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Research Article

Disaster Preparedness among Selected Beach Resorts in San Juan Batangas

Kristian C. Lacerna[1], Wilfredo D. Dalugdog[2]*

[1]De La Salle University – Dasmarinas (DLSU-D), Dasmarinas Cavite, 4114, Philippines
[2]Laguna State Polytechnic University, 4019, Philippines

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**Corresponding author:*
E-mail:
wilfredo.dalugdog@lspu.edu.ph

ABSTRACT

This study was conducted to assess disaster preparedness among selected beach resorts in San Juan, Batangas. A survey questionnaire was randomly distributed to 370 employees from the 10 most visited resorts in the area, and the collected data were analyzed using appropriate statistical tools. The results indicate that employees are consistently prepared across all aspects of disaster management, including prevention, response, recovery, and mitigation. A significant difference in disaster mitigation efforts was observed, suggesting that age influences how mitigation measures are understood and prioritized. The findings highlight a comprehensive preparedness approach among the resorts, emphasizing proactive prevention, efficient response protocols, effective recovery strategies, and robust mitigation efforts. This approach reflects a strong commitment to ensuring safety, resilience, and continuity of operations in the face of potential disasters. Despite the overall high level of preparedness, the study identified key areas for improvement, such as stockpile procurement, evacuation planning, psychosocial interventions, and structural resilience. Recommendations include conducting thorough assessments of essential supplies, developing detailed procurement plans, updating evacuation procedures to address a range of hazard scenarios, and training staff in providing psychosocial support. Structural upgrades and the establishment of mental health programs are also recommended.

Keywords: *Beach resort, Disaster management, Disaster preparedness, Risk mitigation, Resilience*

Background

In company, decisions made at the management level, both proactive and reactive, are often what determine success or failure. In the same manner, how managers and owners handle situations that fall outside of their purview and authority, such as how they handle natural disasters and calamities, determines

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how much success or failure their firms experience.

A disaster is an unforeseen incident when the community's requirements surpass the resources at hand (Furin, 2018). Planning how to respond to attain a sufficient level of preparation to respond to any incident through initiatives that improve the administrative and technological capabilities of communities, organizations, and governments is known as disaster risk management preparedness (Srinivas, 2020). The breadth of disaster risk management preparedness also includes resource inventories, public education and awareness campaigns, warning systems, emergency communications systems, evacuation plans and training, emergency exercises, and readiness plans (Torani et al., 2019). Additionally, the International Federation and Red Cross [IFRC], 2022, states that disaster risk management planning is crucial for saving countless lives, accelerating the healing process, and saving money.

Philippines is considered as one of the countries that are most vulnerable to climate-related disasters, including strong storms, flooding, and extremely high temperatures. Philippines ranks among the top nations in terms of population exposure. It is also well-known for having substantial capital and investment, particularly in stock along coastlines (UNISDR, 2015). In the years 2001–2021, natural or man-made disasters claimed the lives of about six million Filipinos, according to the International Red Cross and Red Crescent Societies.

In a nation like the Philippines where disasters are often, a lot is expected of the local governments which are regarded as a community's center. A local government unit (LGU), as required by the Local Government Code of 1991, is essential before, during, and after disasters, as stated in the same study. Because they have direct control over their citizens and are supposed to be aware of the needs of the community, local governments play a crucial role before to, during, and after disasters (Domingo & Manejar, 2018).

As per the Global Historical Tsunami Database of the National Geophysical Data Center, NOAA, and World Data Service (NGDC/WDS), 4,868 people have died in the Philippines as a result of 21 tidal waves that have been classed as tsunamis since 1749. Nine meters was the highest tidal wave that has been recorded in the Philippines to date. A total of 4,381 individuals were killed by this tsunami on August 16, 1976.

Batangas is well-known for its unique biodiversity diving locations. The provincial government, according to Philippine News Agency, was proud that the province was named one of the top three travel destinations in the nation for 2018 based on the number of visitors, both foreign and domestic, and the number of nights spent in establishments catering to the tourism industry (TRES). These are a few of Batangas's top-notch beachside lodging options. One of the main draws for tourists to Batangas, Philippines, is this.

One of the most developed beaches in Batangas province is Laiya, a coastal neighborhood near San Juan, Batangas. Thousands and thousands of people visit this long, wide length of sand, particularly in the summer. The shore is now home to a huge number of luxurious and affordable resorts, making it a fantastic choice for anyone looking to unwind and feel at ease. Laiya is also well-liked for business gatherings.

Global Facility for Disaster Reduction and Recovery (GFDRR) states that the coastal flood threat in the Batangas region is rated as high. This indicates that at least once in the next ten years, waves with the ability to cause damage are predicted to flood the coast. There is a medium risk of tsunamis. This indicates that within the next 50 years, there is a greater than 10% possibility of a potentially destructive tsunami.

This suggests that the resort's administration might have a plan in place for disaster relief. It might, however, be lacking and require enhancement. A well-defined strategy is necessary to mitigate the destruction inflicted by any calamity. Before, during, and after the crisis, this strategy needs to be created, put into action, and closely watched. The resort management in Batangas needs to create, carry out, and oversee a disaster plan before, during, and after the incident. (Borbon, 2020). Due to this finding, the researcher finds gap on this study.

Reducing the likelihood and impact of a disaster is the primary goal. Actions (flood hazard and flood risk management) that cover different phases of the catastrophe should be implemented to lessen the extent of floods and their effects. These phases include response, recovery, mitigation, and readiness. While the final stage addresses the aftermath of the disaster, the previous two phases focus on pre-disaster issues (Esposito et al., 2019).

The researchers believes that this study will contribute greatly to the Municipal Disaster Risk Reduction Management Office (MDRRMO) staff in order to determine if resort facilities adhere to the Disaster Risk Management Preparedness standards in accordance with the regulations of the Philippine Disaster Risk Reduction and Management Act. Second, the Tourism Office could determine if the resorts are safe for visitors and guests, as well as whether they are completely prepared when a crisis strikes. Third, community leaders can form partnerships in disaster readiness, particularly in disaster response and recovery, and they can determine the resort establishment's level of preparedness. Fourth, owners and staff of resort facilities will be able to evaluate the resort's advantages and disadvantages, as well as how best to support their guests in the event of a calamity. Finally, visitors would be made aware of the resorts' level of disaster readiness, allowing them to know what services the resort can offer in the event of a calamity.

