

**Exploring the graduate school inclination of liberal arts graduates:
Trends and influences**

Dr. Wilfredo B. Balao-as*

Northeastern College, Santiago City, Philippines

ABSTRACT

This study examined community perceptions of disaster prevention and mitigation practices in public schools of Paracelis District, Mountain Province, Philippines. Using a descriptive survey design, data were collected from 33 community members, including parents, barangay officials, and local stakeholders selected through purposive sampling. The study assessed five dimensions of school-based Disaster Risk Reduction and Management (DRRM): awareness, perceived effectiveness, community involvement, communication and coordination, and recommendations and sustainability. Results showed that respondents generally expressed high awareness and strong agreement regarding the effectiveness of DRRM practices, particularly in the conduct of regular disaster drills and the development of hazard-specific plans. Communication and coordination with local disaster management offices were also perceived as reliable, although lower ratings were observed in the clarity of communication channels and dissemination of information. Community involvement was found to be generally high; however, a significant difference emerged between male and female respondents, with females reporting greater participation in DRRM activities. Respondents identified key hazards affecting schools, including earthquakes, floods, typhoons, and fire risks associated with inadequate facilities and electrical systems. Overall, the findings indicate that disaster prevention and mitigation practices in Paracelis schools are effective and widely supported by the community. Nevertheless, improvements are needed in enhancing community participation, strengthening infrastructure resilience, and ensuring the sustainability of DRRM activities throughout the year. The study underscores the importance of inclusive and sustained school–community collaboration in building disaster-resilient educational environments.

Keywords: Disaster risk reduction and management, community perception, school safety, disaster preparedness, paracelis district, Philippines.

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*Corresponding author

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INTRODUCTION

Disasters pose persistent threats to educational systems, particularly in developing countries such as the Philippines where schools are frequently exposed to hazards like earthquakes, typhoons, floods, and landslides. In geographically vulnerable areas, schools serve not only as centers of learning but also as evacuation shelters and community hubs during emergencies. This dual function underscores the importance of effective disaster prevention and mitigation practices in ensuring the safety and resilience of both learners and surrounding communities.

In response to increasing disaster risks, the Philippine government enacted Republic Act No. 10121, which institutionalized a proactive approach to Disaster Risk Reduction and Management (DRRM). Complementing this, the Department of Education (DepEd) established policies through its Disaster Risk Reduction and Management Service (DRRMS), mandating schools to implement preparedness measures such as drills, hazard mapping, and coordination with local government units. Despite these frameworks, the effectiveness of school-based DRRM initiatives largely depends on community awareness, participation, and perception.

Community members play a crucial role in disaster preparedness as first responders and key stakeholders in school safety. Their perceptions reflect the visibility, accessibility, and effectiveness of disaster prevention and mitigation practices implemented in schools. However, existing literature has focused more on institutional compliance and student preparedness, with limited emphasis on community perspectives, particularly in remote and hazard-prone areas such as Paracelis District in Mountain Province.

This study aims to address this gap by examining community perceptions of disaster prevention and mitigation practices in public schools of Paracelis District. Understanding these perceptions is essential in strengthening school-community collaboration and enhancing the overall effectiveness of DRRM initiatives.

Statement of the problem

This study aimed to assess community perceptions on disaster prevention and mitigation practices in public schools of Paracelis District. Specifically, it sought to:

1. Describe the demographic profile of respondents in terms of age, sex, civil status, educational attainment, occupation, and involvement in disaster preparedness programs.
2. Determine the level of awareness, perceived effectiveness, community involvement, communication and coordination, and sustainability of school-based DRRM practices.
3. Identify the most effective disaster prevention and mitigation practices as perceived by the community.
4. Determine the specific hazards that schools should prioritize.
5. Examine whether significant differences exist in perceptions when respondents are grouped according to sex.
6. Provide recommendations to strengthen school-community collaboration in DRRM.

