Disaster Awareness and Preparedness of Lakeside Barangays in Sta. Cruz, Laguna: Input to GSAR Social Support Services

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Abstract

This study investigates the disaster awareness and preparedness of lakeside barangays in Sta. Cruz, Laguna, providing valuable insights for Graduate Studies and Applied Research Program (GSAR) Social Support Services. Utilizing a cross-sectional descriptive survey design, data were collected from 404 respondents to assess their awareness of hazards, exposure, vulnerability, and preparedness levels in relation to disaster risk reduction. The findings reveal that respondents demonstrated a moderate level of awareness regarding hazards and exposure but only a somewhat aware understanding of vulnerability. In terms of preparedness, participants were extremely prepared for response activities, while preparedness and recovery efforts were categorized as somewhat prepared. Correlation analysis indicated a statistically significant but very weak relationship between disaster awareness and preparedness, suggesting that increased awareness does not necessarily translate into effective preparedness. Based on these findings, the study recommends the implementation of targeted community awareness campaigns, enhanced training and capacity-building programs, and participatory disaster risk reduction initiatives to strengthen the overall disaster preparedness framework. Additionally, it advocates for expanding resource availability and logistical support, establishing a sustainable monitoring and evaluation system, and fostering collaboration between government agencies and humanitarian organizations. These efforts are important for building resilience within the community and ensuring effective disaster response and recovery in the face of future threats.

Keywords: disaster risk, disaster awareness, disaster preparedness, social support services, SDG 11

1. Introduction

The Philippines is highly susceptible to the adverse impacts of climate change, characterized by rising sea levels, increasing temperatures, and the frequency of extreme weather events such as tropical cyclones, floods, landslides, and droughts (ClimateLinks, 2017). Its geographical location and extensive coastline, which houses the majority of its population and major cities, exacerbate these risks. The Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) reports that the country experiences an average of 20 tropical cyclones annually, with about 8 to 9 making landfall and causing significant damage, especially during the peak typhoon season from July to October, when nearly 70% of all typhoons form (PAGASA, n.d.). The risk of storm surges has intensified, particularly in low-lying areas that are vulnerable to permanent destruction due to rising sea levels, which are increasing at a rate faster than the global average.

In recent years, the Philippines has endured a series of devastating tropical cyclones, with notable events including Tropical Storm Ondoy (Ketsana) in 2009, which set a record for rainfall in a single day, and subsequent typhoons such as Pepeng (Parma) and Yolanda (Haiyan) that wreaked havoc across the nation (Abon et al., 2011). According to a study by Dela Cruz-Santos (2021), Typhoon Ulysses (Vamco) was the most destructive in 2020, disproportionately impacting areas near water bodies that lack sufficient vegetation to absorb heavy rainfall. The CALABARZON region, which includes Laguna province, is among the most frequently affected, highlighting the urgent need for effective disaster preparedness and awareness.

Flooding poses the greatest threat, leading to significant loss of life and property, often exceeding a community's capacity to respond (Department of Disaster Management – Virgin Islands, 2011). Contributing

factors to flooding include deforestation, urbanization, silted waterways, and storm surges, all of which exacerbate the vulnerability of communities in the face of natural calamities (Calilung, 2016).

The municipality of Santa Cruz, situated on the southeastern coast of Laguna de Bay, is particularly vulnerable to flooding due to its proximity to the lake. With a geographical location of 14.2817 degrees latitude and 121.4144 degrees longitude, Santa Cruz is bordered by Laguna de Bay to the north and is accessible via major roads from Metro Manila. The municipality serves as a regional commercial hub comprising 26 barangays, five of which are in the urban Poblacion area. Despite ongoing development, many barangays experience recurring flooding, primarily in areas with inadequate drainage systems and low elevation, leading residents to become accustomed to these natural hazards.

Given the community's vulnerability and exposure to various disasters, enhancing disaster awareness and preparedness among residents is important. A disaster is defined as a severe disruption of a community's normal operations, resulting in significant losses that exceed local recovery capacities (IFRC, 2020). Disaster awareness encompasses understanding hazards, exposure, and vulnerabilities, while disaster preparedness involves proactive measures to anticipate, prevent, and mitigate the effects of disasters, thereby enabling communities to respond effectively (IFRC, 2020). This research aims to address Sustainable Development Goal (SDG) 11, which focuses on making cities and human settlements inclusive, safe, resilient, and sustainable, by examining disaster awareness and preparedness in the lakeside barangays of Sta. Cruz, Laguna, and providing valuable input for GSAR Social Support Services.

