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The Influence of the Community-Based Disaster Management Approaches on the Psychological Resiliency of the School Heads in the Public Elementary School in Tagkawayan Districts I And II, Division of Quezon

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ABSTRACT

The study assessed community-based disaster management approaches and psychological resiliency among public elementary school heads in Tagkawayan Districts I and II, Division of Quezon. A descriptive-evaluative-inferential design employed researcher-made questionnaires with 38 school heads: 20 in District I and 18 in District II. Weighted means and ranks described four disaster-management domains and four resilience domains; reported Wilcoxon–Mann–Whitney analyses compared district item-ranking distributions. Disaster management was rated Much Evident overall (3.87). Preparedness ranked highest (3.90), followed by precaution and mitigation and disaster response (3.87 each), and rehabilitation and recovery (3.85). Psychological resiliency was also rated Much Evident overall (3.87). The summary ranked coping strategies first (3.88), social support and exposure to adversity jointly second (3.87 each), and personality traits fourth (3.85). The detailed social-support table reported an inconsistent domain average of 3.94. All eight district comparisons were classified as not significant. The findings identify comparatively lower ratings for infrastructure reinforcement, staff training, emotional and psychological response, recovery funding advocacy, and formal support access. They support consideration of coordinated preparedness, recovery resources, and professional support for school heads. The statistical analyses concern district item rankings and do not establish an association or causal influence between disaster management and psychological resiliency. Self-report measurement, unresolved reporting discrepancies, and the absence of participant-level relationship analyses constrain interpretation.

1. Introduction

School heads have responsibilities that extend across preparedness, emergency response, and the restoration of school operations after disruption. Their work requires coordination with staff, families, local government units, and other community stakeholders. At the same time, school heads must manage uncertainty and personal strain while supporting the school community. The study examined these organizational and psychological concerns among public elementary school heads in Tagkawayan Districts I and II, Division of Quezon.

Community-based disaster management places local participation and coordination at the center of risk reduction. Within a school setting, this includes identifying hazards, preparing plans, communicating warnings, organizing evacuation, mobilizing assistance, and participating in recovery. These activities involve different stages of disaster management. A school may be comparatively well prepared to recognize a hazard while having fewer resources to reinforce facilities or finance recovery. Examining distinct domains therefore provides more useful information than a single undifferentiated rating of readiness.

Ruslanjari et al. (2024), in research on local actors and disaster risk reduction in Yogyakarta, emphasized the importance of leadership and collaboration among community and institutional actors. Their findings make local coordination relevant to the study's assessment of community-based approaches. The institutional setting differs from public elementary schools in Quezon, however, and their work does not establish the effectiveness of the practices reported by these school heads. Its contribution is a contextual basis for considering participation and coordination as substantive components of disaster management.

School emergency preparedness also involves organizational arrangements that extend beyond an emergency drill. Shah et al. (2020) examined school preparedness in Khyber Pakhtunkhwa, Pakistan, including planning, facilities, readiness activities, and continuity concerns. Their research supports examining preparedness through concrete activities. The study accordingly considered plans, training, resources, and coordination alongside response and recovery. Ratings of these activities describe perceived implementation; they are not direct observations of performance during an actual disaster.

The leadership demands of disaster management include judgments about competing needs, communication under uncertainty, and the continuity of schooling. Potter et al. (2021) addressed natural disasters, crisis management, and school leadership through a case-based contribution. This literature provides a relevant framework for considering organizational decisions during disruption. A teaching case does not provide a population estimate of resilience or a causal effect of leadership practices, so it is used here to contextualize the school head's role rather than to validate a statistical relationship.

Psychological resiliency was examined through coping strategies, social support, exposure to adversity, and personality traits. These domains cover personal responses, interpersonal resources, experiences of difficulty, and reported dispositions. They should not be treated as interchangeable. Access to support differs conceptually from exposure to stressful events, while remaining calm differs from having encountered adversity. The interpretation of an overall resilience rating depends on what the individual statements actually ask and on how those statements are scored.

Cheung et al. (2024) investigated principals' experiences of resilience during the COVID-19 pandemic in the United States. Their qualitative account situates resilience within the conditions surrounding school leaders, including relationships and organizational contexts. That perspective is pertinent to considering school heads' coping and support ratings together. It does not imply that resilience is exclusively an individual attribute or that favorable self-ratings demonstrate that leaders are unaffected by stress.

Disaster education research also connects participation with psychological considerations. Krishna et al. (2022) examined child participation in disaster resilience education and its potential contribution to mental well-being. Their population and intervention differ from those of the study. Nevertheless, their work makes it reasonable to attend to the psychological dimensions of participation while retaining a clear distinction between evidence concerning children and evidence concerning adult school heads.

