

LEVEL OF AWARENESS AND STATUS OF IMPLEMENTATION OF DISASTER RISK REDUCTION MEASURES OF THE SCHOOL HEADS OF ELEMENTARY SCHOOLS IN BALICUATRO AREA OF NORTHERN SAMAR

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ABSTRACT

The study sought to find out the relationship between awareness and status of implementation of disaster risk reduction measures in terms of information dissemination and advocacy campaign, policy mechanisms, organizational structure and mitigation measures to ensure the safety of the pupils, school personnel, properties and records. The findings showed that there was a significant relationship on the level of awareness of the respondents and the status of implementation of disaster risk reduction measures. There was no significant difference on the level of awareness between the school heads in the mainland and island elementary schools. The respondents possess some extent of knowledge on disaster risk reduction measures. It can be implied that the efforts of the government to raise the awareness is effective. Furthermore, the respondents' awareness has influenced their status of implementation of the measures.

Keywords

disaster risk reduction awareness, level of awareness, status of implementation, Balicuatro Area Northern Samar

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Introduction

Disasters are uncontrolled threats confronting the world which create a pressing challenge on the part of the schools because they bring risks to the safety of the learners, teachers, school personnel, school properties and records. The learning of the learners is affected due to disturbances in the actual class contact time, psychological impact of the catastrophes, and health and economic issues. Teachers and school personnel consume additional hours restoring the school systems to normal. The flow of the lessons is disrupted. Disasters denude buildings, fences, furniture, computers, textbooks, instructional materials and other school properties. Records can also be destroyed and distorted.

The National Disaster Risk Reduction and Management Council of the Philippines reported that when Super Typhoon Yolanda hit the country in 2013, it left 6, 300 casualties, 28,689 injured and 1,061 missing, and unprecedented destruction in various educational investments (COA, 2014). In the Division of Northern Samar, after the onslaught of Typhoon Glenda, it damaged 163 classrooms, 20 of which are located in the Balicuatro Area.

UNESCO, with other organizations, has set the goals of Comprehensive School Safety which included protection of learners and education workers from death, injury, and harm in schools, planning for educational continuity in the face of expected hazards, safeguarding education sector investments and strengthening climate-smart disaster resilience through education. Accordingly, these are addressed by education policy and practices aligned with disaster management covering three pillars which include safe learning facilities, school disaster management and risk reduction and resilience education (Balderas, 2013).

School integrated DRRM actions and programs in its fourfold function in research, extension, instruction and production through curricular integration, extension services, awareness campaign and capability-building seminar (Perez, 2012). In his research titled "The Vulnerability and Capacity Assessment in Barangay Dao, San Jose, Northern Samar", Dela Fuente (2012) stressed that the elementary school in the said community is among the elements at risk to typhoon and other hazards. Also, knowing disaster preparedness

must be coupled with being alert always, calm and cooperative with persons in authority (Ortal, 2012).

A foreign study conducted by Mamogale (2011) assessed the disaster preparedness of learners and educators in Soshaguve North schools. The study identified the possible threats to the schools which included floods, fires and storms. Other findings of the study showed that educators were not trained on disaster management.

Moreover, *Educator* magazine columnist Carlos Valarao (2009) stated that the relationship between disasters and schools is a crucial one. There is a need to protect the schools from disasters as there is a significant role that the schools play during disasters. Therefore, schools should take seriously Disaster Risk Reduction and Management. In a more proactive sense, schools can even lead the communities in taking initiatives to withstand disasters.

Guevarra (2008) assessed the disaster preparedness in selected thirty-seven schools in Luzon. It found out that majority conducted drills once a year. Drills are conducted to attain the highest level of awareness among the school children, school personnel and the community. It also determined awareness of key school personnel on disaster preparedness programs (both national and local) and Department of Education disaster related policies. The results of the study discussed that majority of the public school key personnel were aware of the national and local disaster management programs. All respondents were aware of the DepEd disaster-related policies. However, with all these legal bases, the researcher observed that the issue on Disaster Risk Reduction and Management is less prioritized by the schools. It is manifested in the impacts of calamities that seem to be usual scenarios every after the ravages of disasters. Actions are not systematic. Disaster risk reduction plans and committees are not felt functional. Aside from drills which not all schools conduct, no other regular activity is being conducted by the schools in relation to disaster risk reduction.

Thus, the researcher has thought of taking an in-depth look into the level of awareness and status of implementation of disaster risk reduction measures of school heads of elementary schools in the Balicuatro Area of Northern Samar.

METHODOLOGY

Purposive sampling was used to determine the locale of the study which was the elementary schools in the Balicuatro Area of Northern Samar. The population of seventy school heads in the Balicuatro Area was composed of forty school heads from the mainland schools and thirty school heads from the island schools. Complete enumeration of school heads was employed. Thus, 70 school heads from 106 schools were automatically the respondents of this study. San Isidro district had the greatest number of ten school heads. The districts of Allen, Lavezares II and Victoria had nine school heads. Capul district had eight. Lavezares I and San Antonio districts got seven school heads, respectively. Biri district had six. Moreover, the district with the least number of school heads was San Vicente with only five school heads.

