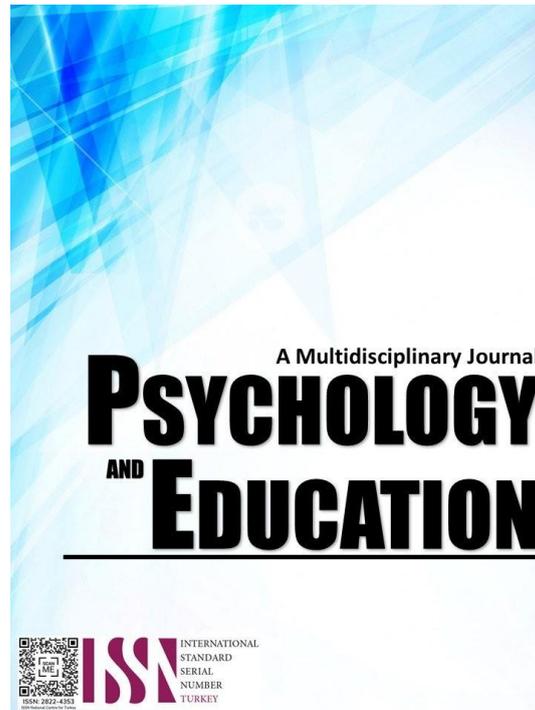


**IMPROVING THE DISASTER AWARENESS AND  
PREPAREDNESS OF THE PERSONNEL AND  
STUDENTS OF STA. FE O-IT  
ELEMENTARY SCHOOL**



**PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL**

2023

Volume: 12

Pages: 480-484

Document ID: 2023PEMJ1076

DOI: 10.5281/zenodo.8260007

Manuscript Accepted: 2023-17-8

## Improving the Disaster Awareness and Preparedness of the Personnel and Students of Sta. Fe O-IT Elementary School

Roosevelt E. Ecle\*

*For affiliations and correspondence, see the last page.*

### Abstract

Disasters are hazards, whether natural or caused by humans, that seriously impair the functioning of a community or society. They involve significant losses in terms of people, property, and resources, as well as negative effects on the environment. This research focus on the improvement of the disaster awareness and preparedness of Sta. Fe O-it Elementary School's personnel and students and compare their level of disaster awareness before and after undergoing a Disaster Risk Reduction and Management training/seminar. The tool that assessed the respondents' disaster awareness and prepared with the use of a survey questionnaire that composed of five indicators. The data was analyzed by means of t-test and the result shown that there is a significant improvement on the level of disaster awareness and preparedness of the respondents after conducting a seminar.

**Keywords:** *disaster, awareness, preparedness, disaster risk reduction and management*

### Introduction

The most crucial factor to take into account in any circumstance is the safety of each individual. In actuality, safety precautions are included in all educational institutions and organizations. The majority of schools now have preparation plans in place, greatly lessening the impact of incidents. Both the Humanitarian Charter and International Humanitarian Law (Geneva Conventions, 1949) make reference to protecting children from tragedy. It states the right to protection and aid and outlines the fundamental principles that underpin humanitarian action. The charter acknowledges the sector's readiness to defend the right to a life with dignity, to be safe from harm, and to have access to necessities in the event of emergencies. According to Carter (2001), a school serves as a child's second crucial grooming ground after their family and community since there, they are taught new information and abilities. The youngsters should be able to play here in a secure setting. Priority and serious consideration must be given to school safety. It is a legal issue since schools may be held responsible if they fail to take steps to ensure a secure learning environment.

The Philippines' geographic location makes us more vulnerable to various hazards. According to the reference guide of Philippine Disaster Management 2018, the Philippines is geographically situated in Southeast Asia, making it particularly vulnerable to natural disasters. The nation is affected by typhoons, earthquakes, floods, volcanic eruptions, landslides, and fires. Natural disasters are unpredictable and can result in significant property damage and devastating loss of

life. Due to the school's location and, more importantly, the students' susceptibility, the educational system has been impacted by the necessity of class suspension. It denies students their right to a top-notch education and imperils both the students' and school staff's security. The national level's efforts to reduce disaster risk are frequently insufficient to shield towns and households from the devastating effects of natural disasters. Local government and disaster-relief organizations need some time to mobilize resources to an impacted area after a disaster has happened, which complicates public efforts by addressing local needs and conditions. Increased local efforts, engaging communities and individual households, are required in addition to national actions to assist endure upcoming shocks (Hoffmann & Mutarak, 2014).