1.1 Purpose and research questions

The study sought to determine the influence of community-based disaster management approaches on the psychological resiliency of school heads. Its research questions addressed the extent of disaster precaution and mitigation, preparedness, response, and rehabilitation and recovery; significant district differences in the rank orders of these approaches; the extent of coping strategies, social support, exposure to adversity, and personality traits; significant district differences in the rank orders of these resilience indicators; and policy recommendations arising from the findings.

The title and stated purpose retain the study's focus on influence. The reported analyses, however, describe domain ratings and compare district item rankings. They do not estimate a relationship between disaster-management scores and resilience scores. This distinction determines the scope of the manuscript's empirical claims. Favorable ratings for both sets of domains can coexist without demonstrating that one produces, predicts, or is statistically associated with the other.

2. Methods

2.1 Design, setting, and participants

The study used a descriptive-evaluative-inferential research design in public elementary schools in Tagkawayan Districts I and II, Division of Quezon. The descriptive and evaluative components concerned the extent to which specified practices and resilience indicators were evident. The inferential component comprised district comparisons using reported Wilcoxon–Mann–Whitney statistics. No intervention, random assignment, prospective follow-up, or comparison of resilience before and after a disaster-management program was described.

The participant group comprised 38 school heads. The sampling account referred both to purposive sampling and to total enumeration of the school heads in the two districts. These descriptions are retained without assuming a random selection process. Table 1 reports the district distribution. A separate recruitment flow, nonresponse count, and detailed eligibility criteria were not reported. The findings concern this local group; they do not provide a probability-based estimate for all school heads in the Division of Quezon.

Table 1. Distribution of participating school heads

District	School heads	Percentage
District I	20	53%
District II	18	47%
Total	38	100%

District I contributed slightly more respondents than District II. The district percentages describe the composition of the participant group and should not be confused with the number of cases shown in the inferential tables. Those tables report 10 cases per group because they concern ten item values in each domain. The participant total of 38 and the analytical total of 20 therefore refer to different units.

The main statement of the problem identified School Year 2024–2025, whereas the abstract and concluding summary identified School Year 2025–2026. An administrative permission letter was dated July 23, 2025. The precise questionnaire administration period cannot be resolved from these entries. No single school year is assigned to the data collection without author confirmation.

2.2 Instruments and measurement

Two researcher-made questionnaires addressed disaster-management approaches and psychological resiliency. Disaster management comprised precaution and mitigation, preparedness, response, and rehabilitation and recovery. Psychological resiliency comprised coping strategies, social support, exposure to adversity, and personality traits. The reported results provide ten fixed statements for each domain, yielding 80 rated statements across the two instruments. The questionnaire also provided an "Others, please specify" entry in each domain.

The table of specifications listed 88 items, or 11 per domain. The questionnaire layout contained ten fixed statements plus the additional specification entry in each domain. The reported item tables contain only the fixed statements. Whether the eight additional entries were scored, analyzed qualitatively, or left unused was not specified. The manuscript therefore does not assume that 88 numerical responses contributed to the reported means.

The response anchors were 5 = Very much evident, 4 = Much evident, 3 = Evident, 2 = Fairly evident, and 1 = Not at all. Weighted means and ranks summarized the ratings. All values in the results tables carried the interpretation Much Evident (ME). This response label describes the extent to which the statements were reported as evident. It is not a clinical classification of resilience, a diagnosis of psychological well-being, or a verified measure of disaster-response effectiveness.

Instrument preparation involved adviser checking, juror validation, revision, and a dry run with teachers before administration to school heads. The methodological account also referred to readministration of a corrected instrument. The pilot sample size, juror qualifications, item-level validity evidence, and completed reliability coefficient were not reported. Kuder–Richardson Formula 21 was named as a proposed reliability procedure, but a numerical result was not supplied. No reliability value is inferred. Its suitability for the five-point responses requires methodological clarification.

The resilience measures were researcher-made; the study did not report administering a standardized clinical resilience inventory, a diagnostic assessment, or an established personality inventory. Several statements retained teacher-oriented wording despite the participant group being school heads. These statements are reproduced in the tables to preserve their measurement content. The resulting ambiguity is relevant to construct interpretation and cannot be resolved by silently changing "teacher" to "school head."

2.3 Procedures and ethical documentation

The procedural account described proposal preparation, requests for administrative permission, instrument construction and checking, validation, a dry run, finalization, questionnaire distribution and retrieval, tallying, tabulation, analysis, and preparation of the completed study. District supervisors approved the request to conduct the study. The available account did not specify the mode of administration, completion time, exact distribution and retrieval dates, handling of missing responses, or whether school heads completed the questionnaires in the presence of the researcher.

A signed data-sharing agreement documented responsibilities concerning confidentiality and data protection. Its terms included physical and password safeguards, encryption for mobile or transmitted data, restrictions on disclosing identifiers and onward sharing, and provisions for returning or destroying data when the agreement ended. These terms describe documented commitments rather than independently verified implementation. Names were optional on the questionnaire. An ethics committee approval number and a detailed individual informed-consent procedure were not reported.

