrators such as managers and supervisors, hold the pivotal roles in decision-making, policy implementation and resource allocations during disaster situations. Their perspective is essential in understanding organizational readiness and the strategic planning required to ensure effective response and recovery. The respondents in this study are not considered vulnerable because they are legally competent adults who are employed, capable of independent decision-making and able to understand and evaluate the information provided about the research.

Participation in the study is entirely voluntary. All respondents were given a clear explanation of the study's purpose, procedures, and their expected involvement before giving their consent. They were also informed of their full right to withdraw from the study at any time, for any reason, without any penalty or negative consequence. Their decision to participate or withdraw were fully respected, and any data they may have provided prior to withdrawal were excluded upon request.

The approximate quota for each restaurant, hotels and resorts is 35 – 36 respondents. The 250 respondents were chosen via inclusion criteria. The inclusion criteria in selecting respondents include the respondent being a middle administrator, rank and file and frontline employees. If the respondent is a middle administrator, they must have been employed with the restaurant for more than one year and be willing to answer the questionnaire same with the other criteria.

### Research Instrument

This study used an adapted survey questionnaire for the level of disaster preparedness, which is mainly adopted from the study of Vito et al. (2021), Healthy and Self Preparedness of Sogo Hotel in South Caloocan City, which comprises 20 items. The adapted survey questionnaire was validated by the validators. The reliability test of the adapted questionnaire yielded a Cronbach's alpha coefficient of 0.929.

The results were interpreted using the 5-point Likert scale as presented in the matrix.

### Disaster Preparedness

Mean Range	Description	Interpretation
4.20 - 5.00	Very High	The level of disaster preparedness of the hospitality industry employees is always evident.
3.40 - 4.19	High	The level of disaster preparedness of the hospitality industry employees is evident most of the time.
2.60 - 3.39	Average	The level of disaster preparedness of the hospitality industry employees is evident occasionally.
1.80 - 2.59	Low	The level of disaster preparedness of the hospitality industry employees is rarely evident.
1.00 - 1.79	Very Low	The level of disaster preparedness of the hospitality industry employees is not evident all the time.
1.00 - 1.79	Very Low	The level of disaster preparedness of the hospitality industry employees is not evident all the time.

## RESULTS AND DISCUSSION

Presented in this chapter are the results of the study, including the demographic profile of Hospitality employees, their level of disaster preparedness, and the significant differences in disaster preparedness across demographic groups.

### Hospitality Employees Demographic Profile

A total of 250 hospitality employees participated in the study as presented in Table 1. Of these, 128 are females (51.2%) and 122 are males (48.8%), reflecting a nearly balanced distribution in the sample.

In terms of job category, the largest number of employees were from the Food and Beverage department with 90 respondents (36.0%), followed by 57 employees (22.8%) from the other departments, 53 (21.2%) from Housekeeping, and 50 (20.0%) from the Front Office. This distribution shows that Food and Beverage had the highest representation, the other departments were also well represented.

With respect to job position, the majority of respondents held frontline roles with 112 employees (44.8%), followed by 85 in support roles (34.0%), 33 in supervisory positions (13.2%), and 20 in the management (8.0%). This data reflects the common staffing structure in hospitality, where frontline and support employees make up the bulk of the workforce while supervisory and management staff comprise a smaller proportion.

In terms of employment status, most employees were full-time with 232 respondents (92.8%), while only 14 were part time

(5.6%) and 4 probationary (1.6%), indicating that the hospitality workforce is largely composed of regular and permanent staff.

**Table 1**

*Demographic Profile of Respondents (N = 250)*

Profile	Frequency	Percentage
Sex		
Female	128	51.2
Male	122	48.8
Job Category		
Food and Beverage	90	36.0
Others	57	22.8
Housekeeping	53	21.2
Front Office	50	20.0
Position		
Frontline	112	44.8
Support	85	34.0
Supervisory	33	13.2
Management	20	8.0
Employment Status		
Full time	232	92.8
Part time	14	5.6
Probationary	4	1.6