METHODOLOGY

This study employed a descriptive survey research design to assess community perceptions of disaster prevention and mitigation practices in public schools. The descriptive approach was deemed appropriate given the study's objective of systematically documenting and profiling the perceptions, awareness levels, and experiences of community members in

relation to school-based disaster risk reduction and management practices, without manipulating variables or establishing causal relationships. The study was conducted in Paracelis District, Mountain Province, a locale characterized by its geographic vulnerability to natural hazards and the corresponding relevance of disaster preparedness as a community concern.

The respondents of the study consisted of 33 community members, including parents, barangay officials, and other stakeholders with knowledge of or involvement in school-based disaster risk reduction and management activities. Purposive sampling was employed as the sampling technique to ensure that selected participants possessed relevant experience or direct engagement with school DRRM programs, thereby maximizing the informational value and contextual relevance of the data collected. This non-probability sampling approach was considered appropriate given the specialized nature of the subject matter and the limited population of individuals with sufficient familiarity with school-level DRRM implementation in the district.

Data were gathered using a structured questionnaire developed specifically for the purposes of this study. The instrument was composed of three major components. The first component addressed the demographic profile of the respondents, capturing information relevant to the description and classification of the sample. The second component consisted of Likert-scale items designed to measure respondents' perceptions across the key dimensions of DRRM practices, including awareness, perceived effectiveness, community involvement, communication and coordination, and recommendations for sustainability. The third component comprised open-ended questions intended to elicit more nuanced and context-specific responses that could supplement and enrich the quantitative data gathered through the Likert-scale items.

The data collected were analyzed using a combination of statistical techniques appropriate to the nature of the research questions and the level of measurement of the variables. Frequency counts and percentages were used to describe the demographic profile and categorical characteristics of the respondents. Weighted mean scores were computed to summarize and interpret respondents' Likert-scale responses across each dimension of DRRM practice, and ranking was applied to identify the relative standing of specific indicators within each dimension. To examine differences in perceptions between groups, the t-test for independent samples was utilized as the inferential statistical tool, enabling the study to determine whether statistically significant differences existed between identified subgroups of respondents in their assessments of school-based disaster prevention and mitigation practices.

Throughout all stages of the research process, the study upheld its ethical responsibilities by promoting honesty, transparency, respect, and accountability in the treatment of respondents, the collection and handling of data, and the reporting and interpretation of findings. These ethical principles guided every phase of the study to ensure the integrity of the research process and the protection of all participants involved.

RESULTS AND DISCUSSION

This section presents the results and discussion of a descriptive survey study examining community perceptions of disaster prevention and mitigation practices in public schools in Paracelis District, Mountain Province. The study involved 33 respondents selected through purposive sampling, comprising parents, barangay officials, and other stakeholders with direct knowledge of or involvement in school-based disaster risk reduction and management activities. Data were gathered using a structured questionnaire consisting of a demographic

profile component, Likert-scale items across five DRRM dimensions, and open-ended questions. The data were analyzed using frequency counts and percentages, weighted mean scores, ranking, and independent samples t-tests, with significance evaluated at the 0.05 alpha level. The discussion that follows presents and interprets all findings in direct relation to the objectives of the study and is grounded entirely in the data gathered through these instruments and procedures.

Respondent profile

The demographic profile of the respondents reveals that the majority were middle-aged, female, married, highly educated, and employed in government service. A large proportion of the respondents reported prior involvement in disaster preparedness programs, reflecting a generally high baseline level of community awareness regarding school-based DRRM activities in the district. This profile is significant in contextualizing the findings, as respondents with educational attainment and prior DRRM exposure are likely to provide informed and experience-based assessments of disaster preparedness practices. The predominance of female respondents and government employees within the sample also bears relevance to the interpretation of gender-disaggregated findings discussed in subsequent sections.