2.4 Analysis and reporting

Descriptive analysis used frequency counts, percentages, weighted means, and ranks. Reported Wilcoxon–Mann–Whitney analyses compared district item-ranking distributions separately for the eight domains. The inferential tables supplied rank sums, group case counts, computed z statistics, associated probabilities, null-hypothesis decisions, and significance classifications. Their case counts were 10 per group and 20 overall. They are retained exactly as tabulated rather than relabeled as participant-level tests.

The reported probabilities are presented as probabilities associated with z because the sidedness, tie correction, and full calculation settings were not adequately documented. No probabilities or test statistics were recomputed. "Accepted" is retained as the reported null-hypothesis decision; analytically, the not-significant classifications mean that the tests did not establish a district difference under the reported procedure. They do not demonstrate district equivalence or the absence of meaningful individual variation.

Tables retain the exact displayed means and ranks, including different decimal precision and ties. Mean/rank pairs condense the presentation without changing values. All ME interpretation labels are represented by a table note. No standard deviations, confidence intervals, missing-data estimates, or effect sizes are supplied because they were not reported. Material discrepancies are also identified in a separate author-review document.

3. Results

3.1 Disaster precaution and mitigation

Precaution and mitigation had an overall average of 3.87 (Table 2). Identifying potential hazards ranked first at 4.05. Coordination with barangay officials and collaboration with local government were also comparatively prominent. Reinforcing infrastructure ranked last at 3.80. The profile places hazard recognition and local coordination above physical reinforcement within the reported ordering.

Table 2. Disaster precaution and mitigation approaches

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Identifies potential hazards that may affect the school and community.	4.1 / 1	4 / 1	4.05 / 1
Collaborates with local government units to assess disaster risks.	3.89 / 3	3.9 / 3	3.90 / 3
Reinforces school infrastructure to reduce vulnerability to disasters.	3.79 / 9	3.8 / 10	3.80 / 10
Implements school-wide policies that promote risk reduction.	3.85 / 5	3.88 / 5	3.87 / 4
Conducts community awareness campaigns on disaster mitigation.	3.83 / 6.5	3.83 / 8	3.83 / 7.5
Integrates disaster risk education into school activities or curriculum.	3.78 / 10	3.89 / 4	3.84 / 6
Encourages stakeholders to participate in hazard mapping and planning.	3.82 / 8	3.84 / 7	3.83 / 7.5
Coordinates with barangay officials for mitigation projects.	3.9 / 2	3.91 / 2	3.91 / 2
Supports the installation of early warning systems in the school.	3.83 / 6.5	3.81 / 9	3.82 / 9
Evaluates the effectiveness of existing mitigation strategies regularly.	3.87 / 4	3.85 / 6	3.86 / 5
Average	3.87	3.87	3.87

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

This distinction matters because identifying a threat does not itself remove exposure to that threat. The comparatively lower infrastructure rating identifies a practical area for review, but the table does not establish the condition of any specific building or the adequacy of engineering protection. The identical district averages also conceal different ordering of some activities, including disaster-risk education. A shared domain mean therefore does not imply identical implementation priorities.

3.2 Disaster preparedness

Preparedness received the highest disaster-management summary average, 3.90 (Table 3). Updating disaster-preparedness plans was the highest-rated activity at 4.08, whereas staff training was lowest at 3.77. These results distinguish the presence of planning activity from the development and maintenance of practical staff capability.

Table 3. Disaster preparedness approaches

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Develops a school disaster risk reduction and management (DRRM) plan in coordination with the community.	3.99 / 2	3.98 / 2.5	3.99 / 2
Conducts regular disaster drills involving students, teachers, and parents.	3.87 / 7	3.93 / 4.5	3.90 / 5
Prepares emergency supplies and equipment for disaster situations.	3.79 / 9	3.8 / 8.5	3.80 / 9
Trains teachers and staff on emergency procedures and protocols.	3.75 / 10	3.78 / 10	3.77 / 10
Establishes clear communication channels for disaster warnings.	3.95 / 4	3.98 / 2.5	3.97 / 3
Collaborates with local emergency response units in planning.	3.9 / 6	3.89 / 6	3.90 / 6.5
Educates students on what to do before, during, and after a disaster.	3.91 / 5	3.88 / 7	3.90 / 6.5
Assigns specific roles and responsibilities to DRRM team members.	3.96 / 3	3.93 / 4.5	3.95 / 4
Monitors weather updates and other early warning information.	3.85 / 8	3.8 / 8.5	3.83 / 8
Reviews and updates preparedness plans based on recent experiences or changes.	4.1 / 1	4.05 / 1	4.08 / 1
Average	3.91	3.90	3.90

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

The favorable preparedness classification should be read alongside its individual components. Written plans require people who understand their responsibilities and can use available resources during disruption. The lower relative training rating supports reviewing opportunities for practice and capacity development. It does not show that staff were untrained, that a drill failed, or that any school would perform poorly in a future emergency.