#### **Level of Disaster Preparedness of Hospitality Employees In Zamboanga City**

The data in Table 2 presents the level of disaster preparedness of Hospitality employees across 17 preparedness indicators. The results indicate that the overall disaster preparedness among the employees is very high, as reflected by a weighted mean of 4.48. the standard deviation ranges from 0.797 to 0.913, respectively, implying the responses consistency. This implies the level of disaster preparedness of the Hospitality Industry employees is always evident. This suggests that Hospitality employees are well-prepared to respond to emergencies and disasters, demonstrating strong knowledge, skills and readiness. These findings indicate that hospitality establishments place strong emphasis on maintaining accessible and functional emergency exits, conducting regular safety checks and ensuring clear communication protocols during disasters. This demonstrates the sectors proactive commitment to ensuring guest and employee safety. Overall, the high level of disaster preparedness observed in this study suggests that both structural mechanisms (such as exits and equipment) and human factors (such as training and communication) are effectively integrated into the hospitality industry safety practices.

**Table 2**

*Level of Disaster Preparedness of Hospitality Employees in Zamboanga City*

Level of Preparedness Statement	Mean	SD	Verbal Description
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1. Provides clear communication on how and where to evacuate.	4.54	.906	Very High
2. Designates group of employees to train for emergency preparedness also known as CPR or first aid training.	4.48	.870	Very High
3. Has a group of Employees who are well-educated about emergency responses.	4.50	.847	Very High
4. Ensures that guests are informed about potential hazards in the vicinity of the Hospitality, resorts, and restaurants.	4.50	.842	Very High
5. Ensures that the survival tools and medication are accessible for everyone.	4.52	.842	Very High
6. Provides lists of disaster telephone contact (e.g. Hospitals, BFP, Coast Guard, PNP).	4.52	.870	Very High
7. Informs the clients which services will be provided immediately and which will not.	4.42	.899	Very High
8. Employs a dedicated team of employees known as the Disaster Committee, who regularly monitor official weather forecasts to prepare for potential disasters.	4.34	.827	Very High
9. Conduct drills and exercises to practice safety preparedness.	4.40	.868	Very High
10. Receives, verifies, and shares public alerts with the clients.	4.48	.842	Very High
11. Has staff who attends safety preparedness orientation regularly.	4.47	.817	Very High
12. Provides health care services which are always available in the building when disaster occurs.	4.51	.827	Very High
13. Has a strong connection with the organizations related to health responses (e.g. Hospital, Clinic, ZCDRRMO)	4.48	.817	Very High
14. Has a disaster response plan which is a detailed written document that explains what emergencies an organization is likely to face.	4.46	.797	Very High
15. Has audible alarms loud enough to be heard anywhere and are hard to ignore.	4.52	.842	Very High
16. Has emergency exit doorways and routes which are	4.55	.869	Very High

checked daily.			
17. Has an available transportation equipment (e.g. vehicle, lifeboat) for emergency purposes.	4.44	.913	Very High
<b>Weighted Mean</b>	<b>4.48</b>	<b>.749</b>	Very High
<b>Weighted Mean</b>	<b>4.48</b>	<b>.749</b>	Very High

The results are consistent with previous studies emphasizing the institutionalization of disaster management systems in the hospitality sector. Ritchie, et al (2019) noted that hotels have strengthened disaster preparedness through formalized systems and trained personnel, particularly among frontline employees who play vital roles in emergency response. Perry and Lindell (2021) further emphasized the need for disaster preparedness like regular safety drills, visible emergency exits and clear communication signage are critical to reducing confusion and panic during crises. Similarly, Kouadio et al, (2020) highlighted that the frequent training and communication-based disaster preparedness programs enhance employees' confidence and readiness in emergencies.

Ritchie et al. (2019), the effectiveness of disaster preparedness in the hospitality industry often depends on the presence of formalized emergency teams and routine practice exercises that reinforce response protocols. Similarly, Kahn et al. (2021) emphasize that organizations with clearly defined disaster committees and consistent drills are better equipped to respond swiftly and cohesively during emergencies. The slightly lower ratings for these indicators in the present study may reflect operational limitations or inconsistent implementation of these preparedness measures within some establishments.

## Comparison of the Disaster Preparedness Across

### Demographic Groups of Hospitality Employees

The data in Table 3 presents the comparison of disaster preparedness across demographic groups of hospitality employees. The results reveal varying levels of preparedness depending on sex, job category, position and employment status.