Due to the community’s vulnerability and exposure to various disasters and hazards, it is imperative that the residents need to be aware of and prepared to deal with the probability of such disasters occurring frequently. As defined, a disaster is a severe interruption of a society's normal operations that results in extensive losses of people, property, or the environment that exceed the capacity of the affected society to recover using solely its own resources (IFRC, 2020). Disaster awareness includes determination of hazards, exposure, and vulnerability. Disaster preparedness, on the other hand, refers to measures taken to prepare for and reduce the effects of disasters. This entails anticipating them, attempting to prevent them, minimizing their impact on populations that are more susceptible to disasters, and respond to and effectively cope with their consequences (IFRC, 2020).

Numerous academic publications have been published worldwide that concentrate on disaster knowledge, attitudes, and practices (KAPs), disaster risk management, and disaster preparedness and response. Studies, particularly those conducted by Rogayan and Dollete (2020), underscore how insights from KAPs inform the development of effective disaster response plans and contribute to community resilience. In the Philippines, research has focused on various aspects of disaster resilience, including community-based practices, youth engagement, and the role of local leaders in fostering preparedness. Such foundational work is essential for implementing effective disaster risk reduction management strategies (DRRMS) and educational initiatives, emphasizing the need for individuals to be informed and motivated to reduce vulnerability and mitigate disaster impacts (Soriano, 2019).

Rimando (2016) further elucidates the dynamics of disaster impact by identifying three key factors: the severity of the hazard, the extent of exposure to risk, and the degree of community vulnerability. He defines hazards as phenomena that threaten human safety and property, while exposure pertains to the likelihood of encountering these hazards. Vulnerability reflects the susceptibility of individuals and communities to harm, influenced by their specific circumstances. These concepts form the backbone of disaster risk reduction, which encompasses systematic efforts to analyze and manage disaster causes, enhance preparedness, and reduce exposure and vulnerability through prudent land use and environmental management (Calilung, 2016).

Disaster risk reduction management, as defined by Calilung (2016), involves a comprehensive, systematic approach that encompasses the four phases of disaster management: mitigation, preparedness, response, and recovery. Mitigation efforts aim to minimize hazard impacts through engineering practices and environmental regulations, while preparedness focuses on building capacities to effectively respond to and recover from disasters. In the aftermath of disasters, response efforts provide immediate assistance to affected populations, emphasizing the urgent need for relief. Recovery involves restoring and improving living conditions in affected communities, aligning with the principles of "build back better."

The study aims to provide assessment on the disaster awareness and preparedness of the residents of lakeside barangays in Santa Cruz, Laguna and use it as a baseline for an extension program development. Guided by the study of Rogayan and Dollete (2020), the following are the driving questions for the conduct of the study are as follows:

- What natural disasters/hazards frequently affect the neighborhood?
- How do the community evaluate the risk of various disasters?
- How informed are the community on the existence, severity, and risks posed by disasters?
- What level of preparedness do the community have for the various disasters?

Conceptual Framework

Figure 1 depicts a conceptual framework in the form of a research paradigm that served as a guide for the present researcher in addressing the problem areas raised in this study.