The instrument used in this study was the survey questionnaire developed from the issuances of the Department of Education related to disaster risk reduction.

Listed items about the level of awareness of school heads on disaster risk reduction measures in terms of: information dissemination and advocacy campaign, policy mechanisms, organizational structure, mitigation measures ensuring the safety of pupils and school personnel, school properties and school records. Another, items to assess the status of implementation of disaster risk reduction measures in terms of information dissemination and advocacy campaign, policy mechanisms, organizational structure, mitigation measures ensuring the safety of pupils and school personnel, school properties and school records.

Scoring and Interpretation

The items stipulated in the questionnaires administered to the respondents were scored and interpreted using the following system:

For the level of awareness, it was measured through this scoring :

| Numerical Equivalent | Statistical Limits | | | Interpretation |
|----------------------|--------------------|---|------|-----------------|
| 5 | 4.2 | - | 5.00 | Very Much Aware |
| 4 | 3.4 | - | 4.19 | Much Aware |
| 3 | 2.6 | - | 3.39 | Aware |
| 2 | 1.8 | - | 2.59 | Less Aware |
| 1 | 1.0 | - | 1.79 | Least Aware |

For the status of implementation, it was measured through:

| Numerical Equivalent | Statistical Limits | | | Interpretation |
|----------------------|--------------------|---|------|-------------------------|
| 5 | 4.2 | - | 5.00 | Very Highly Implemented |
| 4 | 3.4 | - | 4.19 | Highly Implemented |
| 3 | 2.6 | - | 3.39 | Implemented |
| 2 | 1.8 | - | 2.59 | Less Implemented |
| 1 | 1.0 | - | 1.79 | Least Implemented |

safety of school records got a sub-mean of 4.0 interpreted as “much aware”.

RESULTS AND DISCUSSION

Table 1 contains the summation of the level of awareness of the school heads on disaster risk reduction measures. With a grand mean of 4.2, the level of awareness of the respondents on disaster risk reduction measures is registered as “very much aware”. Moreover, policy mechanisms and mitigation measures ensuring the safety of school properties got a sub-mean of 4.4 interpreted as “very much aware”; mitigation measures ensuring the safety of pupils and school personnel got a mean of 4.3, “very much aware”; organizational structure with a sub-mean of 4.1 “much aware”; information dissemination and advocacy campaign and mitigation measures ensuring the

This means that the respondents possessed knowledge on the disaster risk reduction measures in schools which are necessary to protect the pupils, school personnel, properties and records against the ravages of disasters. The “very much aware” level of awareness was influenced by the efforts of the Department of Education and other agencies such as NDRRMC, PAGASA, and DOST to disseminate disaster-related information. The researcher observed that in the current School Improvement Planning Guide, there was already an inclusion or mainstreaming of disaster risk reduction concepts. This is in line with priority three of the Hyogo Framework for Action to use knowledge, innovation and education to build a culture of safety and resilience at all levels.

Table 1. Level of Awareness of the Respondent on Disaster Risk Reduction Measures

| Disaster Risk Reduction Measures in term of: | Sub-mean | Interpretation |
|--|----------|-----------------|
| Policy Mechanisms | 4.4 | Very Much Aware |
| Mitigation Measures to Ensure the Safety of School Properties | 4.4 | Very Much Aware |
| Mitigation Measures to Ensure the Safety of Pupils and Personnel | 4.3 | Very Much Aware |
| Organizational Structure | 4.1 | Much Aware |
| Information Dissemination and Advocacy Campaign | 4.0 | Much Aware |
| | 4.0 | Much Aware |

Mitigation Measures to Ensure the Safety of School Records

Grand Mean **4.2** **Very Much Aware**

Table 2 presents the summary of the status of implementation of disaster risk reduction measures. The data revealed that the status of implementation was “highly implemented” with a grand mean of 3.7. In terms of information dissemination and advocacy campaign and policy mechanisms, it got a sub-mean of 4.1, respectively. For organizational structure, 3.6 sub-mean. In terms of mitigation measures on ensuring the safety of pupils and school personnel, it had a sub-mean of 3.9; ensuring the safety of school properties, 3.7; and, ensuring the safety of school records got a sub-mean of 3.7. This means that the school heads in the Balicutro Area of Northern Samar highly implemented disaster risk reduction measures.

The finding was influenced by the schools’ vulnerabilities, availability of human and non-

human resources which are necessary in the implementation of disaster risk reduction measures, the dissemination of information by the government pertaining to disaster risk reduction, and the sense of prioritizing programs to be implemented by the school heads.

This finding confirms Alderfer’s ERG Theory and Theory of Hierarchy of Needs of Abraham Maslow which tackled the need to be safe. School heads highly implemented disaster risk reduction measures for the safety of everyone in school. Moreover, Chaos Theory is also confirmed. The theory stipulated making sense of nature’s unpredictability. Because nature is unpredictable, schools make sense out of it by implementing measures to withstand such unpredictability.