Hence, this study aimed to assess the disaster preparedness of selected beach resorts in San Juan Batangas, Specifically, it aimed to determine the profile variable of the respondents in terms of sex, age, number of years in the service, and seminars and training attended related to disaster preparedness. Likewise, it also aimed to determine the level of disaster preparedness of selected beach resorts in San Juan Batangas in terms of disaster prevention, disaster response, disaster recovery, and disaster mitigation. Furthermore, this study answer the null hypothesis that there is no significant difference in the respondents' assessment on the level of disaster preparedness of the selected beach resorts when they are grouped according to profile variables.

Methods

The study employed a descriptive cross-sectional research design to assess the level of disaster preparedness among selected registered beach resorts in San Juan, Batangas. The research was conducted specifically in ten (10) beach resorts located in Calubcub 1st, Laiya, and Hugom. The respondents of this study were 370 employees from these beach resorts, selected using the stratified random sampling technique. The sample had an almost equal distribution of male and female respondents, with the majority belonging to the 21-25 and 26-30 age groups. Most respondents had one year or less, or two to five years of service in the industry. Additionally, while most had attended orientation sessions on basic life support and water safety, fewer had received training on basic disaster risk reduction and first aid concepts. The survey questionnaire used in this study consisted of two parts. The first part gathered demographic information, including age, gender, years of service, and training/seminars attended related to natural disasters. The second part employed a four-point Likert scale to assess disaster preparedness levels, where "Always Prepared" represented the highest rating and "Unprepared" the lowest. The questionnaire underwent content validation by three (3) experts in the field. Following validation and incorporation of their recommendations, a pilot test was conducted to assess the internal consistency and reliability of the instrument. The Cronbach's Alpha value exceeded 0.70, indicating that the questionnaire was both valid and reliable for the study. Data collection was conducted face-to-face after obtaining approval for the request letter. Respondents were provided with the survey questionnaire, and an informal interview was also conducted to explain the study's purpose and ensure clarity in their responses. To analyze the profile variables and the level of disaster preparedness of the selected beach resorts, the study employed basic statistical tools such as frequency, percentage, ranking, mean scores, and standard deviation. Before conducting inferential analysis, the Shapiro-Wilk Test was applied to check data normality, confirming that the dataset was normally distributed. Consequently, one-way analysis of variance (ANOVA) was used to

determine significant differences in the respondents' assessments of disaster preparedness when grouped according to their profile variables. The researchers strictly adhered to ethical considerations. Ethical clearance was obtained from the Ethics Committee of De La Salle University-Dasmariñas (DLSU-D), with certification code DERC_23-24_175M.

Result and Discussion

The data are presented in tabular form and organized in a sequential manner, following the order of presentation of the specific objectives posed at the beginning of the study.

Table 1. Respondents Profile Variables

Profile Variables	Frequency *(N=370)*	%	Rank
Gender			
Male	184	49.7	1
Female	177	47.8	2
Prefer not to say	9	2.4	3
Age			
21-25 years old	131	35.4	1
26-30 years old	101	27.3	2
31-35 years old	50	13.5	3
36-40 years old	37	10.0	4
41-45 years old	21	5.7	5.5
46-50 years old	21	5.7	5.5
51 years old and above	9	2.4	7
Length of Service			
1 year and below	111	30.0	2
2 to 5 years	171	46.2	1
6 to 10 years	52	14.1	3
11 to 15 years	30	8.1	4
16 years and above	6	1.6	5

Table 1 presents the demographic distribution of respondents. The majority were male, with a frequency of 184 (49.7%), followed by female respondents at 177 (47.8%), while 9 (2.4%) preferred not to disclose their gender. In terms of age, the largest group belonged to the 21–25 age bracket, comprising 131 respondents (35.4%), followed by those aged 26–30 years, with 101 respondents (27.3%). The smallest group consisted of respondents aged 51 years and above, with a frequency of 9 (2.4%). Regarding length of service, the majority had 2 to 5 years of experience, totaling 171 respondents (46.2%), followed by those with 1 year or less, at 111 respondents (30%). The least represented group comprised respondents with 15 years or more of service, with only 6 respondents (1.6%).

Table 2. Seminars and Trainings Attended by the Respondents

	Profile Variables	Frequency *(N=370)*	%	Rank
1.	Orientation on Basic Life Support with Water Safety	186	28.9%	1
2.	Emergency Evacuation Management Training with Orientation on Basic Life Support	139	21.6%	2
3.	First Aid Training and Water Survival	71	11.0%	5
4.	Disaster Preparedness and Response Training	82	12.7%	4
5.	Basic Disaster Risk and Reduction Concept and First Aid Concept	69	10.7%	6

Profile Variables	Frequency *(N=370)*	%	Rank
6. Skills Training on Basic Life Support and First Aid	96	14.9%	3
7. Other, please specify	1	0.2%	7
Total	644	100%	--

**Multiple Response*

Table 2 presents the distribution of respondents according to their training attended. Most of the respondents have completed "orientation on basic life support with water safety" with a frequency of 186 (28.9%), followed by "emergency evacuation management training with orientation on basic life support" with a frequency of 139 (21.6%), and "skills training on basic life support and first aid" with a frequency of 96 (14.9%). One (1) respondent answered "other" with a frequency of 1 (0.2%). It can be observed that the 370 respondents have completed several trainings with a mean score of 1.75 and a standard deviation of .225. As affirmed by Khalaf et al. (2016), the importance of training in the hospitality industry is heavily reliant on its human resources. It emphasizes that training acts as a strategic tool for creating a team of high-quality staff capable of providing exceptional service and meeting guest expectations. The research demonstrates that training not only enhances employee skills and knowledge but also positively impacts employee morale, satisfaction, and retention.

Table 2.1. Disaster Prevention Preparedness of the Selected Beach Resorts in San Juan, Batangas

Indicators	Mean	SD	VI	Rank
1. A plan for disaster preparedness has been created, which includes protocols, procedures, resources inventories, and budget plan.	3.38	.524	Always Prepared	7
2. There are various options for escape and evacuation in case of different disasters and emergencies, equipped with signs, emergency lighting, and emergency exits.	3.40	.548	Always Prepared	5
3. The owners and staff members have received thorough training in basic life support, first aid, as well as evacuation procedures.	3.41	.564	Always Prepared	3.5
4. There are various options for both internal and external communication, including intercom systems, walkie talkies, battery powered devices, and megaphones.	3.45	.560	Always Prepared	1
5. In case of emergency, teams are assembled and provided with specific training according to the core responsibilities.	3.34	.564	Always Prepared	10
6. The resort ensures that regular meetings and training sessions cover topics related to disaster preparedness and response.	3.37	.586	Always Prepared	8.5
7. Regular maintenance is provided for all disaster equipment on a routine basis	3.41	.524	Always Prepared	3.5
8. The responsibility of overseeing all aspects of preparedness, response, and recovery during a disaster or evacuation has been assigned to a senior staff member who holds a permanent position.	3.39	.603	Always Prepared	6
9. Everyone in the resort establishment knows exactly who the safety officers are and can count on them during disasters and emergencies.	3.43	.586	Always Prepared	2
10. The owner collaborates with local government units to gain access to disaster training for staff -members.	3.37	.612	Always Prepared	8.5