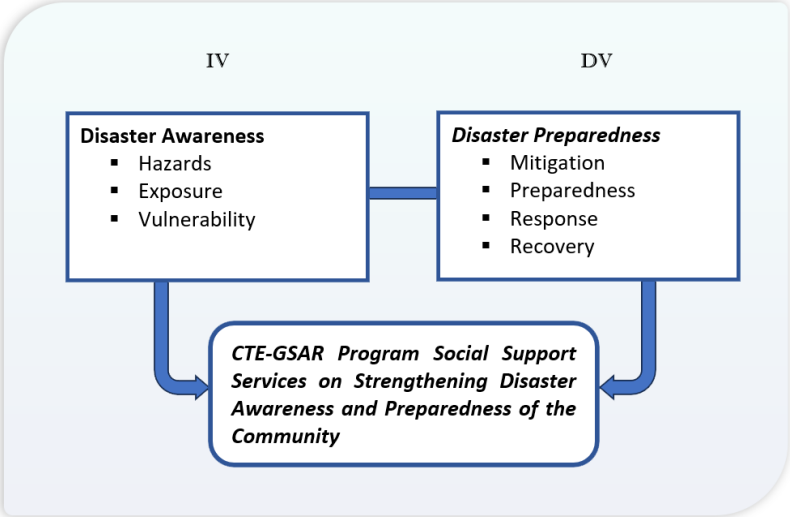

Figure 1. Research Paradigm of the Study

Statement of the Problem

In order to provide baseline data for a community social support service, the study is focused on the assessment of the disaster awareness and preparedness of the residents of lakeside barangays in Santa Cruz, Laguna. Specifically, this study sought to answer to the following questions:

1. What is the level of disaster awareness of the respondents in terms of:
   1.1 hazard;
   1.2 exposure; and
   1.3 vulnerability.
2. What is the level of disaster preparedness of the respondents in terms of:
   2.1 mitigation;
   2.2 preparedness;
   2.3 response; and
   2.4 recovery.

3. Is there a significant relationship between the respondent's disaster awareness and preparedness?

4. What type of extension program may be undertaken to promote disaster awareness and preparedness among residents of lakeside barangays in Santa Cruz, Laguna?

2. Methodology

2.1 Research Design

The research will utilize a cross-sectional descriptive survey to determine the disaster awareness and preparedness of the respondents in lakeside barangays in Santa Cruz, Laguna. A cross-sectional study looks at data at a single point in time. The participants in this type of study are selected based on particular variables of interest (Cherry, K. 2022). Comparing longitudinal survey designs, the cross-sectional survey approach is

the one that is most frequently utilized. One of the primary reasons for this is that cross-sectional design requires shorter amount of time in the gathering of information (Creswell, 2005). This technique is frequently used to draw conclusions about potential connections or to collect initial data to enable future study and experimentation.

2.2 Participants of the Study

The respondents were identified after having conceptualized the problems that must be addressed. The study employed random sampling of four hundred four (404) residents from various lakeside barangays in Santa Cruz, Laguna. The respondents come from a variety of socio-economic backgrounds. Table 1 presents the respondents' demographic profile which includes age, gender, civil status, educational attainment, source of income, economic status, and years of residency.

Table 1 *Respondents Demographic Profile*

Category	Variable	Frequency	Percentage
Age	15-20	12	2.86
	21 - 30	208	51.43
	31- 40	132	32.86
	41 - 50	40	10.00
	51 - 60	6	1.43
	61 & above	6	1.43
Gender	Male	52	12.86
	Female	352	87.14
Civil Status	Single	248	61.43
	Married	139	34.29
	Divorced/ Separated	17	4.29
Educational Attainment	Elementary	35	8.57
	High School	294	72.86
	College	75	18.57
Source of Income	Employed	58	14.29
	Self-Employed	69	17.14
	Student	6	1.43
	Retired/Pensioner	6	1.43
	Others	104	25.71
	None	161	40.00
Economic Status (Based on monthly income)	less than P10,957.00	357	88.57
	P10,957.00 – P21,914.00	35	8.57
	P21,915.00 – P43,828.00	12	2.86
Years of Residency	1 to 5	58	14.29
	6 to 10	75	18.57
	11 to 15	12	2.86
	16 to 20	29	7.14
	21 to 25	35	8.57
	26 to 30	87	21.43
	31 and above	108	27.14

The demographic profile reveals that the respondents are predominantly young adults, with the majority (51.43%) aged between 21 to 30 years. A significant portion (32.86%) also falls within the 31 to 40-year-old bracket, suggesting that many participants are either early in their careers or transitioning into mid-career roles. The distribution of older respondents decreases with age, with only 10% aged 41 to 50 and 1.43% each for those aged 51-60 and 61 years or older. This concentration of younger individuals reflects a population that is likely active in the workforce or pursuing personal and professional development.