3.2 Disaster response

Disaster response averaged 3.87 (Table 4). Evacuation-related action was rated highest at 4.04, while addressing emotional and psychological needs was lowest at 3.76. The pattern suggests that immediately visible protective actions were more prominent in the ratings than psychosocial aspects of response.

Table 4. Disaster response approaches

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Activates emergency procedures promptly during a disaster.	3.82 / 7	3.85 / 6	3.84 / 6
Coordinates with local responders such as fire, police, and health workers.	3.9 / 4.5	3.93 / 3	3.92 / 3
Provides immediate support and safety to students and personnel.	3.8 / 8	3.8 / 8.5	3.80 / 9
Implements evacuation plans effectively and orderly.	4.03 / 1	4.05 / 1	4.04 / 1
Communicates updates and instructions to stakeholders during emergencies.	3.97 / 2	3.98 / 2	3.98 / 2
Mobilizes community volunteers to assist during disaster situations.	3.93 / 3	3.89 / 4	3.91 / 4
Documents incidents and reports them to relevant authorities.	3.9 / 4.5	3.88 / 5	3.89 / 5
Responds to the emotional and psychological needs of affected individuals.	3.79 / 9.5	3.73 / 10	3.76 / 10
Assesses damage and identifies urgent needs post-disaster.	3.83 / 6	3.8 / 8.5	3.82 / 7
Adjusts response strategies based on the severity of the disaster	3.79 / 9.5	3.82 / 7	3.81 / 8
Average	3.88	3.87	3.87

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

The relative ordering is relevant to the study's joint interest in disaster management and resilience. Emergency response encompasses both immediate safety and the support needs that accompany disruption. The lower psychological-response rating provides a reason to review referral and support arrangements. It does not measure the prevalence of distress or establish whether any respondent received appropriate care. Such questions require evidence beyond reported organizational practices.

3.4 Disaster rehabilitation and recovery

Rehabilitation and recovery averaged 3.85, the lowest of the four disaster-management domains (Table 5). Community rebuilding was highest at 3.93, while advocacy for funding was lowest at 3.78. All statements nevertheless remained classified as Much Evident. The finding concerns comparative emphasis within an overall favorable assessment.

Table 5. Disaster rehabilitation and recovery approaches

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Leads efforts in restoring school operations after a disaster.	3.89 / 3	3.87 / 5	3.88 / 4
Coordinates with government and NGOs for reconstruction support.	3.87 / 4	3.9 / 2	3.89 / 3

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Provides psychosocial interventions for affected students and staff.	3.79 / 8.5	3.8 / 8	3.80 / 8
Involves the community in rebuilding school facilities.	3.9 / 2	3.95 / 1	3.93 / 1
Assesses long-term impacts and addresses ongoing needs.	3.85 / 6	3.88 / 3.5	3.87 / 5
Advocates for disaster recovery funding or assistance.	3.77 / 10	3.78 / 9.5	3.78 / 10
Updates school policies to reflect lessons learned from the disaster.	3.91 / 1	3.88 / 3.5	3.90 / 2
Supports programs that help families and communities recover.	3.86 / 5	3.83 / 6	3.85 / 6
Facilitates training to strengthen post-disaster resilience.	3.8 / 7	3.78 / 9.5	3.79 / 9
Monitors and evaluates recovery progress to ensure sustainability.	3.79 / 8.5	3.81 / 7	3.80 / 7
Average	3.84	3.85	3.85

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

Recovery depends on continued coordination after immediate danger has passed. The ranking of funding advocacy identifies a possible constraint on translating recovery intentions into sustained action. The ratings do not provide expenditure data, amounts of external assistance, restoration timelines, or evidence of completed reconstruction. Consequently, the study supports attention to recovery resources without estimating a financial deficit or attributing delayed recovery to inadequate funding.

3.5 Summary and district comparisons of disaster-management approaches

Table 6. Summary of disaster-management approaches

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Disaster Precaution and Mitigation	3.87 / 3	3.87 / 2.5	3.87 / 2.5
Disaster Preparedness	3.91 / 1	3.90 / 1	3.90 / 1
Disaster Response	3.88 / 2	3.87 / 2.5	3.87 / 2.5
Disaster rehabilitation and recovery	3.84 / 4	3.85 / 4	3.85 / 4
Average Weighted Mean	3.88	3.87	3.87

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

Table 6 brings the four domains together. Preparedness ranked first, precaution and mitigation and response shared rank 2.5, and rehabilitation and recovery ranked fourth. The overall district means were 3.88 and 3.87, with an average of 3.87. The narrow spread in summary ratings supports examining individual activities before assigning broad priorities. It does not justify treating a difference of a few hundredths as a demonstrated substantive difference.