Awareness of DRRM practices

Respondents expressed strong agreement regarding their awareness of disaster preparedness plans, designated evacuation areas, and the conduct of emergency drills, reflecting a community that is broadly informed about fundamental DRRM protocols in their schools. These high awareness ratings are consistent with the active involvement in preparedness programs reported by the majority of respondents and suggest that schools in Paracelis District have made meaningful progress in communicating core DRRM information to community stakeholders. However, slightly lower ratings were recorded for items related to information dissemination, indicating that while general awareness of DRRM practices is high, the processes and channels through which information is communicated to the broader community may not yet be fully effective. This gap between overall awareness and the quality of information dissemination points to a specific area requiring targeted improvement, particularly in reaching community members who may be less directly connected to school-level DRRM activities.

Perceived effectiveness of DRRM practices

Community perceptions of the effectiveness of school-based DRRM practices were generally favorable, with respondents rating drills and hazard-specific planning as particularly effective components of the disaster preparedness framework. The strong endorsement of these procedural elements reflects recognition among community stakeholders that schools have established functional preparedness routines that contribute meaningfully to community resilience. Nonetheless, concerns were raised regarding the physical adequacy of school facilities to withstand disaster events, suggesting that while procedural preparedness is well regarded, infrastructural readiness remains a source of apprehension. This distinction between procedural and structural dimensions of disaster preparedness is important, as it highlights that community confidence in DRRM effectiveness is contingent not only on training and planning activities but also on the physical conditions of the schools themselves, an area that requires investment and policy attention beyond the scope of school-level DRRM coordination alone.

Community involvement in school DRRM

Community involvement in school-based DRRM activities was rated as generally high across the respondent group, indicating a positive degree of stakeholder engagement with disaster preparedness efforts at the school level. This finding suggests that schools in Paracelis District have succeeded in cultivating a participatory culture around DRRM, drawing parents, barangay officials, and other community members into preparedness activities. The data further reveal, however, that the nature and degree of this involvement are not uniform across all community members, with gender emerging as a significant differentiating factor in how involvement is perceived and experienced, as discussed in the statistical analysis section that follows.

Communication and coordination

Respondents perceived the communication and coordination practices associated with school-based DRRM as generally reliable, affirming that information flows and coordination mechanisms between schools and the community are functional. At the same time, respondents indicated that the clarity of communication could be improved, suggesting that while the infrastructure for communication exists, the messages conveyed may not always be sufficiently clear or accessible to all community stakeholders. This finding underscores the importance of investing not only in the frequency of DRRM-related communications but also in the quality, comprehensibility, and targeting of the information shared, ensuring that all community members can act meaningfully on the information they receive.

Recommendations and sustainability of DRRM activities

Respondents expressed strong support for the continuation and strengthening of DRRM training programs, enhanced inter-agency collaboration, and improvements to school physical facilities, reflecting a community that is not only aware of current preparedness efforts but also committed to their long-term advancement. The high ratings assigned to these recommendations indicate broad consensus among community stakeholders regarding the directions necessary to enhance school-based disaster preparedness. However, respondents also identified the consistency and sustainability of DRRM activities throughout the year as an area requiring reinforcement, suggesting that while episodic preparedness activities such as drills and training sessions are well received, the institutionalization of DRRM as a continuous and year-round school practice remains a challenge. The key hazards identified by respondents included earthquakes, floods, typhoons, fire, and risks arising from poor school infrastructure, specifically faulty electrical wiring and the absence of adequate safety equipment. The identification of infrastructure-related risks alongside natural hazards reinforces the earlier finding regarding community concern over the physical condition of school facilities and further strengthens the case for prioritizing structural improvements as part of a comprehensive DRRM strategy.

Gender-based differences in DRRM perceptions

To determine whether significant differences existed between male and female respondents in their perceptions of disaster prevention and mitigation practices, independent

samples t-tests were conducted across the five DRRM dimensions and for the overall summative score, with significance evaluated at the 0.05 alpha level. For awareness of school-based DRRM practices, the analysis revealed no significant difference between male and female respondents ($t = 1.1759$, $p > 0.05$), with female respondents recording a mean of 4.71 and male respondents a mean of 4.60, both groups reporting high levels of awareness. The null hypothesis of no significant difference was therefore retained for this dimension, indicating that knowledge of DRRM plans, evacuation procedures, and drills is comparably high across genders.