Gender-wise, the survey is heavily skewed toward females, who constitute 87.14% of respondents, compared to only 12.86% males. This gender imbalance suggests that the study may be influenced by female perspectives or that more women are engaged in the relevant activities or communities being studied. In terms of civil status, most respondents (61.43%) are single, while 34.29% are married, and 4.29% are divorced or separated. The high proportion of single respondents aligns with the dominance of younger participants, who may not yet have transitioned to marriage or family life.

Educational attainment data show that the majority (72.86%) have completed high school, indicating a moderately educated population. A smaller percentage (18.57%) have attained a college degree, while 8.57% reported only elementary-level education. These figures suggest that most respondents may have limited access to higher education, which could impact their employability and economic status.

The economic profile highlights that 88.57% of respondents earn less than P10,957 per month, placing them within the low-income bracket. Furthermore, 40% reported having no income, and 25.71% rely on irregular or unspecified sources of income. Self-employment (17.14%) is more common than formal employment (14.29%), reflecting a reliance on informal or entrepreneurial work. These findings suggest financial instability within the population, with limited access to stable employment opportunities.

The residency data indicate that the community consists of both long-term and newer residents. A significant portion (27.14%) has lived in the area for over 31 years, while 21.43% have resided there for 26 to 30 years. However, newer residents (1 to 10 years) also make up 32.86% of the population, indicating some degree of recent migration or relocation.

The demographic profile points to a predominantly young, female-dominated population with moderate educational attainment and significant financial challenges. Many respondents are either unemployed or rely on informal income sources, highlighting the need for targeted programs focused on job creation and skills development. Additionally, the combination of long-term and recent residents suggests a diverse community with varying needs, which could benefit from inclusive social and economic initiatives. Understanding these demographic dynamics is essential for crafting interventions that promote both individual well-being and community development.

2.3 Research Instrument

The study utilized a three-part questionnaire, adapted and modified from official government sources such as the National Disaster Risk Reduction and Management Council (NDRRMC), Philippine Institute of Volcanology and Seismology (Phivolcs), and Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA), among others. This instrument was designed to evaluate the respondents' levels of disaster awareness and preparedness. Specifically, the questionnaire included the following sections:

- Demographic profile of the respondents;
- Disaster Awareness Questionnaire; and
- Disaster Preparedness Questionnaire

To ensure the reliability and validity of the research instrument, it was subjected to both Cronbach's alpha testing and review by three field experts. This process ensured the internal consistency and appropriateness of the questions for the study's objectives.

2.4 Data Collection and Analysis Procedure

Ethical considerations were fundamental to ensuring the integrity, trustworthiness, and responsible advancement of knowledge in this research. The researchers prioritized obtaining informed consent from all participants, ensuring they fully understood the purpose, procedures, and potential risks of the study. The privacy and rights of participants were safeguarded by maintaining confidentiality and protecting any personal information gathered. The study strictly adhered to recognized ethical standards, including those set by the American Psychological Association, to ensure that the research was conducted with both scientific rigor and moral responsibility. By upholding these ethical principles, the research aimed to contribute valuable insights while respecting the dignity and welfare of all participants.

Each respondent was given a brief explanation about the study before being asked to complete a survey questionnaire through a Google Form designed by the researchers. For those without internet access, printed questionnaires were provided to ensure inclusivity. To assess the levels of disaster awareness – in terms of hazard, exposure, and vulnerability, and disaster preparedness – in terms of mitigation, preparedness, response, and recovery, descriptive statistics such as mean, standard deviation, frequency, and percentage were employed. These statistical measures provided a clear overview of the respondents' awareness and preparedness levels, enabling the identification of trends and areas that need improvement. This approach

aligns with the methodologies used in the studies of Dela Cruz-Santos (2021) and Calilung (2016), which effectively utilized descriptive statistics to analyze community disaster awareness.

To determine the relationship between disaster awareness and preparedness, the Pearson Product-Moment Correlation Coefficient was used. This inferential statistical tool reveals the strength and direction of the relationship between these two variables, testing the hypothesis that increased awareness leads to improved preparedness. A p-value < 0.05 will indicate statistical significance, confirming that awareness influences preparedness behaviors. This correlation-based analysis aligns with disaster-related studies that emphasize the critical role of awareness in fostering preparedness actions, contributing to more resilient communities.