Table 7. Reported district comparisons of disaster-management item rankings

Indicators	Disaster Precaution and Mitigation	Disaster Preparedness	Disaster Response	Disaster rehabilitation and recovery
Summation of the Ranks of Big Group	114.5	98	105	107.5
Summation of the Ranks of Small Group	95.5	112	105	102.5
Number of Cases for Small Group	10	10	10	10
Number of Cases for Big Group	10	10	10	10
Total Number of Cases	20	20	20	20
Computed z	0.75	0.52	0.03	0.22
Probability Associated with the Z	0. 2266	0.3015	0.4880	0.4129
Decision on H0	Accepted	Accepted	Accepted	Accepted
Significant Difference	Not Significant	Not Significant	Not Significant	Not Significant

Note. Statistics, case counts, probability labels, and decisions are reproduced as reported. Cases refer to ten item values per group, rather than the 20 and 18 school-head participants. Probability sidedness and tie adjustments were not specified.

All four comparisons in Table 7 were classified as Not Significant. Computed z values ranged from 0.03 for disaster response to 0.75 for precaution and mitigation. The reported null hypotheses were accepted. These findings do not establish that the two districts had identical conditions. They indicate that the reported ranking procedure did not identify a statistically significant difference for any disaster-management domain.

The comparison concerns the distributions of ten item values from each district. It is not a direct test using the 38 respondents' domain scores. Moreover, corresponding items refer to the same practices in each district, so the suitability of treating the two sets as independent samples requires clarification. The inferential findings are retained as reported while their analytical unit and assumptions constrain their use.

3.6 Coping strategies

Coping strategies averaged 3.88 (Table 8). Seeking support from colleagues, friends, or family ranked highest at 3.94, followed by humor and optimism. Positive self-talk or reflection ranked lowest at 3.82. The results place interpersonal help-seeking among the more evident reported coping resources.

Table 8. Coping strategies indicators

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Remains calm and composed when facing high-stress or emergency situations.	3.82 / 8	3.85 / 7	3.84 / 7
Uses positive self-talk or reflection to manage stress and stay focused.	3.8 / 10	3.83 / 9	3.82 / 10
Seeks support from colleagues, friends, or family during challenging times.	3.9 / 3	3.98 / 1	3.94 / 1
Maintains a sense of humor and optimism even in difficult circumstances.	3.95 / 1	3.9 / 4	3.93 / 2
Practices time management and prioritization to reduce work-related pressure.	3.93 / 2	3.91 / 3	3.92 / 3
Engages in physical, recreational, or relaxation activities to relieve stress.	3.87 / 5	3.89 / 5	3.88 / 5
Adapts quickly to unexpected changes or disruptions in the school environment.	3.81 / 9	3.84 / 8	3.83 / 8.5
Sets realistic goals and takes practical steps to address stressful situations.	3.86 / 6	3.93 / 2	3.90 / 4
Remains solution-focused rather than dwelling on problems.	3.85 / 7	3.8 / 10	3.83 / 8.5
Encourages a supportive and emotionally safe atmosphere for both students and peers.	3.88 / 4	3.87 / 6	3.88 / 6
Average	3.87	3.88	3.88

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

The individual items span practical organization, emotional regulation, adaptation, and the creation of a supportive environment. They cannot identify which strategy was most effective for an individual school head. The comparatively lower self-talk rating identifies an area for optional professional support, while the high help-seeking rating suggests that support networks are already a relevant part of the reported coping profile. No strategy was experimentally tested.

3.7 Social support

Table 9 reports social-support activities and an average of 3.94 for each district and overall. Communication with colleagues and a sense of belonging each displayed an average of 3.95, but their reported ranks were 1 and 2. Access to formal counseling or mentoring was lowest at 3.81. The detailed average conflicts with the 3.87 social-support values in the domain summary in Table 12; both sets are retained.

Table 9. Social support indicators

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Communicates with colleagues for advice or emotional support during difficult times.	3.92 / 2	3.98 / 1	3.95 / 1
Participates in school team building and peer support activities.	3.8 / 9.5	3.83 / 7.5	3.82 / 9
Receives encouragement and reassurance from family and friends during stressful situations.	3.89 / 4	3.9 / 3	3.90 / 3.5
Feels a sense of belonging and emotional safety within the school community.	3.94 / 1	3.95 / 2	3.95 / 2
Supports coworkers in coping with professional or personal challenges.	3.83 / 8	3.88 / 5	3.86 / 6
The teacher has access to formal support systems such as counselling or mentoring when needed.	3.8 / 9.5	3.82 / 9	3.81 / 10
Builds strong professional relationships with colleagues that foster mutual trust and collaboration.	3.9 / 3	3.89 / 4	3.90 / 3.5
Acknowledges and appreciates the supports provided by students and their families.	3.86 / 6	3.83 / 7.5	3.85 / 7
Engages in open and respectful dialogue with school administrators when facing work-related concerns.	3.85 / 7	3.8 / 10	3.83 / 8
The teacher's sense of resilience is strengthened through positive social interactions in the workplace.	3.87 / 5	3.85 / 6	3.86 / 5
Average	3.94	3.94	3.94

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported. The detailed social-support average differs from the summary in Table 12.