**Sex.** The results showed that male employees ( $\bar{x} = 4.40$ ) and female employees ( $\bar{x} = 4.55$ ) reported relatively high levels of disaster preparedness, with females rating slightly higher. However, the difference was not statistically significant ( $p > .05$ ). this suggests that gender does not significantly influence disaster preparedness among hospitality employees. This implies that preparedness strategies and training are being internalized by both sexes in a similar way, suggesting that gender does not play a substantial in how hospitality employees perceive or practice disaster preparedness.

However, this result negates the findings of Enarson and Morrow (2021) and Kouadio et al. (2020), who observed that while women often show higher engagement in preparedness activities due to caregiving and community responsibilities, organizational training and institutionalized safety protocols can minimize gender disparities in preparedness behavior. Perry and Lindell (2021) further noted that when disaster management practices are standardized and inclusive, both male and female employees develop comparable competencies and confidence in emergency response. Hence, the absence of significant gender differences in this study may reflect the effectiveness of workplace wide training and awareness programs in promoting equal levels of disaster readiness among all employees.

**Table 3**

*Comparison on Disaster Preparedness Across Demographic Groups of Hospitality Employees*

Profile	Groups	N	Mean	p-value	Remarks
Sex	Male	128	4.40	0.107	Not Significant
	Female	122	4.55		
Job Category	Food and Beverage	90	4.50	0.159	Not Significant
	Others	57	4.28		
	Housekeeping	53	4.55		
	Front Office	50	4.58		
Position	Frontline	112	4.61	0.005	Significant <i>Post Hoc Analysis:</i> <i>Frontline &gt; Support</i>
	Support	85	4.27		
	Supervisory	33	4.66		
	Management	20	4.35		
Employment Status	Full time	232	4.50	0.275	Not Significant
	Part time	14	4.28		
	Probationary	4	4.03		

**Job Category.** When grouped according to job category, employees from the Front Office ( $\bar{x} = 4.58$ ) and Housekeeping ( $\bar{x} = 4.55$ ) reported higher preparedness compared to those in Food and Beverage ( $\bar{x} = 4.50$ ) and those classified as "Others" ( $\bar{x} = 4.28$ ).

Despite these variations, the differences were not statistically significant ( $p > .05$ ). This result indicates that disaster preparedness initiatives are relatively consistent across the different departments in the hospitality sector.

This finding aligns with the observations of Ritchie et al. (2019), who emphasized that disaster preparedness in hospitality establishments tends to be organization-wide, with standardized training and safety protocols applied to all departments. In the study of Pidgeon and King (2020) noted that although the nature of tasks may differ across departments, consistent communication and safety training foster a uniform level of readiness among employees. Furthermore, Smith and Brown (2020) highlighted that employees who frequently interact with guests such as those in Front Office and Housekeeping often display higher preparedness due to their greater exposure to safety drills and emergency communication procedures.

The results of this study, therefore, suggest that while certain roles may naturally encourage more proactive disaster responses, institutionalized preparedness programs help maintain uniform readiness across all job categories in the hospitality industry. Nonetheless, the slightly lower preparedness among “Others” may suggest a gap in training or role-specific disaster management responsibilities that should be addressed in future interventions.

**Position.** The results showed a significant difference in disaster preparedness across positions ( $p < .05$ ). Post hoc analysis revealed that Frontline employees ( $\bar{x} = 4.61$ ) were significantly more prepared than Support staff (4.27). This finding can be explained by the fact that frontline employees are often directly exposed to guest interactions and emergency situations, making disaster preparedness training more immediately relevant to their roles.

Similarly, Pidgeon and King (2020) emphasized that employees in managerial and supervisory roles typically possess a broader understanding of organizational disaster plans, yet frontline workers tend to demonstrate higher practical preparedness due to frequent participation in safety drills and direct exposure to emergency procedures. Note though, that Ritchie et al. (2019), encounter these findings where in individuals in operational and service-oriented roles often exhibit stronger preparedness behaviors because their responsibilities require immediate response to crises and guest safety concerns. Moreover, Kahn et al. (2021) found that frontline personnel are critical in implementing preparedness strategies during actual incidents, serving as the first responders within hospitality establishments.