3. Results and Discussions

Table 2 shows the weighted mean level of the respondent's disaster awareness in terms of hazards, exposure and vulnerability.

Table 2 *Level of Disaster Awareness of the Respondents*

Disaster Awareness	WM	SD	Verbal Interpretation
Hazards	3.89	1.234	Moderately Aware
Exposure	3.47	1.313	Moderately Aware
Vulnerability	3.17	1.063	Somewhat Aware

Legend:

Scale	*Verbal Interpretation*
4.20 – 5.00	Extremely Aware
3.40 – 4.19	Moderately Aware
2.60 – 3.39	Somewhat Aware
1.80 – 2.59	Slightly Aware
1.00 – 1.79	Not All Aware

The data on the respondents' level of disaster awareness shows varying degrees of awareness across different aspects of disaster-related concepts. In terms of hazards, the respondents have a weighted mean score of (WM = 3.89, SD = 1.234), indicating that they are "Moderately Aware" of potential threats and dangers, such as natural or man-made hazards. This suggests that most respondents possess a general understanding of risks but may still require deeper knowledge or more targeted information on specific hazard types.

For exposure, the weighted mean score (WM = 3.47, SD = 1.313), which also falls within the "Moderately Aware" category. This implies that the respondents have some awareness of their level of exposure to risks but may not fully grasp the extent to which they, their properties, or their community are at risk. The higher standard deviation for exposure suggests that there may be variability among respondents, with some being more informed than others regarding their personal or community vulnerability to disasters.

When it comes to vulnerability, the respondents reported a weighted mean score of (WM = 3.17, SD = 1.063), which translates to being "Somewhat Aware". This lower level of awareness indicates that respondents might have limited understanding of how their individual circumstances or community characteristics (such as infrastructure, socioeconomic conditions, or preparedness) could affect their susceptibility to disaster impacts.

The data suggests that while respondents are moderately aware of hazards and exposure, their understanding of vulnerability is more limited. This partial awareness across different disaster-related concepts highlights the need for targeted educational efforts to bridge knowledge gaps, particularly in understanding how vulnerability affects their overall disaster preparedness. Enhancing awareness in all three areas: hazards, exposure, and vulnerability – can empower individuals and communities to take proactive measures to mitigate risks and improve resilience.

Vulnerability arises from multiple factors, including poor infrastructure, insufficient asset protection, lack of education, and weak environmental governance (Rimando, 2016). These vulnerabilities underscore the importance of addressing not just physical risks but also social and economic factors that contribute to communities' susceptibility to disasters.

While awareness is crucial for understanding disaster risks, it does not guarantee preparedness. Gubalane (2015) emphasizes that awareness is shaped by reliable information, yet Maminta (2019) points out that preparedness goes beyond knowledge – it requires logistical and infrastructural readiness. This distinction

suggests that even well-informed individuals may struggle to act effectively without the necessary resources and systems in place.

Institutional frameworks play a critical role in bridging the gap between awareness and preparedness. The Philippine Disaster Risk Reduction and Management Act of 2010 (RA 10121) mandates national and local governments to address vulnerabilities and build institutional capacities for disaster risk reduction. The law further emphasizes the importance of empowering vulnerable and disadvantaged groups to enhance their ability to respond to and recover from disasters, recognizing that resilience must be cultivated across all sectors of society.

The literature underscores the need for a multi-faceted approach to disaster management. While awareness is essential, it must be complemented by infrastructure, resources, and institutional support to achieve comprehensive preparedness. Strengthening local resilience, particularly among vulnerable populations, is crucial for effective disaster response and recovery. Thus, the intersection of education, governance, and community engagement is key to minimizing disaster risks and fostering sustainable resilience.

Table 3 show the weighted mean level of the respondent's disaster preparedness in terms of mitigation, preparedness, response, and recovery.