The item pattern distinguishes informal relationships from formal support access. Positive collegial contact can coexist with a comparatively lower rating for structured counseling or mentoring. The study does not establish unmet clinical need, service utilization, or the quality of available support. The teacher-oriented wording of two statements also limits confidence that all items consistently captured school-head experience. The unresolved average prevents a definitive ranking of social support against the other resilience domains.

3.8 Exposure to adversity

Exposure to adversity averaged 3.87 (Table 10). Continuing despite setbacks was rated highest at 4.03; professional exhaustion was also prominent at 3.98. Conflict-related experience was lowest at 3.77. These statements address different aspects of difficulty and adaptation, making their shared domain label insufficient to determine the meaning of a high score.

Table 10. Exposure to adversity indicators

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Encounters challenging situations such as natural disasters, emergencies, or personal loss while in service.	3.82 / 8	3.79 / 9	3.81 / 8
Experiences high-stress conditions due to heavy workload or limited resources.	3.87 / 5	3.9 / 3	3.89 / 5
Deals with emotionally difficult situations involving students or their families.	3.79 / 9	3.8 / 7.5	3.80 / 9
Faces professional setbacks or failures and continued to fulfil responsibilities.	4 / 1	4.05 / 1	4.03 / 1

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
The teacher has taught in environments affected by socio-economic challenges or community crises.	3.84 / 6	3.86 / 6	3.85 / 6
Manages classrooms during times of school-wide disruptions or safety concerns.	3.92 / 3	3.89 / 4	3.91 / 3
Continues teaching effectively despite experiencing personal or family problems.	3.91 / 4	3.88 / 5	3.90 / 4
The teacher has been exposed to mental and emotional exhaustion and still maintained professionalism.	3.97 / 2	3.98 / 2	3.98 / 2
Encounters conflicts with colleagues, parents, or administrators.	3.76 / 10	3.78 / 10	3.77 / 10
Demonstrates perseverance in the face of repeated or prolonged adversity in their school management career.	3.83 / 7	3.8 / 7.5	3.82 / 7
Average	3.87	3.87	3.87

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

Greater adversity is not inherently greater resilience. A statement about exhaustion describes strain, whereas persistence through setbacks describes a response to strain. Without a documented scoring rationale or reverse coding, an overall mean may combine experiences with different psychological implications. The table is therefore interpreted at the level of its content rather than as evidence that exposure itself strengthened school heads or that high scores demonstrate good mental health.

3.9 Personality traits

Personality traits averaged 3.85 in Table 11. Flexibility was highest at 3.97, whereas remaining calm under stress was lowest at 3.78. District I had an average of 3.86 and District II 3.85. The item ratings describe perceived dispositions and behaviors within the study's researcher-made measure.

Table 11. Personality traits indicators

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Demonstrates optimism and maintains a positive outlook despite challenges.	3.88 / 4	3.84 / 5	3.86 / 5
Shows self-confidence in handling difficult situations and making decisions.	3.79 / 9	3.83 / 6.5	3.81 / 8
Remains calm and composed under pressure or stress.	3.77 / 10	3.78 / 10	3.78 / 10
Displays perseverance and determination in overcoming setbacks.	3.8 / 8	3.82 / 8	3.81 / 9
The teacher is flexible and open to change when facing unexpected events.	3.95 / 1	3.98 / 1	3.97 / 1
Maintains a sense of purpose and direction in both personal and professional life.	3.87 / 5	3.86 / 4	3.87 / 4
Exercises patience and emotional control during difficult classroom situations.	3.91 / 2	3.88 / 3	3.90 / 2.5
Displays empathy and understanding when dealing with others' emotions or needs.	3.84 / 7	3.83 / 6.5	3.84 / 6
Approaches problems with a proactive and solution-oriented mindset.	3.85 / 6	3.8 / 9	3.83 / 7
Exhibits strong moral values and integrity in all actions and decisions.	3.9 / 3	3.89 / 2	3.90 / 2.5
Average	3.86	3.85	3.85

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

The profile suggests that adapting to change and regulating responses under stress were not equally prominent in the ratings. It does not identify stable personality factors through a standardized personality model. Nor does it establish that dispositions caused differences in coping or disaster management. The small descriptive district difference should be considered together with the measurement limitations and the absence of participant-level estimates of uncertainty.