In contrast, the relatively lower preparedness among support and management staff may reflect their limited engagement in day-to-day emergency operations, as noted by Williams et al. (2019). Their focus on administrative, back-office, or policy-level functions may reduce their participation in routine drills or hands-on safety activities. As Perry and Lindell (2021) highlighted, comprehensive disaster preparedness requires not only operational readiness but also active managerial involvement to ensure alignment between policy development and actual on-ground execution.

Supervisory staff's high scores also reflect their responsibility to ensure protocol compliance. On the other hand, Support and some Management personnel may be less directly engaged in operational emergencies, which could contribute to their relatively lower preparedness.

**Employment Status.** Employees with full-time status ( $\bar{x} = 4.50$ ) reported higher preparedness compared to part-time ( $\bar{x} = 4.28$ ) and probationary staff ( $\bar{x} = 4.03$ ). However, the differences were not statistically significant at  $p = 0.275$ . This suggests that regardless of employment status, disaster preparedness training and protocols

are being communicated fairly consistently. This finding aligns with the study of Bolin and Bolton (2017), who observed that regardless of position and employment status have access to training resources, institutional support, and organizational information factors that contribute to higher preparedness levels. Likewise, Giesbrecht and Wulff (2021) found that employment conditions allow individuals to participate more actively in preparedness initiatives. In addition, Nguyen et al. (2022) highlighted issues that part-time and probationary employees may face challenges which can affect their ability to fully engage in disaster readiness activities.

Despite these tendencies, the absence of a significant difference in the present study suggests that hospitality institutions are making deliberate efforts to extend preparedness training and safety communication to all employees, regardless of their employment status. This finding supports the recommendation of Perry and Lindell (2021) that inclusive and organization-wide preparedness programs are essential in ensuring that every employee—permanent or temporary—can respond effectively during emergencies.

The slightly lower mean scores of probationary employees could be attributed to their limited exposure and shorter time within the organization, pointing to the need for orientation programs that emphasize disaster preparedness even during early stages of employment.

The findings highlight that disaster preparedness among hospitality employees is generally high across demographic groups, which reflects positively on existing organizational policies and training initiatives. However, the significant differences by position underscore the importance of tailoring preparedness programs to the specific roles and responsibilities of employees. In particular, support staff and management may benefit from more targeted interventions to elevate their preparedness levels to that of frontline and supervisory employees.

### Proposed Action Plan

#### Rationale

The hospitality industry significantly contributes to Zamboanga City's economic and tourism development but remains highly vulnerable to natural and human-induced disasters such as earthquakes, floods, fires, and bomb threats. Ensuring the safety and preparedness of establishments is vital to protect lives, sustain operations, and preserve public trust. However, many employees still lack sufficient disaster response knowledge and coordination, resulting in delayed and inefficient emergency actions.

The Proposed Action Plan for Disaster Management in Hospitality Establishments aims to address these gaps through a structured and sustainable strategy focusing on six key areas: enhancing disaster awareness and training, strengthening the Disaster Committee, improving early warning and communication systems, reinforcing coordination and response protocols, ensuring post-disaster recovery and continuity, and promoting continuous monitoring and improvement.

Through these initiatives, hospitality establishments in Zamboanga City will become more resilient, capable of minimizing disaster impacts, and better prepared to ensure the safety and well-being of both guests and employees while maintaining operational stability.