Indicators	Mean	SD	VI	Rank
11. The resort owner ensures that there are prepositioning/procurement of stockpile when it comes to disaster and emergency equipment.	3.30	.534	Always Prepared	11
Overall Mean & Standard Deviation	3.39	.420	Always Prepared	--

Table 2.1 presents the disaster prevention preparedness among the selected beach resorts in San Juan, Batangas. Indicator 4 ranked first, there are various options for both internal and external communication, including intercom systems, walkie talkies, battery powered devices and megaphones, obtaining a mean score of 3.45 and a standard deviation of .560, with a verbal interpretation of always prepared. It implies that various communication options are always prepared, including intercom systems, walkie-talkies, battery-powered devices, and megaphones, indicating that resorts are consistently well-prepared in this area. Effective communication is critical during emergencies, ensuring that both internal and external communications can be maintained during a disaster. As affirmed by Houston (2024), the essential nature of communication in keeping people safe during disasters and highlights the impact of effective communication on protecting human health and saving lives.

Indicator 9 ranked second, everyone in the resort establishment knows exactly who the safety officers are and can count on them during disasters and emergencies, obtaining a mean score of 3.43 and a standard deviation of .586, with a verbal interpretation of always prepared. It implies a strong emphasis on clarity and reliability of roles within the resorts. Knowing who the safety officers are and being able to rely on them are vital for coordinated and effective emergency response, and the high mean score indicates that this knowledge is well-ingrained among resort staff and guests. As mentioned on the HSE Study Guide (n.d.), the vital role of safety officers as communicators-in-chief during emergencies and the importance of effective communication strategies they employ are very vital. It also emphasizes that understanding the hierarchy and functions of safety officers within emergency response frameworks is crucial for identifying reliable safety officers during crises.

Indicators 3 and 7 ranked third, the owners and staff members have received thorough training in basic life support, first aid, as well as evacuation procedures, and regular maintenance is provided for all disaster equipment on a routine basis, both obtaining mean score of 3.41, and a standard deviation of .564 and .524, respectively, with a verbal interpretation of always prepared. It implies that resort owners and staff have received thorough training in basic life support, first aid, and evacuation procedures. Additionally, there is a strong emphasis on the regular maintenance of disaster equipment. These measures ensure that staff are not only knowledgeable but also that the necessary equipment is always functional and ready for use. As affirmed by Welty (2018), the hospitality industry, including resorts, frequently faces emergency situations ranging from natural disasters to man-made crises. It stresses that proper training and emergency preparedness plans are crucial in navigating these crises effectively. Training ensures that employees are well-prepared to handle emergencies, providing a higher likelihood of positive outcomes during crisis situations.

Meanwhile, iOFFICE Corp (2024), emphasized the importance of preventive maintenance in the context of resort establishments and its direct relation to disaster preparedness. The study emphasizes that regular maintenance of essential equipment in resorts is critical to ensuring operational efficiency and guest safety. By implementing preventive maintenance checklists tailored to the specific needs of resort buildings, facilities, and equipment, establishments can identify and address potential issues proactively, reducing the risk of equipment failure during emergencies.

However, indicator 11 ranked eleventh, the resort owners ensures that there are

prepositioning/procurement of stockpile when it comes to disaster and emergency equipment, obtaining a mean score of 3.30 and a standard deviation of .534, with a verbal interpretation of always prepared. It implies that while resorts are generally well prepared, there is room for improvement in ensuring that sufficient supplies and equipment are readily available in anticipation of disasters. This aspect of preparedness is crucial for long-term resilience and immediate response capability. As affirmed by PODS (2020), the critical role that hotels and resorts play during disasters often serves as safe havens and vital forms of disaster aid. It stresses the importance of preparing for disaster recovery well in advance by taking inventory of supplies, stockpiling provisions like water and canned foods, servicing emergency equipment, and having an evacuation plan in place. These measures ensure that resort establishments are well-equipped to support guests and the community in times of crisis.

In general, the disaster preparedness among the selected resorts establishments along the coastal areas of San Juan, Batangas, in terms of disaster prevention obtained an overall mean score of 3.39 and a standard deviation of .420, with a verbal interpretation of always prepared. It implies that resorts establishments along the coastal areas of San Juan, Batangas, in terms of disaster prevention are always prepared. This high level of preparedness likely stems from a comprehensive approach to disaster prevention, incorporating effective communication, clear roles and responsibilities, thorough training, regular equipment maintenance, and a degree of stockpiling. As according to Hilton at al. (2015), the roles and responsibilities of staff in disaster management emphasize the importance of effective communication, clear roles, training, equipment maintenance, and stockpiling in community-based outpatient clinics. The study examined the perceived attitudes and staff roles in disaster management at Community-Based Outpatient Clinics (CBOCs), emphasizing the significance of disaster response in healthcare settings. Findings highlighted the critical role of effective communication in coordinating disaster response efforts. Clear delineation of roles and responsibilities among staff members is essential for a coordinated and efficient response. Training programs enhance staff preparedness and response capabilities. Regular equipment maintenance ensures operational readiness during emergencies. Stockpiling of essential supplies has been identified as a key component of disaster preparedness. The study underscores the importance of integrating effective communication, clear roles, training, equipment maintenance, and stockpiling into disaster management strategies at CBOCs.