Table 3 *Level of Disaster Preparedness of the Respondents*

Disaster Awareness	WM	SD	Verbal Interpretation
Mitigation	4.16	0.882	Moderately Prepared
Preparedness	3.33	0.818	Somewhat Prepared
Response	4.23	0.774	Extremely Prepared
Recovery	3.25	0.688	Somewhat Prepared

Legend:

Scale	*Verbal Interpretation*
4.20 – 5.00	Extremely Prepared
3.40 – 4.19	Moderately Prepared
2.60 – 3.39	Somewhat Prepared
1.80 – 2.59	Slightly Prepared
1.00 – 1.79	Not All Prepared

The data on the respondents' level of disaster preparedness reveals varying degrees of readiness across the four key phases of disaster management. For mitigation, the respondents have a weighted mean of (WM = 4.16, SD = 0.882), indicating that they are moderately prepared to take actions that reduce or prevent the impact of potential disasters. This suggests that the respondents have adopted some preventive measures, though there may still be room for improvement in their mitigation strategies.

In terms of preparedness, the weighted mean score (WM = 3.33, SD = 0.818), reflecting a somewhat prepared status. This indicates that while respondents have some level of readiness, such as plans or supplies in place, their preparedness may not be comprehensive or consistent enough to ensure effective disaster management. Similarly, for recovery, the weighted mean score of (WM = 3.25, SD = 0.688) suggests they are also somewhat prepared to restore normalcy after a disaster. This implies that respondents may have basic plans for post-disaster recovery but lack the depth or resources needed for sustained recovery efforts.

Interestingly, the respondents reported their highest level of readiness in response, with a weighted mean of (WM = 4.23, SD = 0.774), indicating that they are extremely prepared to act immediately during a disaster. This strong performance in the response phase suggests that they are confident in their ability to react effectively when a disaster occurs, possibly through knowledge of evacuation procedures, communication plans, or emergency drills.

The respondents demonstrate varying levels of disaster preparedness, with strengths in response and mitigation but relatively weaker readiness in preparedness and recovery phases. This pattern suggests that while they are well-equipped to react during emergencies, there are gaps in their ability to fully prepare in advance and sustain recovery afterward. Strengthening these areas will create a more balanced and comprehensive approach to disaster management, ensuring that individuals and communities can not only respond effectively but also recover and rebuild sustainably. Strengthening preparedness and recovery efforts through training, planning, and resource mobilization will be essential in ensuring that individuals and communities can not only respond effectively but also recover and rebuild sustainably.

Calilung (2016) defines preparedness as pre-disaster actions that include community organizing, training, planning, stockpiling, hazard mapping, and public education, all of which are grounded in thorough risk analysis. Disaster preparedness also requires the formulation of policies, institutional frameworks, and warning systems to

equip at-risk communities to act appropriately during emergencies. These measures emphasize that preparedness is both proactive and preventive in nature.

Arcigal (2018) further elaborates on key preparedness activities, such as developing operational processes, stockpiling resources, and enhancing disaster-related competencies. These activities are critical to ensuring that individuals and institutions are ready to respond effectively when disasters strike. Similarly, the OECD (2010) underscores the importance of a bottom-up approach, involving communities in DRRM planning and implementation, which enhances outcomes by fostering community ownership and participation.

Preparedness and mitigation are identified as essential phases of the disaster management cycle, ensuring readiness before catastrophic events occur. The involvement of multiple actors, including Local Government Units (LGUs), the Department of Social Welfare and Development (DSWD), and other key agencies like the Armed Forces of the Philippines (AFP) and the Philippine National Police (PNP), plays a crucial role in response and recovery efforts. Developmental efforts at the preparedness stage reduce disaster risks and build the capacity of communities to respond effectively.

However, several studies highlight challenges to achieving full disaster readiness. Petal (2012) emphasizes that the success of DRRM depends on the community's perception of danger, awareness of hazards, and trust in the organizations issuing warnings. Effective communication and the credibility of warning agencies are critical for prompt public action. In contrast, Balita (2012) identifies gaps in disaster response capacity, citing issues related to manpower, inadequate training, and insufficient equipment, tools, and resources, which hinder effective disaster management.

While institutional efforts and community involvement are key to reducing disaster risks, challenges such as resource limitations, manpower issues, and public trust remain significant barriers. A successful DRRM strategy must address these gaps by ensuring adequate resources, fostering trust through credible communication, and empowering communities to actively participate in preparedness initiatives.

Table 4 show the correlation between the respondent's Disaster Awareness and Disaster Preparedness.