3.10 Summary and district comparisons of psychological resiliency

Table 12. Summary of psychological resiliency domains

Indicator	District I Mean / rank	District II Mean / rank	Average Mean / rank
Coping Strategies	3.87 / 1.5	3.88 / 1	3.88 / 1
Social Support	3.87 / 1.5	3.87 / 2.5	3.87 / 2.5
Exposure to Adversity	3.87 / 1.5	3.87 / 2.5	3.87 / 2.5
Personality Traits	3.86 / 4	3.85 / 4	3.85 / 4
Average Weighted Mean	3.87	3.87	3.87

Note. Every reported interpretation is Much Evident (ME). Mean and rank values, including decimal precision and displayed ties, are retained as reported.

The resilience summary in Table 12 reports an overall average of 3.87 in both districts and overall. Coping strategies ranked first at 3.88. Social support and exposure to adversity shared rank 2.5 at 3.87, and personality traits ranked fourth at 3.85. Three District I domains displayed 3.87 and rank 1.5 each. These ranks are preserved; the calculation of ties was not documented. The social-support inconsistency identified above prevents treating the summary ordering as fully resolved.

Table 13. Reported district comparisons of psychological-resiliency item rankings

Indicators	Coping Strategies	Social Support	Exposure to Adversity	Personality Traits
Summation of the Ranks of Big Group	111.5	106.5	103.5	99.5
Summation of the Ranks of Small Group	98.5	103.5	106.5	110.5
Number of Cases for Small Group	10	10	10	10
Number of Cases for Big Group	10	10	10	10
Total Number of Cases	20	20	20	20
Computed z	0.52	0.15	0.15	0.45
Probability Associated with the Z	0.3015	0.4404	0.4404	0.3264
Decision on H0	Accepted	Accepted	Accepted	Accepted
Significant Difference	Not Significant	Not Significant	Not Significant	Not Significant

Note. Statistics, case counts, probability labels, and decisions are reproduced as reported. Cases refer to ten item values per group, rather than the 20 and 18 school-head participants. Probability sidedness and tie adjustments were not specified.

Table 13 classified all four district comparisons as Not Significant. Coping strategies had a computed z of 0.52 and reported probability of 0.3015. Social support and exposure to adversity each had z = 0.15 and probability 0.4404. Personality traits had z = 0.45 and probability 0.3264. These results concern comparisons between district item distributions; they do not test whether disaster-management approaches predict resilience.

Nonsignificance should not be interpreted as proof that every school head experienced the same level of support or adversity. Aggregate item means can conceal substantial variation among respondents. The study did not report distributions of individual domain scores, variability estimates, or associations with school conditions. Consequently, the findings support a cautious description of district profiles rather than an inference that support needs were uniform.

4. Discussion

4.1 Disaster-management priorities across stages

The study found Much Evident ratings across precaution and mitigation, preparedness, response, and recovery. The highest summary rating for preparedness indicates comparatively strong reported attention to activities before an emergency. The lowest summary rating for recovery highlights the importance of examining what happens after immediate response. These are relative differences within a narrow numerical range and should guide inquiry rather than be treated as definitive measures of program performance.

The hazard-recognition and coordination findings in Table 2 are consistent with the relevance of local leadership and collaboration discussed by Ruslanjari et al. (2024). For Tagkawayan, the practical implication is to connect existing coordination routines with specific implementation needs. Hazard mapping, communication, and local partnerships may provide an organizational basis for action, while infrastructure reinforcement still requires resources, technical assessment, and responsibility for follow-through. The study did not examine whether a particular partnership achieved those outcomes.

Table 3 similarly separates the preparation of plans from the preparedness of people. Shah et al. (2020) provide a useful comparison because their school-focused investigation addresses several operational components of readiness. The study's lower staff-training rating suggests that plan review and practical capacity development warrant joint attention. An implementation review could consider whether responsibilities are understood and whether activities are practiced, but those additional observations were not part of the reported evidence.

Tables 4 and 5 extend the analysis beyond planning. The relatively lower rating for emotional and psychological response suggests a possible gap between protective action and support during disruption. The relatively lower funding-advocacy rating concerns the sustainability of recovery. Potter et al. (2021) offer a relevant case-based account of the leadership judgments involved in crisis management. The study adds a local descriptive profile, while providing neither an observed emergency-performance assessment nor a test of alternative recovery strategies.

4.2 Resilience as a contextual and measurement concern

The high rating for help-seeking in Table 8 and comparatively favorable collegial-contact items in Table 9 suggest that relationships are salient in the school heads' reported experience. Cheung et al. (2024) place principals' resilience within a wider ecology of relationships and institutional conditions. This perspective supports considering peer connections and organizational support together. It also cautions against interpreting resilience solely as a personal obligation to endure difficult conditions.