The Comprehensive DRRM in Basic Education Framework was developed by DepEd with the issuance of DO 37 s2015 following the promulgation of Republic Act 10121, also known as the Philippine DRRM Act of 2010, which highlights three pillars, including safe learning environments, school disaster management, and disaster risk reduction in education. The Comprehensive DRRM in Basic Education Framework seeks to; 1. Protect learners and education workers from death, injury, and harm in schools; 2. Plan for educational continuity in the face of expected hazards and threats; 3. Safeguard education sector investments; and 4. Strengthen risk reduction and resilience through education. Despite our nation's susceptibility to natural disasters, the DepEd is taking this move to guarantee the continuity of education. Since vulnerability refers to how susceptible a person, a community, assets, or systems are to the effects of hazards, education—including both school-based and



less formalized approaches—can also significantly reduce the likelihood of natural disasters and hazards (Twigg, 2020). Education can encourage the adoption of safety precautions and help increase household awareness. Additionally, it can help with the provision of vital intangible and material resources needed to successfully protect against and adapt to natural hazards. In order to reduce disaster risk and other environmental risks on both a household and community level, education is a crucial component (Kagawa & Selby, 2013). Disasters are unavoidable, and when they do, they may result in the loss of life, property damage, and disrupted study schedules. As a result, the study looked into and enhanced the preparedness for emergencies of the students and staff of Sta. Fe O-it Elementary School.

**Research Questions**

This study sought to improve the level of disaster awareness and preparedness of the Sta. Fe O-it Elementary School. Specifically, it aims to answer the question:

1. What is the level of disaster awareness and preparedness of Sta. Fe O-it Elementary School on the following indicators before undergoing a trainings/seminars on Disaster Risk Reduction Management?
  - 1.1 Disaster-Related Knowledge;
  - 1.2 Disaster Preparedness and Readiness;
  - 1.3 Disaster Adaptation;
  - 1.4 Disaster Awareness; and
  - 1.5 Disaster Risk Perception?
2. What is the level of disaster awareness and preparedness of Sta. Fe O-it Elementary School on the following indicators after undergoing a trainings/seminars on Disaster Risk Reduction Management?
  - 2.1 Disaster-Related Knowledge;
  - 2.2 Disaster Preparedness and Readiness;
  - 2.3 Disaster Adaptation;
  - 2.4 Disaster Awareness; and
  - 2.5 Disaster Risk Perception?
3. Is there a significant difference on the level of disaster awareness and preparedness of Sta. Fe O-it Elementary School on the following indicators before and after undergoing a trainings/seminars on Disaster Risk Reduction Management?
  - 3.1 Disaster-Related Knowledge;
  - 3.2 Disaster Preparedness and Readiness;
  - 3.3 Disaster Adaptation;
  - 3.4 Disaster Awareness; and
  - 3.5 Disaster Risk Perception?
4. What is the implication of the study?

**Methodology**

The researcher employed a descriptive study design in this action investigation. The descriptive research technique involves the process of disciplined inquiry through the collection and analysis of empirical data, and each strives to develop knowledge (Best & Kahn, 2007). This method is a research study that can gather information about present situations or find significant relationships between current occurrences (Bryman & Bell, 2011). Descriptive research is concerned with acquiring information about current events or occurrences in order to describe and interpret them. This form of research entails more than just gathering and tabulating data; it also requires correct analysis, interpretation, comparisons, and trend and relationship detection (Salaria, 2012).

This study assesses on the level of awareness and preparedness Sta. Fe O-it Elementary School in the Implementation of Disaster Risk Reduction and Management Program.

**Respondents**

The respondents of the study are the personnel and students of Sta. Fe O-it Elementary School.

Table 1. *Respondent*

<i>Respondents</i>	<i>Number</i>
Personnel	9
Students	45
Total	54

The respondents are the nine (9) personnel and forty-five students of Sta. Fe O-it Elementary School with an overall total of fifty-four (54) respondents.

**Instrument**

The primary research instrument was a survey questionnaire. According to Sapsford and Jupp (2006), questionnaires are a great alternative to consider when conducting a survey because they can be designed by the researcher or based on a pre-existing index. The researcher adapted a 5-point Likert scale questionnaire



to assess the level of disaster awareness and preparedness of the Sta. Fe o-it Elementary School personnel and students before and after undergoing on a trainings/seminars on Disaster Risk Reduction Management.

**Data Gathering Procedure**

The researcher requested permission and consent from Sta's principal. Elementary School Fe O-it. The aims of the study were communicated with the respondents to ensure the seamless administration of the survey instrument, and their replies were treated with the strictest confidentiality. Data was collected, counted, analyzed, and interpreted. In order to analyze the gathered data, conventional statistical processes and the Excel computer software program will be used.

**Ethical Consideration**

Before doing this study, a permit from the School Head must be obtained. The researcher obtained the consent of the respondents, and an agreement was reached to ensure that their personal data and replies would be kept confidential and used solely for research reasons.