	Key Activities	Responsible Person/Unit	Time Frame	Expected Output	Performance Indicator
1. Improve the Disaster Preparedness of Support Staff	<ul style="list-style-type: none"> <li>• Conduct role-specific training and workshops for support staff (maintenance, admin, kitchen, security) focusing on their duties during emergencies.</li> <li>• Implement a “buddy system” pairing support employees with experienced frontline staff during drills.</li> <li>• Require quarterly drills that include support and back-office roles.</li> </ul>	HR Department Safety Officer Department Heads	Quarterly	Enhanced preparedness and confidence among support staff.	Support staff preparedness rating increases to “Very High” in succeeding evaluations.
2. Sustain the Very High Preparedness Level Across All Employees	<ul style="list-style-type: none"> <li>• Institutionalize bi-annual refresher trainings on first aid, evacuation, and risk communication in collaboration with CDRRMO, BFP, and Philippine Red Cross.</li> <li>• Establish an “Employee Preparedness Recognition Program” to reward departments with exemplary performance in drills.</li> <li>• Regularly review and update the Disaster Preparedness Manual.</li> </ul>	HR Department Safety Officer Disaster Committee	Every 6 months	Consistent and motivated workforce demonstrating sustained disaster readiness.	Maintained “Very High” preparedness rating across all departments.
3. Strengthen Monitoring, Evaluation, and Communication Systems	<ul style="list-style-type: none"> <li>• Conduct post-drill evaluations and safety audits to identify areas for improvement.</li> <li>• Develop a departmental Disaster Preparedness Dashboard or checklist to monitor compliance.</li> <li>• Assign a Preparedness Coordinator in each department to ensure coordination and reporting.</li> </ul>	Disaster Committee Department Heads Safety Officer	Bi-annually	Systematic tracking and continuous improvement of preparedness measures.	Completed audit reports and action updates per department after each drill.

## CONCLUSION AND RECOMMENDATIONS

In this section the conclusion and recommendations based on the findings provided in the previous chapter. The conclusion sheds light on the importance of Disaster Management in Hospitality Establishments.

### Conclusions

The following conclusions were drawn from the results of the study.

The respondents represented a balanced workforce in terms of sex, position and employment status, with most employees working full



time and support roles. This demographic diversity suggests that disaster preparedness initiatives in Zamboanga City hospitality sector must consider varied responsibilities and experiences. The predominance of full-time workers provides an opportunity for consistent and sustained training programs across establishments.

Hotel employees demonstrated a very high level of disaster preparedness, indicating that regular drills, safety orientations and effective communication systems are being implemented. This high reflects strong institutional commitment to guest and employee safety. However, continued reinforcement through refresher training is crucial to maintaining and improving preparedness standards across all hospitality establishments.

Results revealed no significant differences in preparedness based on sex, job category or employment status, indicates that disaster preparedness is being equitably implemented. However, a significant difference across positions indicates that frontline and supervisory staff were more prepared than support and management employees. This highlights the need to extend hands-on disaster response training to all positions, ensuring that preparedness becomes a shared organizational responsibility across departments.

The findings affirm the need for continuous training and structured disaster programs, which lead to the Proposed Action Plan in enhancing and sustaining disaster preparedness. It responds to the significant difference in preparedness observed across job positions and address the need for consistent participation and training across all staff categories. Moreover, it translates the principles of the Modern Disaster Theory (Chen 2011) and the Protection Motivation Theory (Rogers, 1975) that guided this research showing that both organizational systems and individual motivation must work together to build a resilient and safety-conscious hospitality workforce. The study confirms the validity to both theoretical frameworks by illustrating that effective disaster preparedness in the hospitality industry is achieved through a combination of institutional commitment and individual motivation reinforcing that preparedness is both a social and psychological process shaped by education, leadership, and organizational culture. Through this plan, the study contributes to strengthening disaster readiness and promoting a culture of resilience within Zamboanga City's hospitality industry.

### Recommendations

Based on the findings and conclusion of the study, the following recommendations are offered.

It is recommended that hospitality establishments in Zamboanga City implement the Proposed Action Plan in enhancing and sustaining disaster preparedness through coordinated efforts of key stakeholders, including hotel administrators, the Human Resource Department, Safety Officers, the City Disaster Risk Reduction and Management Office (CDRRMO), the Bureau of Fire Protection (BFP), and the Philippine Red Cross. These agencies and departments should collaborate to institutionalize regular disaster preparedness training, conduct coordinated emergency drills, and ensure consistent dissemination and enforcement of updated disaster management policies across all units. Such a unified implementation will strengthen institutional systems, enhance employee competence, and cultivate a culture of safety and resilience within the hospitality sector.

Furthermore, future research may be conducted to examine the long-term effects of disaster preparedness initiatives on employee performance on actual emergency response behaviors. Expanding

the study to include other cities or regions could provide comparative insights and identify best practices that can be applied across different hospitality settings. The follow-up research would address the current study's limitations in scope and contribute to a deeper understanding of how organizational culture and individual motivation interact to improve disaster resilience in the industry.

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