In the dimension of perceived effectiveness of disaster prevention and mitigation practices, the t-test similarly yielded no significant difference between male and female respondents ($t = 0.4467$, $p > 0.05$), with female respondents recording a mean of 4.56 and male respondents a mean of 4.53. Both groups strongly agreed on the effectiveness of school DRRM initiatives, and the null hypothesis was retained, indicating that assessments of DRRM effectiveness are consistent across genders.

In contrast, a statistically significant difference was observed in the dimension of community involvement in school DRRM ($t = 3.9475$, $p < 0.05$), with female respondents recording a mean of 4.51 compared to a mean of 4.18 among male respondents. The null hypothesis was rejected for this dimension, indicating that gender is a meaningful factor in how community involvement is perceived and enacted, with women reporting significantly greater levels of participation in school-based DRRM activities. This finding is consistent with broader research on gender and disaster risk, which has documented the tendency for women to assume more active roles in community-based preparedness and response activities, often as a result of their central positions within family and community care networks. The significant gender gap identified in this dimension underscores the importance of designing DRRM engagement strategies that are explicitly responsive to gender dynamics and that incorporate targeted efforts to increase male community members' participation in school preparedness activities.

For communication and coordination, the independent samples t-test yielded no significant difference between male and female respondents ($t = 1.8454$, $p > 0.05$), with female respondents recording a mean of 4.71 and male respondents a mean of 4.62. Both groups expressed similar and favorable perceptions of communication practices, and the null hypothesis was retained, indicating that assessments of DRRM-related communication and coordination are generally consistent across genders. In the dimension of recommendations and sustainability, no significant difference was found between male and female respondents ($t = -0.964$, $p > 0.05$), with male respondents recording a mean of 4.91 and female respondents a mean of 4.87. Both groups strongly agreed on the importance of sustaining and strengthening DRRM initiatives, and the null hypothesis was retained for this dimension.

The overall summative analysis of perceptions across all five dimensions likewise revealed no significant difference between male and female respondents ($t = 1.6705$, $p > 0.05$), with female respondents recording an overall mean of 4.67 and male respondents an overall mean of 4.57. Both groups rated disaster prevention and mitigation practices highly at the aggregate level, and the null hypothesis was retained for the overall comparison. Taken together, these statistical findings demonstrate that perceptions of school-based DRRM practices are broadly consistent across genders, with community involvement representing the sole dimension in which a statistically significant gender-based difference was identified.

The findings of this study collectively demonstrate that community awareness, perceived effectiveness, and support for school-based DRRM practices in Paracelis District are strong, reflecting a community that is informed, engaged, and committed to disaster preparedness. The results directly address the research objectives by providing a systematic, data-grounded profile of community perceptions across five critical DRRM dimensions,

identifying both areas of strength and specific gaps requiring attention, most notably in information dissemination, infrastructural adequacy, the sustainability of year-round DRRM activities, and gender-equitable community engagement. The identification of community involvement as the only dimension exhibiting a significant gender-based difference contributes an empirically grounded insight to the DRRM literature, highlighting the need for gender-responsive strategies in school-based preparedness programming. The subsequent chapter translates these findings into concrete recommendations for school administrators, local government units, and DRRM coordinators seeking to strengthen the quality, inclusivity, and sustainability of disaster preparedness practices in public schools within mountainous and geographically vulnerable communities.

CONCLUSION

The study concludes that disaster prevention and mitigation practices in Paracelis public schools are effective and widely supported by the community. High levels of awareness and positive perceptions reflect strong implementation of DRRM initiatives.

However, significant gaps remain in community involvement, infrastructure resilience, and sustained implementation of programs. The findings emphasize the need for stronger school-community collaboration, improved communication strategies, and continuous capacity-building efforts.

Overall, disaster preparedness in Paracelis schools is well-established, but further enhancements are necessary to ensure long-term sustainability and resilience in a hazard-prone environment.

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