**Results and Discussion**

Table 2. Results on the Perception of the SFOES Personnel towards Level of Disaster Awareness and Preparedness before and after undergoing a Disaster Risk Reduction Management seminar

Indicator	Before Mean	After Mean	t value	P value	Interpretation
1.Disaster Related Knowledge	20.45	25.38	2.02	0.05	Significant
2.Disater Preparedness and Readiness	33.97	39.05	2.63	0.02	Significant
3.Disaster Adaption	30.00	34.46	2.55	0.02	Significant
4.Disater Awareness	27.98	29.37	1.51	0.10	No Significant
5.Disaster Risk Perception	17.06	18.42	1.60	0.10	No Significant
Overall Mean	25.89	29.34	2.06	0.05	Significant

Table 2 reveals the results on the perception of the SFOES personnel towards Level of Disaster Awareness and Preparedness before and after undergoing a Disaster Risk Reduction Management training/seminar.

The results show that there is a significant difference on the mean scores of the respondents on indicators 1,2 and 3, while for the indicators 4 and 5 the result shows that there is no significant difference on the two.

Similarly, the computed t-value to test the significant difference in the overall mean score on the perception of the respondents towards Level of Disaster Awareness and Preparedness before and after undergoing a Disaster Risk Reduction Management seminar is 2.06 which is also significant at 5% level.

Table 3. Results on the Perception of the SFOES Students towards Level of Disaster Awareness and Preparedness before and after undergoing a Disaster Risk Reduction Management seminar

Indicator	Before Mean	After Mean	t value	P value	Interpretation
1.Disaster Related Knowledge	11.17	15.72	2.19	0.05	Significant
2.Disater Preparedness and Readiness	17.37	24.69	2.99	0.01	Significant
3.Disaster Adaption	15.09	21.69	2.75	0.01	Significant
4.Disater Awareness	15.42	18.77	2.32	0.02	Significant
5.Disaster Risk Perception	10.02	11.51	1.94	0.05	Significant
Overall Mean	13.81	18.48	2.44	0.02	Significant

Table 3 reveals that there is a significant difference on the perception of the SFOES students towards Level of Disaster Awareness and Preparedness before and after undergoing a Disaster Risk Reduction Management seminar on all the indicators. With the overall computed t-value of 2.44 which is significant at 5% level. The null hypothesis is rejected.

The table 4 shows the combined mean of the respondents in every indicator. The results revealed that by undergoing a seminar on Disaster Risk Reduction Management the respondent's level of disaster awareness and preparedness improved for every indicator. Therefor the null hypothesis is rejected, hence there is a significant difference on the level of disaster awareness and preparedness of the personnel and students Sta. Fe O-it Elementary School.

Table 4. *Significant Difference on the Mean Scores of the SFOES Personnel and Students towards Level of Disaster Awareness and Preparedness before and after undergoing a Disaster Risk Reduction Management seminar*

Indicator	Before Mean	After Mean	Interpretation
1.Disaster Related Knowledge	25.96	32.48	Improved
2.Disaster Preparedness and Readiness	40.56	46.35	Improved
3.Disaster Adaption	35.35	41.44	Improved
4.Disaster Awareness	35.56	36.89	Improved
5.Disaster Risk Perception	23.34	25.29	Improved
Overall Mean	32.15	36.49	Improved

## Conclusion

Disaster preparedness draws largely on educational planning. Education planning begins with a vision for change or benefit. As a result, the educational planner creates a road map to help bring about the desired transformation. Similarly, disaster awareness entails identifying activities to be carried out as part of disaster risk management. Schools that have adequate disaster preparedness manage disaster risks very well. The entire school community must be directly involved in learning about disaster preparedness and identifying ways to protect the schools (Kay, 2003).

Prior to the Disaster Risk Reduction Management Seminar, respondents' perceptions of disaster awareness and readiness were relatively low, compared to the results following the seminar. It may be concluded that after attending the aforementioned seminar, the respondents got new knowledge and realized the necessity of catastrophe management in their daily life. Based on the results presented, it can be inferred that the program conducted is deemed effective and has shown significant improvement on the level of disaster awareness and preparedness of Sta. Fe O-it Elementary School.

With the positive result of the program conducted, the conduct of Disaster Risk Reduction Management Seminar is recommended to be sustained and further subject for monitoring of progress and evaluation. Based on the positive results of the study, the researcher has offered the following recommendations: (1) School officials should work with appropriate agencies to create awareness among school workers so that they can properly assist students. (2) Mock drills and evacuation exercises

should be practiced on a regular basis in coordination with the appropriate authorities, and students should participate actively in these drills. (3) Messages about disaster preparedness and awareness can be distributed to kids through posters, magazines, and even social media.