Formal support access was lower in the social-support ordering than communication and belonging. This pattern supports reviewing how school heads obtain mentoring, coaching, and appropriate professional assistance when needed. It does not establish that informal support was insufficient or that a specific intervention would improve outcomes. The discrepancy in the social-support average further limits cross-domain comparisons. Resolving that discrepancy is necessary before using the summary to allocate resources based on small numerical differences.

The exposure-to-adversity findings in Table 10 require particular care. Persistence, exhaustion, and conflict exposure do not represent a single direction of psychological functioning. Aggregating them without a clear scoring rationale can obscure whether a high value reflects adaptive response, frequent stress, or both. The study's Much Evident interpretation therefore indicates endorsement of the specified statements, rather than a validated position on a continuum from low to high mental health.

Table 11 adds information about perceived flexibility and emotional composure, but its personality label should remain operationally bounded. The findings do not demonstrate a stable trait profile or explain individual differences in disaster response. Taken together, Tables 8–11 suggest several distinguishable needs: practical coping resources, supportive relationships, attention to strain, and opportunities to manage stressful interactions. The ratings do not establish which need was most consequential for performance or well-being.

Krishna et al. (2022) offer a complementary perspective on participation and psychological considerations in disaster education. Their child-focused findings should not be generalized directly to school heads. For the study, the relevant implication is methodological: psychological outcomes deserve explicit measurement alongside participation and preparedness. A future evaluation should specify whose well-being is being assessed, what outcome is expected to change, and how change would be distinguished from favorable perceptions of implementation.

4.3 Meaning of the district comparisons and the stated influence

Tables 6 and 12 summarize reported extent; Tables 7 and 13 address district comparisons. These answer different questions. A favorable mean describes the reported level of an activity or indicator. A nonsignificant test describes the outcome of a particular comparison procedure. Neither result estimates the relationship between the two sets of constructs. The study therefore cannot determine whether greater community-based disaster management corresponded to greater psychological resiliency among participants.

The analytical unit further limits the inferential conclusion. Ten item values per district do not constitute ten independently sampled school heads. The same statements were used in both districts, and item values summarize responses from unequal participant groups. A participant-level relationship analysis would require appropriately scored individual responses, measurement checks, and a model corresponding to the research question. Such an analysis is not reconstructed from aggregate means.

The reported not-significant results do not justify assuming district equivalence. No equivalence margin, power analysis, or confidence interval was supplied. Similarly, a nonsignificant district difference cannot be used as indirect evidence of a common causal mechanism. The defensible conclusion is that the reported procedures did not establish district differences in the item distributions, while the influence expressed in the title remains untested by the presented analyses.

4.4 Implications, limitations, and further research

The proposed policy directions include strengthening warning systems, reviewing infrastructure needs and emergency supplies, developing staff capability, improving safety procedures, and supporting recovery coordination and funding. Psychological-support directions include peer activities, mentoring and counseling access, stress-management opportunities, trauma-informed practice, and conflict-resolution support. These recommendations are derived from comparative ratings and the study's practical concerns. They were not implemented or evaluated as interventions within the study.

A feasible application of the findings is to review the lower-ranked activities with school heads and district stakeholders before setting priorities. This would allow the numerical profile to be interpreted alongside actual resources, existing responsibilities, and service availability. Such consultation would extend the study rather than supply evidence already collected. The findings should not be used to label an individual school head as psychologically deficient or a school as unsafe.

Several limitations constrain the evidence. The study covered a small, geographically bounded group using self-report questionnaires. Favorable ratings may reflect perceptions and response tendencies rather than observed practice. Instrument validation procedures were described without complete psychometric results. No reliability coefficient, item-level response distributions, or variability estimates were reported. Teacher-oriented wording and mixed content within the adversity domain complicate construct interpretation. The unresolved school-year and social-support entries also require clarification.

Further research should retain individual-level responses, specify the scoring direction of every resilience statement, document validation and reliability, and distinguish adversity exposure from adaptation outcomes. Direct observations or administrative evidence could complement perceptions of disaster management. Repeated measurement could examine changes over time, while a suitable comparison strategy would be needed for stronger claims about effects. These are proposed improvements to future investigation, not additional procedures attributed to the study.

5. Conclusion

Community-based disaster management and psychological resiliency were rated Much Evident among the 38 participating school heads. Preparedness was the highest-rated disaster-management domain and rehabilitation and recovery the lowest. The resilience summary placed coping strategies first and personality traits fourth, although the conflicting social-support average prevents a fully resolved comparison among resilience domains. All reported district comparisons were classified as not significant.

The study supports attention to practical staff training, infrastructure reinforcement, psychological response, recovery resources, and formal professional support. Its findings describe reported practices and resilience-related indicators within two districts. They do not establish that community-based disaster management influenced psychological resiliency. Resolving reporting discrepancies and strengthening measurement and participant-level analysis are necessary before making stronger explanatory claims.

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