Table 2.2. Disaster Response Preparedness of the Selected Beach Resorts in San Juan, Batangas

Indicators	Mean	SD	VI	Rank
1.The plan outlines the steps for evacuating and rescuing individuals in all possible hazard scenarios at the site, taking into consideration both daytime and nighttime conditions.	3.30	.536	Always Prepared	9
2.In times of disaster, guests and employees, along with their families, can find accessible and secure shelter for a prescribed period declared by the resorts in a safer location on open	3.33	.550	Always Prepared	5
3.Emergency supplies and essential necessities, such as toiletries for personal hygiene, as well as tool like tarps, shovels and trash bags, are being provided by the resort staff to assist in relief efforts.	3.31	.613	Always Prepared	7.5
4.Basic search and rescue equipment for first responders is always accessible in all situations.	3.35	.598	Always Prepared	4
5.The proper external organizations have been informed and collaborated with regards to evacuation and rescue strategy.	3.38	.583	Always Prepared	1.5

Indicators	Mean	SD	VI	Rank
6.A senior staff member with a permanent position has been designated as the individual responsible for overseeing evacuation and rescue operations.	3.31	.542	Always Prepared	7.5
7.The map for evacuation displays safe zones and designated routes for various types of hazards may occur	3.32	.576	Always Prepared	6
8.A communication team has been responsible for conveying local weather updates and emergency warnings and are properly trained in proper comprehension and interpretation of the information.	3.38	.531	Always Prepared	1.5
9.In times of disaster and emergencies, the resort staff maintains a composed and collected demeanor.	3.37	.531	Always Prepared	3
Overall Mean & Standard Deviation	3.34	.433	Always Prepared	--

Table 2.2 presents the disaster response preparedness of the selected beach resort in San Juan, Batangas. Indicators 5 and 8 ranked first, the proper external organizations have been informed and collaborated with regards to evacuation and rescue strategy and a communication team has been responsible for conveying local weather updates and emergency warnings and are properly trained in proper comprehension and interpretation of the information, both obtaining mean score of 3.38 and standard deviation of .583 and .591, respectively, with a verbal interpretation of always prepared. It implies that strong collaboration and communication with external agencies are always conducted to enhance their ability to execute effective evacuation and rescue operations. The presence of a trained communication team is crucial for accurate dissemination of information, which is vital during emergencies. As emphasized by AlBattat et al. (2013), the significant role of collaboration and communication with external agencies in ensuring effective evacuation and rescue operations during emergencies. The study explores the critical aspects of emergency planning and preparedness for the hospitality industry, stressing the importance of safeguarding guests and staff during crises. It highlights the vulnerability of the hospitality sector to various internal and external hazards and the necessity of collaborating with external agencies, such as emergency responders, government authorities, and local community organizations, to enhance emergency response capabilities.

Furthermore, as noted by Zhang et al. (2014), the significance of having a trained communication team and utilizing various media channels effectively for accurate information dissemination during disasters and emergencies. By understanding the dissemination mechanisms of different media, establishing efficient communication plans, and training communication teams, resort establishments can enhance their preparedness and response capabilities, ensuring the timely and accurate dissemination of critical information to mitigate the impact of disasters on guests and staff.

Indicator 10 ranked third, in times of disaster and emergencies, the resort staff maintains a composed and collected demeanor, obtaining a mean score of 3.37 and a standard deviation of .531, with a verbal interpretation of always prepared. It implies that resort staff are trained to remain composed and collected, which is essential for maintaining order and effectively managing emergency situations. Calm and controlled behavior by staff can significantly influence the overall response efficiency and the safety of guests.

Shibamaru et al. (2020), noted the importance of developing a personnel training course aimed at smoothly accommodating stranded persons during disasters. It evaluates the outcomes of this training through quizzes, entry sheets, and a questionnaire. The two-day and one-night course uses role-play to simulate disaster scenarios, allowing participants to experience the processes involved in handling disasters, including providing emergency food

and accommodation. The research highlights the importance of training staff to respond effectively to vulnerable people during disasters, emphasizing the need to consider trust and the image of the business. Through real-life training scenarios using stockpiled food and bedding, participants acquire knowledge on responding to stranded individuals, including vulnerable populations such as the elderly, disabled, infants, pregnant women, and foreigners. The study underscores the significance of understanding the specific requirements of different groups to provide satisfactory emergency assistance. By simulating real disaster situations and facilitating role-play scenarios, this study demonstrates the effectiveness of hands-on training in enhancing staff preparedness and ensuring they remain composed and collected during emergencies. Training programs like this equip resort staff with the necessary skills and knowledge to respond calmly and effectively in crisis situations, ultimately improving the overall safety and well-being of guests and staff during disasters

Indicator 4 ranked fourth, basic search and rescue equipment for first responders is always accessible in all situations, obtaining a mean score of 3.35 and a standard deviation of .598, with a verbal interpretation of always prepared. It implies that resorts prioritize having essential equipment available, ensuring that initial response efforts can be promptly and effectively executed as the accessibility of basic search and rescue equipment for first responders is always prepared.

According to PODS (2020). the critical role that hotels and resorts play during disasters transitions from lodging facilities to safe havens and vital forms of disaster aid. It stresses the importance of preparing for disaster recovery well in advance by ensuring that resort establishments have access to necessary equipment for search and rescue operations, evacuation procedures, and overall emergency response. It emphasizes the need for readily accessible search and rescue equipment, such as emergency generators, first aid kits, communication devices, and other essential tools to support effective response efforts during disasters. By ensuring that basic search and rescue equipment is accessible and well-maintained, resort establishments can enhance their ability to respond promptly and efficiently to emergencies, safeguarding the well-being of guests, staff, and the surrounding community.

However, indicator 1 ranked nineth, the plan outlined the steps for evacuating and rescuing individuals in all possible hazard scenarios at the site, taking into consideration both daytime and nighttime conditions, obtaining a mean score of 3.30 and a standard deviation of .536, with a verbal interpretation of always prepared. It implies that while resorts have plans in place, there may be areas for improvement in ensuring that these plans are comprehensive and adaptable to all possible scenarios as this indicator ranked the least among the indicators. Likewise, outlining evacuation and rescue plans for various hazard scenarios must be considered in both daytime and nighttime conditions. According to Savoie (2019), there are significant advantages of having a well-thought-out evacuation plan in place for establishments, including resorts, to effectively respond to disasters.

In general, the disaster preparedness among the selected resorts establishments along the coastal areas of San Juan, Batangas, in terms of disaster response obtained an overall mean score of 3.34 and a standard deviation of .433, with a verbal interpretation of always prepared. It implies that resorts are generally well-prepared to respond to disasters, with strong external collaborations, effective communication systems, well-trained staff, and accessible equipment. Tsai et al. (2020) emphasized the importance of disaster prevention knowledge, attitude, skills, and services among hotel staff. The research highlights the significance of disaster prevention training for staff to enhance disaster prevention literacy, ensuring effective response capabilities during disasters. Furthermore, the study underscores the critical role of disaster prevention literacy in the hotel industry, emphasizing the need for well-prepared staff, strong external collaborations, effective communication systems, and accessible equipment. It discusses the impact of disaster prevention knowledge, attitude, and behavior of hotel staff on guest safety, emphasizing the importance of proactive disaster prevention measures. By integrating insights from

this study, resort establishments can enhance their disaster response strategies by prioritizing staff training in disaster prevention, fostering strong collaborations with external agencies, establishing effective communication systems, ensuring well-trained staff, and maintaining accessible equipment. This holistic approach to disaster response can significantly improve the preparedness and resilience of resort establishments, enabling them to effectively respond to disasters and safeguard the safety of guests and staff.