## References

- Alberta Learning Special Education Board (1999). 'School Climate', in 'Supporting Safe, Secure and Caring Schools in Alberta'. Edmonton.
- Best, John W. and Kahn, J.V.(2007). Research in Education. New Delhi, Prentice Hall of India Private.
- Bryman, Alan and Bell, Emma (2011). Social Research Methods. Oxford: Oxford University press.
- Carter, S. (2001). Surrounded by safety: A Crime Prevention through Environmental Design (CPTED) handbook for youth. Miami, FL: Youth Crime Watch of America.
- Grant, T. (2002). Bring Your First Aid Kit. Unannounced Drill. Journal of School Nursing.18 (3)-174-178.
- Hoffmann, Roman and Muttarak, Raya (2017). Learn from the Past, Prepare for the Future: Impact of Education and experience on Disaster Preparedness in the Philippines and Thailand. World Development 96, 32- 51, 2017.
- Implementing Rules and Regulation of Republic Act No. 1012
- Kagawa, F. and Selby, D. (2013). Enhancing Child-Centered Disaster Risk Reduction for Safe School: Insight from Cambodia, China and Indonesia. Bangkok: Plan Asia Regional Office.
- Kay, Janet (2003). Teachers Guide to Protecting Children. London: Continuum
- Lulua L.,(2008). Addressing school safety in Uganda. Kampala :UPHOLD-USAID.
- Mechler, R. (2005). "Cost-Benefit Analysis of Natural Disaster Risk Management in Developing Countries." Working Paper for Sector Project "Disaster Risk Management in Developing Cooperation,"Gtz.
- Magunda, M.K., (2010). Study on the Disaster Risk Reduction Management and Environment for Karamoja Subregion.
- Ministry of Education (2001). Health and Safety Standards in Educational Institutions. (Circular Ref no.G9/1/169).
- Ministry of Education (2005). Kenya Education Sector Support Programme (KESSP) 2005 2010. Nairobi.
- Ministry of Education (2008). Safety Standards Manual for Schools in Kenya. Nairobi: Government Printer.
- Mitchekk T., (2008). Planning and the new institutionalisms. In Institutions and planning, Niraj verma . Amsterdam : Elsevier. 17-36.
- Ndirangu, L; Ocharo, M & Njoka, J. (2006).Vulnerability of Kenyan Schools to Disaster: A Case of Nairobi Public Secondary Schools. Unpublished M. Ed project, University of Nairobi.



- Nduku,A.(2008). An Assessment of factors influencing school disaster awareness and preparedness in public secondary schools in Nyandarua District. Unpublished M.
- Njoroge,S.(2008). The effectiveness of school inspection of disaster awareness and preparedness in public secondary schools in Nyandarua District. Unpublished M. Ed Project, Catholic University of East Africa (CUEA).Ed project, Kenyatta University
- Resilience of Nations and Communities to Disasters. [Online]. Retrieved from: <http://www.unisdr.org> [2011, June 01].
- Reuters (2004). Indian school fire kills 90 children. Retrieved August 6, 2007, from [http:// www.Reuters.com/reports](http://www.Reuters.com/reports).
- Salaria, Neeru (2012). Meaning of the Term-Descriptive survey Research Method. International Journal of Transformation in Business Management,(IJTB) 2012, Vol.No. 1, Issue No. 6, Apr-Jun. <http://www.ijtbm.com/>
- Sapsford, Roger and Jupp, Victor (2006). Data Collection and Analysis, Second Edition, SAGE Publishing.
- Shaw ,M .(2002). Promoting safety in schools: International experiences and actions. Crime prevention series No. 3. Bureau of Justice Assistance Monograph Washington, DC: United States Department of Justice.
- Savula A.& Atsiaya,P ,(2004). Grilles order to school heads. The Standard p.4 Nairobi: Standard Group.
- Twigg,K. (2020). Disaster risk reduction. Good Pract. Rev. 2015,9,1-381. Available online: <https://www.undrr.org/> (accessed on 4 February 2020)
- UNISDR. (2005). World Conference on Disaster Reduction Kobe, Hyogo, Japan 18-22 January 2005. [Online]. Retrieved from: <http://www.unisdr.org> [2011,January 29].
- UNISDR. (2005). Hyogo Framework for Action 2005-2015:
- Waugh, William L. Jr. (2000). Living with Hazards Dealing with Disasters: An Introduction to Emergency Management. M.E. Sharpe: Armonk, New York.

### **Affiliations and Corresponding Information**

**Roosevelt E. Ecle**

Babancal Elementary School

Department of Education - Philippines