Table 4 *Correlation between the Respondent's Disaster Awareness and Preparedness*

Variables	r	p-value	Degree of Correlation	Analysis
Disaster Awareness Disaster Preparedness	0.026	0.000	Very Weak	Significant

Legend:

Scale	*Verbal Interpretation*
±0.80 - ±1.00	Very Strong
±0.60 - ±0.79	Strong
±0.40 - ±0.59	Moderate
±0.20 - ±0.39	Weak
±0.00 - ±0.19	Very Weak

The correlation analysis reveals a very weak positive relationship between the respondents' disaster awareness and disaster preparedness, with a correlation coefficient (r) of 0.026. Despite the weak degree of correlation, the p-value of 0.000 indicates that the relationship is statistically significant. This suggests that, although awareness and preparedness are connected, the strength of this relationship is minimal. In other words, higher awareness does not necessarily translate to a proportionate increase in preparedness among the respondents.

The weak correlation may imply that while respondents are somewhat informed about disaster risks, this awareness alone is not sufficient to result in meaningful preparedness actions. Factors such as access to resources, community support systems, and institutional interventions may play a more significant role in determining preparedness levels. It also points to the possibility that some respondents may be aware of disaster risks but lack the capacity, motivation, or knowledge to translate that awareness into practical preparedness measures.

The findings highlight a gap between disaster awareness and preparedness, indicating that knowledge alone does not guarantee readiness. This emphasizes the need for integrated disaster risk reduction programs that not only enhance awareness but also provide practical tools and strategies to encourage preparedness. Strengthening this linkage through targeted training, community engagement, and resource accessibility can foster a more proactive approach to disaster management, ensuring that individuals are both aware of risks and adequately prepared to face them.

4. Conclusion

Based on the findings, the study concludes that the disaster awareness and preparedness levels of the lakeside barangays in Sta. Cruz, Laguna demonstrate both strengths and areas for improvement. The respondents showed a moderate level of awareness regarding hazards and exposure to risks but only a somewhat aware understanding of vulnerability, indicating that while they recognize risks, there are gaps in their perception of personal and community susceptibility.

In terms of disaster preparedness, the respondents exhibited moderate preparedness in mitigation efforts and were extremely prepared in response activities. However, preparedness and recovery efforts remain at a somewhat prepared level, suggesting the need for improved long-term strategies, such as better planning and post-disaster recovery measures.

The correlation analysis further reveals that while disaster awareness has a statistically significant relationship with disaster preparedness, the correlation is very weak. This indicates that awareness alone does not translate into sufficient preparedness, emphasizing the need for enhanced community interventions and resource support.

In conclusion, the findings suggest that targeted social support services from GSAR can bridge the gaps between awareness and preparedness. The study highlights the importance of integrating community-based programs with institutional efforts, such as training, capacity-building, and logistical support. Strengthening both awareness and preparedness through sustainable partnerships between local government units, community stakeholders, and support organizations is essential to building a resilient community capable of effectively responding to and recovering from future disasters.

5. Recommendation

Based on the findings of the study, the following recommendations are proposed to enhance the disaster awareness and preparedness of the lakeside barangays in Sta. Cruz, Laguna, and serve as input to Graduate Studies and Applied Research (GSAR) Social Support Services:

1. Since the respondents demonstrated only moderate awareness of hazards and exposure and a somewhat aware understanding of vulnerability, GSAR can collaborate with local government units (LGUs) to conduct focused awareness programs. These programs should emphasize personal and community vulnerabilities, such as the risks associated with living near water bodies, to enhance their understanding of disaster impacts.
2. While respondents showed extreme preparedness in response activities, there is a need to improve preparedness and recovery planning. GSAR can provide capacity-building workshops that focus on preparedness strategies, such as creating disaster action plans, evacuation protocols, and recovery plans for post-disaster scenarios.
3. To strengthen the weak correlation between awareness and preparedness, GSAR and local stakeholders should adopt community-based disaster risk reduction initiatives. Encouraging residents to actively participate in planning, hazard mapping, and drills will help translate awareness into actionable preparedness behaviors.
4. The GSAR, in partnership with barangays and other agencies, may develop a monitoring and evaluation framework to regularly assess the effectiveness of disaster awareness and preparedness programs. This system can help identify gaps and ensure that interventions remain responsive to the evolving risks in the area.

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