Table 2.3. Disaster Recovery Preparedness of the Selected Beach Resorts in San Juan, Batangas

Indicators	Mean	SD	VI	Rank
1.The identification of the financial consequences, encompassing expenses for recovery and the necessary resources to resume operation, has been completed.	3.34	.588	Always Prepared	7
2.The resort owner has a rehabilitation plan focused on restoring and rebuilding the resort in order to get back to its usual estate while also after the disaster, developing resilience to withstand future disasters.	3.38	.564	Always Prepared	3
3.The owner offers psycho-social interventions to guests and tourists who have experienced loss or death of a family member during a disaster, or who have been traumatized be the event.	3.28	.566	Always Prepared	9
4.If there is significant damage, the employer offers their employees an alternative means of earning a living.	3.31	.613	Always Prepared	8
5.The owners assist the local authorities in overseeing the condition of the coastal regions following the catastrophe.	3.36	.578	Always Prepared	5.5
6.The owners take responsibilities for identifying all the infrastructure that have been impacted in the coastal region.	3.41	.578	Always Prepared	1
7.Identification of continuity and recovery options has taken place.	3.36	.583	Always Prepared	3.5
8.The owner is always available to offer ongoing support to their guests and tourists to aid in their recuperation.	3.40	.552	Always Prepared	2
9.The resort establishment owner carries out an evaluation of the damaged after the disaster occurs.	3.37	.562	Always Prepared	2
Overall Mean & Standard Deviation	3.36	.463	Always Prepared	--

Table 2.3 presents the disaster recovery preparedness of the selected beach resorts in San Juan, Batangas. Indicator 6 ranked first, the owners take responsibilities for identifying all the infrastructure that have been impacted in the coastal region, obtaining a mean score of 3.41 and a standard deviation of .578, with a verbal interpretation of always prepared. It implies that resort owners prioritize identifying infrastructure impacts in the coastal region. The relatively low standard deviation indicates consistent responses among the resort establishments, suggesting a shared recognition of the importance of infrastructure assessment in disaster recovery. Finucane et al. (2020) highlight the need for proactive disaster recovery planning in coastal areas by identifying infrastructure vulnerabilities. The study emphasizes balancing short-term and long-term community needs, addressing social equity, and involving stakeholders in decision-making. These measures help reduce vulnerabilities and promote equitable and effective disaster recovery, especially for resort owners managing coastal properties.

Indicator 8 ranked second, the owner is always available to offer ongoing support to their guests and tourists to aid in their recuperation, obtaining a mean score of 3.40 and a standard deviation of .552, with a verbal interpretation

of always prepared. It implies that the provision of ongoing support to guests and tourists shows a high level of preparedness. It can be observed that support to human and infrastructure received the highest rating among the respondents of the study. The low standard deviation indicates a consistent approach among the resorts. As emphasize by Horan et al. (2022), that the hospitality industry, especially resort owners, plays a key role in helping guests recover after disasters by providing a supportive and healing environment. Offering personalized care and wellness amenities improves guests' physical and emotional well-being, enhances their experience, and fosters loyalty.

Indicator 2 ranked third, the resort owner has a rehabilitation plan focused on restoring and rebuilding the resort in order to get back to its usual estate while also after the disaster, developing resilience to withstand future disasters, obtaining a mean score of 3.38 and a standard deviation of .564, with a verbal interpretation of always prepared. It implies that resort owners understand the importance of long-term planning and resilience building as it has a rehabilitation plan that focuses not only on restoration but also on building resilience. The standard deviation suggests a slightly higher variation in responses of the respondents. As emphasize by Shalih (2019), that building community resilience is essential for effective disaster risk management. Resilient communities recover better and are better prepared for future disasters. Investing in resilience through engagement, infrastructure, and preparedness reduces vulnerability and supports sustainable recovery. The study calls for policies that prioritize resilience-building to enhance disaster readiness.

However, it can be observed that indicator 3 ranked nineth, the owner offers psycho-social interventions to guests and tourists who have experienced loss or death of a family member during a disaster, or who have been traumatized by the event, obtaining a mean score of 3,28 and a standard deviation of .566, with a verbal interpretation of always prepared. Although this indicator ranks lower, the mean score still falls within the always prepared category, indicating that psychosocial support is recognized but perhaps not as emphasized as other indicators. The slightly higher standard deviation might reflect varied capacities or priorities among the resorts in providing such interventions. Lipinski et al. (2016) found that psychological interventions after tsunamis effectively reduce PTSD symptoms and improve well-being, especially when culturally tailored. The interventions are safe and emphasize the importance of evidence-based, collaborative approaches. This supports the need for customized mental health support for guests and tourists affected by disasters.

In general, the disaster preparedness among the selected resorts establishments along the coastal areas of San Juan, Batangas, in terms of disaster recovery obtained an overall mean score of 3.36 and a standard deviation of .462, with a verbal interpretation of always prepared. It implies that the overall mean score signifies a strong level of disaster preparedness among the resort establishments in San Juan, Batangas. The relatively low overall standard deviation indicates consistent preparedness levels across different resorts. This consistency is crucial for ensuring a unified and effective disaster recovery response in the region. Malhotra (2012) stresses the importance of comprehensive disaster recovery plans for resorts that include damage assessment, ongoing support, rehabilitation, and psychosocial care. Effective coordination, communication, and community involvement are key to timely recovery and building resilience. Incorporating mental health support helps guests and staff recover better, enabling resorts to handle future crises more effectively.