Table 2. Status of Implementation of Disaster Risk Reduction Measures

| Disaster Risk Reduction Measures in terms of: | Sub-mean | Interpretation |
|--|-----------------|---------------------------|
| Information Dissemination and Advocacy Campaign | 4.1 | Highly Implemented |
| Policy Mechanisms | 4.1 | Highly Implemented |
| Mitigation Measures to Ensure the Safety of Pupils and Personnel | 3.9 | Highly Implemented |
| Mitigation Measures to Ensure the Safety of School Properties | 3.7 | Highly Implemented |
| Mitigation Measures to Ensure the Safety of School Records | 3.7 | Highly Implemented |
| Organizational Structure | 3.6 | Highly Implemented |
| Grand Mean | 3.8 | Highly Implemented |

To test the null hypothesis that there is no significant relationship between the level of awareness of the respondents and the status of implementation of disaster risk reduction measures of the schools, the multiple regression analysis was used.

Table 3 presents the result which revealed that the value of the F-Ratio of 55.1643 was

higher than the significant F-Value of 2.4100, which led to the rejection of the null hypothesis, which means that there was a significant relationship between the variables. The coefficient of determination of 44.7% indicated the degree of relationship between these two variables.

It means that the awareness of the school heads of the elementary schools in the Balicutro Area of Northern Samar on disaster risk reduction

measures affected their implementation. The more the school heads were aware of the different measures in terms of information and dissemination campaign, policy mechanisms, organizational structure, and mitigation measures to ensure the safety of the pupils, personnel, properties and records, the more that they can implement these measures. School heads tend to implement programs which they are aware of. The significant relationship confirms M. R. Cohen's statement that people with more environmental information tend to have more

favorable attitudes towards environmental conservation. Environmental information touches awareness, and favorable attitudes towards environmental conservation pertain to measures implemented.

This finding also confirms Edmund Husserl's Social Phenomenology which reveals what human awareness plays in the production of social actions. The product of the awareness of the school heads on disaster risk reduction measures is their implementation.

Table 3. Relationship between Level of Awareness and Status of Implementation of Disaster Risk Reduction Measures of the Respondents

| | F-ratio | Significant F | Coefficient Determination | of Interpretation |
|---------------------------|----------------|----------------------|----------------------------------|--------------------------|
| Level of Awareness | 55.1643 | 2.4100 | 44.7% | Significant |

To test the null hypothesis that there is no significant difference on the level of awareness on disaster risk reduction measures between the school heads in the mainland and island elementary schools in Balicutro of Northern Samar, the t-test was used.

As shown in Table 4, result revealed that the t-computed value of 0.18173 was less than the t-critical value of 1.67411. Thus, the null hypothesis was accepted. There was no significant difference on the level of awareness between school heads in the mainland and island schools.

It means that the school heads shared a common knowledge on the disaster risk reduction measures since they were all provided with different channels of uplifting their awareness through official issuances such as DepEd orders, memoranda and advisories and School

Improvement Planning Guide. Both groups of school heads were also exposed to common vulnerabilities such as tropical cyclones, landslide, earthquakes and floods.

Moreover, the finding strengthens the idea that disaster risk reduction measures should be made known to all school heads who take the lead role in its implementation irrespective of their assigned areas of service. As the Department of Education emphasized that disaster risk reduction in education must aim at addressing drivers of risks such as little awareness. With this finding, it is confirmed that the level of awareness of the school heads in the Balicutro Area of Northern Samar is on very high level. The school heads can use such level of awareness in mandating and mobilizing human and material resources to promote the culture of safety in the schools.

Table 5. Difference on the Level of Awareness between School Heads in the Mainland and Island Elementary Schools of the Balicutro Area of Northern Samar

| | N | Mean | Mean Difference | t- Value | | Interpretation |
|-----------------|----------|-------------|------------------------|-----------------|-----------------|-----------------------|
| | | | | Computed | Critical | |
| Islands | 30 | 199.233 | 1.258 | 0.18173 | 1.67411 | Not Significant |
| Mainland | 40 | 197.975 | | | | |

CONCLUSION

The respondents possess knowledge on DRR measures. It is concluded that they are aware of the disaster risk reduction measures. It implies

that the different forms of media are used by the Department of Education and other government and non-government agencies to include prints and social media contributed to their awareness. As to the status of implementation, it is concluded that the schools have highly implemented disaster

risk reduction measures. The impacts of the disasters that the schools experienced, the mainstreaming of DRR in the School Improvement Plan (SIP), and orders mandated by DepEd and other agencies related to DRR contributed to this.

Since there is a significant relationship between the level of awareness of the respondents and the status of implementation of disaster risk reduction measures, it can be implied that disaster risk reduction in the Balicuatro Area is widespread. Though it has not been implemented systematically, it depends on the awareness of the school heads and other school personnel.

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