Table 2.4. Disaster Mitigation Preparedness of the Selected Beach Resorts in San Juan, Batangas

Indicators	Mean	SD	VI	Rank
1.The identification of strategies for protecting and ensuring the early resumption of essential internal and external resources that support priority business activities, as well as measures to mitigate potential risks have been identified.	3.40	.528	Always Prepared	5
2.The owners guarantee that they have set aside a specific budget for disaster awareness and employee training, as well as for those disaster preventive measures such as alarms, communication radios and CCTV.	3.44	.533	Always Prepared	1
3.The owners identify the risks of disasters on the coastal areas and provide avoidance strategy for those assumed risks.	3.38	.558	Always Prepared	7.5
4.The owners recognize and assess potential disasters that may occur in their area of responsibility. Based on these assessments, they develop various plans, strategies, and prevention measures to address the specific types of disasters.	3.38	.639	Always Prepared	7.5
5.The resort employees and owners are cooperating with the relevant authorities to create a disaster plan for the resort.	3.40	.527	Always Prepared	5
6.The owners of the resort collaborate with other owners to focus on disaster prevention and management.	3.40	.543	Always Prepared	5
7.In order to ensure proper communication during times of disasters, the resort establishments make sure to have a directory or hotline numbers of various government units available.	3.42	.526	Always Prepared	2.5
8.The resort establishments have infographics or IEC materials in place to ensure that all the tourists and guests are properly informed and aware when they visit their premises.	3.42	.547	Always Prepared	2.5
9.The resort employees are assured that they can easily recognize what to do and what specific action to take in a severe weather condition	3.36	.533	Always Prepared	10
10.The resort buildings, hotels, and structures were constructed with the purpose of being able to withstand the primary risks they may encounter.	3.34	.557	Always Prepared	11.5
11.The resort employees are able to determine that their preparedness procedures are desirable to ensure safety in any given disaster attained.	3.37	.551	Always Prepared	9
12.The management regularly inspects the buildings to ensure their integrity and takes proactive measures to maintain them.	3.34	.545	Always Prepared	11.5
Overall Mean & Standard Deviation	3.39	.424	Always Prepared	--

Table 2.4 presents the disaster mitigation preparedness of the selected beach resorts in San Juan, Batangas. Indicator 2 ranked first, the owners guarantee that they have set aside a specific budget for disaster awareness and employee training, as well as for those disaster preventive measures such as alarms, communication radios and CCTV, obtaining a mean score of 3.44 and a standard deviation of .533, with a

verbal interpretation of always prepared. It implies a strong commitment from resort owners to allocate specific budgets for disaster awareness, training, and preventive measures. The relatively low standard deviation indicates a consistent approach among the resorts in prioritizing financial preparedness for disaster mitigation. Mutiarni et al., (2021) emphasize the importance of allocating a dedicated budget for disaster awareness campaigns, employee training programs, and preventive measures to improve preparedness and response capabilities. Their study shows that organizations investing financially in these areas experience higher levels of readiness and more effective disaster responses. The findings highlight a strong correlation between budget allocation and improved disaster prevention, employee readiness, and overall organizational resilience. This research underscores that financial commitment is vital for successful disaster risk management, leading to reduced vulnerabilities and enhanced capacity to mitigate the impact of disasters.

Indicators 7 and 8 ranked second, in order to ensure proper communication during times of disasters, the resort establishments make sure to have a directory or hotline numbers of various government units available and the resort establishments have infographics or IEC materials in place to ensure that all the tourists and guests are properly informed and aware when they visit their premises, both obtaining a mean score of 3.42 and a standard deviations of .526, and .547, respectively, with a verbal interpretation of always prepared. It implies the importance placed on communication and information dissemination during disasters. Having directories or hotlines of government units and infographics or IEC materials ensures that both staff and guests are well-informed and prepared. The closed mean scores and similar standard deviation suggest a uniform implementation of these measures across the resorts. Mitcham et al., (2021) highlight the effectiveness of using infographics to share important information during disasters in resort settings. Infographics simplify complex details, making evacuation routes, safety procedures, emergency contacts, and other vital instructions easy to understand and visually engaging. The study emphasizes the public's need for quick and accessible information during crises. Resorts can tailor infographics for different groups—guests, staff, and local authorities—to ensure relevant messaging and improve response coordination. While the study focuses on social media, it suggests that resorts can use platforms like Facebook and Instagram to widely share these infographics, effectively reaching guests and the local community. Overall, incorporating infographics enhances communication, preparedness, and disaster response in resort establishments.

However, the least in the rank are indicators 10 and 12, the resort buildings, hotels, and structures were constructed with the purpose of being able to withstand the primary risks they may encounter and the management regularly inspects the buildings to ensure their integrity and takes proactive measures to maintain them, both obtaining a mean score of 3.34 and standard deviation of .557 and .545, with a verbal interpretation of always prepared. It implies that while the resorts recognize the importance of constructing and maintaining buildings to withstand risks, there may be variability in how consistently these measures are applied. The slightly higher standard deviations reflect this variability among the responses of the respondents. Baily (2022) highlights the rising frequency of global disasters—such as cyclones, earthquakes, floods, and wildfires—and stresses the importance of addressing vulnerabilities in building construction. Design plays a key role in disaster risk reduction and recovery by promoting innovative and resilient solutions. Through design thinking, which involves problem-solving and iterative processes, architects can better understand systemic issues, clearly define problems, and develop effective solutions. The study calls for integrating disaster resilience concepts into design education, emphasizing topics like urban resilience, climate adaptation, and risk-based architecture. By combining design principles with interdisciplinary collaboration, designers can significantly enhance community resilience and create sustainable built environments.

Additionally, Resort Trades Timeshare + Hospitality Magazine emphasizes the im-

portance of advance planning, regular inspections, and proactive measures to protect resort properties from disaster damage. It highlights the responsibility of management to safeguard the health and safety of owners, guests, and staff through effective disaster preparedness. Regular inspections help identify structural weaknesses, safety hazards, and utility system issues, ensuring resort buildings remain resilient during emergencies.

In general, the disaster preparedness among the selected resorts establishments along the coastal areas of San Juan, Batangas, in terms of disaster mitigation obtained an overall mean score of 3.39 and a standard deviation of .424, with a verbal interpretation of always prepared. The overall mean score indicates a high level of disaster mitigation preparedness among resort establishments. The relatively low standard deviation points to a general consistency in disaster mitigation practices. This uniformity is crucial for effective disaster prevention and preparedness.

Badri (2020) discussed the significance of financial and human resources, management approaches, facilities, and structure in determining disaster preparedness levels. The research emphasizes the importance of regular inspections, crisis management knowledge, risk perception, and prioritizing preparedness in disaster plans for hotels. Additionally, it highlights the role of communication, training, and equipment allocation in enhancing disaster resilience in hospitality establishments.

Table 3.1 Test of Significant Difference in the Respondents' Assessment When They are Grouped According to Respondents' Sex

		SS	df	MS	F	Sig.
Disaster Prevention	Between Groups	.090	2	.045	.254	.775
	Within Groups	65.134	367	.177		
	Total	65.224	369			
Disaster Response	Between Groups	.090	2	.086	.456	.634
	Within Groups	65.134	367	.188		
	Total	65.224	369			
Disaster Recovery	Between Groups	.090	2	.175	.817	.443
	Within Groups	65.134	367	.214		
	Total	65.224	369			
Disaster Mitigation	Between Groups	.090	2	.299	1.671	.189
	Within Groups	65.134	367	.179		
	Total	65.224	369			

Table 3.1 presents the One-Way ANOVA was performed to test significant difference on the respondents' assessment when they are grouped when grouped according to sex.

The respondents' sex and the disaster prevention were found to be not statistically significant F (2,367) = .254, p<.775. It implies that there is no statistically significant difference in disaster prevention preparedness based on the respondent's sex. This suggests that disaster prevention measures are uniformly applied, irrespective of whether the respondents are male or female. As emphasize by Erman et al. (2021), the disaster prevention measures should be applied uniformly across all genders to promote inclusivity, equality, and effectiveness in risk reduction. Their study highlights the importance of gender-neutral strategies, which ensure equal access to resources, information, and support for disaster preparedness. By addressing diverse needs without gender bias, such approaches enhance community resilience, cooperation, and empowerment.

The respondents' sex and the disaster response were found to be not statistically significant F (2,367) = .456, p<.634. It implies that there is no statistically significant difference in disaster response preparedness by sex. This demonstrates that disaster response strategies are equally implemented for both male and fe-

male respondents. Cvetković et al. (2018) highlight gender-based differences in disaster perception, preparedness, and response. While men often display greater confidence in coping with disasters, women tend to have a deeper understanding of such events and show stronger caregiving behaviors, including a greater willingness to assist victims. The study emphasizes the need for gender-aware emergency management planning to improve citizen participation, shared responsibility, and community resilience, particularly in flood-prone areas. Addressing these gender-specific insights can lead to more inclusive and effective disaster preparedness and response strategies.

The respondents' sex and the disaster recovery were found to be not statistically significant F (2,367) = .817, p<.443. It implies that there is no statistically significant difference in disaster recovery preparedness based on sex. This suggests a consistent approach to disaster recovery regardless of the respondents' sex. As affirmed by GFDRR, that there is critical importance of incorporating gender equality and women's empowerment principles into disaster recovery strategies. It highlights that addressing gender disparities and promoting inclusivity in recovery efforts are essential for building resilience, reducing vulnerabilities, and ensuring sustainable recovery outcomes.

The respondents' sex and the disaster mitigation were found to be not statistically significant F (2,367) = 1.671, p<.189. It implies that there is no statistically significant difference in disaster mitigation preparedness based on the sex of the respondents. This indicates uniformity in disaster mitigation practices across male and female respondents. As negates by El Seira et al. (2019), gender plays a significant role in identifying and addressing vulnerabilities in disaster mitigation. Understanding the gender-specific vulnerabilities influenced by societal norms and roles is crucial for effective mitigation planning.

The lack of statistically significant differences in disaster prevention, response, recovery, and mitigation implies that resort establishments have standardized protocols and training that are equally effective for both male and female staff. This consistency is crucial for ensuring comprehensive and effective disaster preparedness across the organization. According to Yakubu (2024), there is a must in advocating gender-sensitive disaster management policies and practices that promote gender equality, address vulnerabilities, and empower individuals of all genders to actively participate in disaster preparedness and response

Table 3.2 Test of Significant Difference in the Respondents' Assessment When They are Grouped According to Respondents' Age

		SS	df	MS	F	Sig.
Disaster Prevention	Between Groups	.690	6	.115	.647	.692
	Within Groups	64.534	363	.178		
	Total	65.224	369			
Disaster Response	Between Groups	1.151	6	.192	1.021	.411
	Within Groups	68.176	363	.188		
	Total	69.327	369			
Disaster Recovery	Between Groups	1.645	6	.274	1.289	.261
	Within Groups	77.172	363	.213		
	Total	78.816	369			
Disaster Mitigation	Between Groups	2.587	6	.431	2.455	.024
	Within Groups	63.774	363	.176		
	Total	66.361	369			

Table 3.2 presents the One-Way ANOVA was performed to test the significant difference in the respondents' assessment when they are grouped according to age.

The respondents' age and the disaster prevention were found to be not statistically significant F (6,363) = .647, p<.692. It implies that there is no statistically significant difference in disaster prevention preparedness based on the respondents' age. This suggests that disaster prevention practices are consistently applied regardless of the age of the respondents. As negates by Cong et al. (2021), that age significantly influences disaster prevention behaviors, with both younger and older adults more likely to encounter challenges in coping with disaster risks. The study also highlights how caregiving responsibilities affect preparedness across age groups, emphasizing the need for age-sensitive disaster prevention strategies.

The respondents' age and the disaster response were found to be not statistically significant F (6,363) = 1.021, p<.411. It implies that there is no statistically significant difference in disaster response preparedness among different age groups. This indicates uniformity in disaster response measures across all ages of respondents. As negates by Toubes et al. (2023), age significantly influences how resort employees prepare for and respond to disasters. The study indicates that as individuals grow older, their resilience tends to increase, enhancing their ability to manage disaster situations effectively. These findings highlight the importance of considering age-related differences in shaping disaster response preparedness, suggesting that age should be a key factor in disaster planning and workforce development within the tourism industry.

The respondents' age and disaster recovery were found to be not statistically significant F (6, 363) = 1.289, p<.261. It implies that there is no statistically significant difference in disaster recovery preparedness based on the age of the respondents. This consistency implies that the practices for recovering from disasters are similar across all age groups. As negates by Campbell (2019), that age significantly influences disaster recovery, with both younger and older individuals facing distinct challenges.

The respondents' age and disaster mitigation were found to be statistically significant F (6, 363) = 2.455, p<.024. It implies that there is a statistically significant difference in disaster mitigation preparedness based on the respondents' age. This suggests that age may influence how disaster mitigation strategies are perceived or implemented. As found out by Meyer et al. (2017), that elderly individuals tend to perceive fewer social connections and support systems available for disaster preparedness. This suggests that age-related differences influence how older populations understand and access social resources, revealing specific vulnerabilities they may face in mitigating disaster risks.

Furthermore, as Connelly (2021) examined how age affects the understanding and prioritization of disaster mitigation strategies. The study found significant differences across age groups, suggesting that age influences risk perception, familiarity with mitigation practices, and willingness to take action. Younger individuals may be more open to adopting new technologies and immediate solutions, while older adults may focus on long-term resilience through traditional approaches. These differences highlight the need for age-specific educational and communication strategies to improve disaster preparedness. The findings emphasize that tailoring mitigation efforts to the unique needs and perspectives of different age groups can enhance engagement and community resilience.

Table 3.3 Test of Significant Difference in the Respondents' Assessment When They are Grouped According to Respondents' Length of Service

		SS	df	MS	F	Sig.
Disaster Prevention	Between Groups	2.798	4	.700	4.091	.003
	Within Groups	62.426	365	.171		
	Total	65.224	369			
Disaster Response	Between Groups	4.641	4	1.160	6.546	.001
	Within Groups	64.686	365	.177		
	Total	69.327	369			

		SS	df	MS	F	Sig.
Disaster Recovery	Between Groups	4.291	4	1.073	5.253	.001
	Within Groups	74.526	365	.204		
	Total	78.816	369			
Disaster Mitigation	Between Groups	2.448	4	.612	3.496	.008
	Within Groups	63.913	365	.175		
	Total	66.361	369			

Table 3.3 presents the One-Way ANOVA was performed to test the significant difference on disaster preparedness among the selected beach resorts in San Juan, Batangas, when grouped according to the respondents' length of service.

The respondents' length of service and the disaster prevention were found to be not statistically significant F (4,365) = 4.091, p<.003. It implies that there is a statistically significant difference in disaster prevention preparedness based on respondents' length of service. This suggests that the length of service influences how disaster prevention measures are perceived or implemented. The significant difference in disaster prevention preparedness indicates that more experienced employees might have a better understanding of the implementation of preventive measures. This could be due to accumulated knowledge and familiarity with risk factors over time. As affirmed by Cominghud et al. (2020), that there was significant relationship between employees' capabilities in disaster prevention, mitigation, preparedness, and response, and their length of service. The study suggests that those with longer tenure tend to have a better understanding and more effective implementation of disaster risk reduction strategies. This is attributed to their accumulated experience, knowledge, and familiarity with protocols and procedures over time.

The respondents' length of service and the disaster response were found to be not statistically significant F (4,365) = 6.546, p<.001. It implies that there is a statistically significant difference in disaster response preparedness based on the length of service. This highlights that experience and tenure may play a critical role in disaster response strategies. The highly significant difference in disaster response preparedness suggests that employees with longer service lengths are likely more adept at responding to disasters. This can be attributed to their extensive experience and possibly having dealt with previous disaster situations. Goniewicz et al. (2020) highlight the importance of preparedness across all levels of management, focusing on factors such as disaster risk perception, response experience, training, and readiness for specific threats. The study, supported by findings from the Harvard Humanitarian Initiative, emphasizes that longer service and greater experience improve employees' disaster response capabilities. Together, these studies suggest that employees with extended tenure are generally more skilled and prepared to handle disaster situations due to their accumulated knowledge and training.

The respondents' length of service and the disaster recovery were found to be not statistically significant F (4,365) = 5.253, p<.001. It implies that there is a statistically significant difference in disaster recovery preparedness based on the respondents' length of service. This finding suggests that the length of service significantly affects the effectiveness and implementation of disaster recovery measures. The significant difference in disaster recovery indicates that those with longer tenure may have more refined skills and strategies for effective recovery. This might be due to their experience in managing post-disaster scenarios and implementing recovery plans.

Existing research in the tourism sector suggests that employees with longer tenure in resort roles tend to develop more advanced skills and strategies for effective disaster recovery. Prayag et al., (2023) found that leadership behaviors cultivated through experience—such as vision sharing, managing change, and task leadership—significantly enhance both em-

ployee and organizational resilience during crises like the COVID-19 pandemic. Employees with extended service in resorts gain valuable knowledge and coping mechanisms from their experience, enabling them to respond to disasters more effectively. Their familiarity with the resort environment and operations supports a more thorough and efficient disaster recovery process.

The respondents' length of service and the disaster mitigation were found to be not statistically significant $F(4,365) = 3.496$, $p<.008$. It implies that there is a statistically significant difference in disaster mitigation preparedness based on the length of service. This implies that tenure may influence how disaster mitigation strategies are perceived or executed. The significant difference in disaster mitigation preparedness implies that longer serving employees may have a more comprehensive approach to mitigating disasters. Their experience likely provides them with deeper insights into potential risks and effective mitigation strategies. Prayag et al., (2023) highlight how leadership behaviors developed through years of experience play a key role in strengthening both employee and organizational resilience during crises. In the tourism industry, especially among resort employees with long tenure, fostering resilient leadership can significantly enhance disaster recovery efforts by promoting a comprehensive and effective approach to disaster mitigation.

Conclusion

Based on the results of the study, it is evident that disaster preparedness practices in beach resort establishments are not only present but also meaningfully embedded in their operational culture. This indicates that both management and employees recognize the importance of proactive planning and collaborative action in ensuring safety. The consistent level of preparedness across disaster prevention, response, recovery, and mitigation reflects a commendable degree of institutional maturity and awareness—particularly in a sector highly vulnerable to natural hazards.

The absence of significant differences in preparedness based on sex and length of service suggests that disaster readiness is a shared responsibility and is not determined by personal characteristics or tenure. This uniformity implies that the establishments have successfully cultivated a culture in which all employees, regardless of demographic factors, are equally informed, trained, and expected to contribute. However, the observed differences in mitigation practices across age groups highlight the need for more age-sensitive approaches. In addition, integrating age-specific strategies into disaster management planning is essential to ensure inclusivity and to optimize the contributions of individuals across all age demographics.

Furthermore, the strong emphasis on post-disaster recovery and mitigation suggests that these establishments are not solely focused on immediate survival but are also committed to long-term resilience and sustainability. This forward-thinking mindset should be acknowledged and emulated by similar institutions.

Recommendations

All beach resort establishments should implement a mandatory Disaster Risk Reduction and Management (DRRM) orientation for newly hired employees within the first month of employment. This should include modules on prevention, response, recovery, and mitigation, with measurable assessment tools to evaluate knowledge retention and readiness. Likewise, resorts should organize quarterly emergency drills and scenario-based training exercises by the end of teach quarter to enhance staff responsiveness and coordination during disaster situations. Performance should be evaluated using structured post-drill assessment forms. Furthermore, each resort should allocate a minimum of 5% of its annual operational budget to fund DRRM efforts, including the purchase of updated equipment, maintenance of emergency supplies, and upgrading of safety infrastructure. The impact of this allocation should be monitored annually through financial audits and DRRM performance reviews. Moreover, partnership with the Local Government Units (LGUs) should be strengthen, and the community-based disaster preparedness activities should be conducted at least twice a year. This include coastal clean-ups, community training, or information drives to

strengthen the resort's role in promoting local disaster resilience.

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