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## AWARENESS OF DISASTER MANAGEMENT AMONG B.ED. PUPIL TEACHERS'

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### Abstract

Disaster is an unexpected accident resulting from natural or man-made factors that incorporates a negative impact on the daily lives and living conditions of human and flora/fauna. Pupil teachers play an important role in effective disaster management system which is vital for a suitable future of life on the earth. Institutions which have a significant influence on the teacher to be trained are important sources for the transition of awareness of disaster management among students. Present study on 120 pupil teachers of govt. and private teacher training institutions in Kolkata revealed that they are having medium level of awareness with significant gender differences in awareness on disaster management. On the other hand there was no significance difference in awareness on disaster management in terms of Locality and Institution type. Although the pupil teachers were aware of their roles and responsibilities for the disaster management in their Institution, certain gaps in terms of structural mitigation, preparedness in capacity building of the pupil teachers, teacher educators and other people are often given more emphasis.

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### Keywords:

Awareness;  
Hazard;  
Disaster;  
Disaster Management;

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**INTRODUCTION:**

Disaster, by Oxford dictionary's simple definition is an unexpected event, that kills a lot of people or causes huge damage".<sup>1</sup> The Centre for Research on the Epidemiology of Disaster (CRED) in Brussels, Belgium has come up with a modified definition i.e., "A disaster is a situation or event which overwhelms local capacity, necessitating a request to a national or international level of external assistance".<sup>2</sup> As per CRED an event can be classified as a disaster if, it kills more than 10 people/impacts or displaces more than 100 people/it is declared a national emergency/the country had to receive international assistance.

'Disaster' is defined as a crisis situation causing wide spread damage which far exceeds our ability to recover. Thus, by definition, there cannot be a perfect ideal system that prevents damage, because then it would not be a disaster. It has to suffocate our ability to recover. Only then it can be called as 'disaster'. Disasters are not totally discrete events. Their possibility of occurrence, time, place and severity of the strike can be reasonably and in some cases accurately predicted by technological and scientific advances. It has been established there is a definite pattern in their occurrences and hence we can do some extent reduce the impact of damage though we cannot reduce the extent of damage itself.

A disaster occurs when a significant number of vulnerable people experience a hazard and unlikely without external aid. (*Blaikie Piers, et al., 1994*). Disasters could be natural or human-caused. In the former category are geological hazards (earthquakes, tsunami/seismic sea waves, volcanic eruptions, mud flows), atmospheric hazards (hurricanes, tropical cyclones or typhoons, tornadoes, lightning-caused fires) and hydrological hazards (e.g. river or coastal floods). Human-caused disasters include heavy environmental pollution, industrial and technological disasters, major traffic accidents, epidemics and many fire accidents. Sometimes disasters can be triggered by combination of human activity and major natural disturbance.

We live in a developing country like India which has been greatly affected by disasters in the last two decades. Earthquake, Tsunami, Fires, Floods, Cyclones, Landslides and Bomb threats are main sudden onset disasters to which schools are most vulnerable in India. Some of the recent disasters that have affected the education sector in India are the Gujarat earthquake (2001) where 971 students and 31 teachers were killed, 1,884 schools collapsed; Tamil Nadu Fire (2004) incident where 93 children died in a fire due to explosion of a cooking gas cylinder, Kashmir earthquake (2005) where 17,000 students died at school, and 10,000 school buildings destroyed (Petal 2007). Unfortunately, it is impossible to forestall most disasters. Nevertheless, we can reduce its worst effects by being prepared.

The incident of disasters over the planet is increasing year by year. These disasters include natural calamities moreover as well as man-made conflicts like terrorist attack, war, chemical abuse etc. Children are our future. They must be shielded from disaster. A disaster resistance school and residential are our moral duty towards their safety and security. In this view of those facts the study was used out the depth of awareness in disaster management among pupil teachers.

**STATEMENT OF THE PROBLEM:**

"The awareness of disaster management among B.Ed. pupil teachers"

**AREA OF STUDY:**

Kolkata districts of West Bengal have been selected for the study because there are situated a number of private and Govt. B.Ed. colleges. It is very much convenience to the investigator to collect information from B.Ed. colleges in the chosen study area.

### **SIGNIFICANCE OF THE STUDY:**

Teachers and media play an important role in an effective disaster management system. This is the importance of holistic approach for disaster management. Isolated thought, preparation, awareness programme, attitude and other activities must be cooperatively integrated with the participation of all section of the community, for the community, and by the community.

Schools are the most effective source to include the awareness by educating the students about disaster management. The awareness inducted in their mind in the very young age and they able to collect more and more information and knowledge how to face the situation most effectively. In a day's come and make a positive attitude towards disaster management

Pupil teachers play an important role in effective disaster management system which is vital for a suitable future of life on the earth. Institutions which have a significant influence on the teacher to be trained are important sources for the transition of awareness of disaster management among students. Therefore, a survey of pupil-teachers was conducted to understand the disaster management awareness.

### **OBJECTIVES OF THE STUDY:**

1. To find out the disaster management awareness of the pupil teachers.
2. To find out whether there is significant difference in disaster management awareness among pupil teachers with respect to gender.
3. To find out whether there is significant difference in disaster management awareness among pupil teachers with respect to their locality.
4. To find out whether there is significant difference in disaster management awareness among pupil teachers with respect to their institution type.

### **HYPOTHESIS:**

H01: There is no significant difference in the awareness of disaster management between male and female pupil teachers.

H02: There is no significant difference in the awareness of disaster management between urban and rural pupil teachers.

H03: There is no significant difference in the awareness of disaster management between govt. aided and private college pupil teachers

### **DELIMITATION OF THE STUDY:**

1. The study is focuses on disaster management awareness of pupil teachers of B.Ed. colleges.
2. In the study only self-made disaster awareness measurement test is used.
3. The present study limited to data collection in the year 2018-2019.
4. Findings and conclusions of the study are based on only primary data.

## METHODOLOGY

### RESEARCH TYPE

This study is a **Descriptive Survey Research**. These studies also gather data regarding B.Ed. pupil teachers' awareness on disaster management. This was done through the use of a questionnaire.

### THE POPULATION:

The population of the study constituted all male and female govt. and private B.Ed. College pupil teachers of Kolkata districts during 2018-2019 academic sessions.

### THE SAMPLE:

The study was mainly confined to the pupil teachers of govt. and private teacher training institution in Kolkata. 120 populations (60 male and 60 female pupil teachers from different govt. and private teacher training institutions in Kolkata) were taken for the sample. Purposive sampling technique was used for the selection of samples. The samples of the study were heterogeneous type as a pupil teachers coming with a different profile like Gender and locality.

### SAMPLE DISTRIBUTION IS GIVEN IN TABLE NO-1 BELOW

VARIABLE	URBAN TEACHERS	RURAL TEACHERS	TOTAL TEACHERS
MALE TEACHERS	30	30	60
FEMALE TEACHERS	30	30	60
TOTAL TEACHERS	60	60	120

### SAMPLING TECHNIQUE:

There is situated a number of B.Ed. colleges in Kolkata Districts of West Bengal. There also govt. and private wise pupil teachers in respect of B.Ed. colleges in Kolkata. So, purposive sampling procedure was employed to select samples. Different B.Ed. college pupil teachers were selected as samples for our study.

### VARIABLE:

The present study includes the following variables.

### DEPENDENT VARIABLE:

Awareness in disaster management is selected as dependent variable.

### INDEPENDENT VARIABLE:

Gender, locality and institution types of the pupil teachers are considered as the independent variables.



**TOOLS AND TECHNIQUES:**

To study the awareness of disaster management among pupil teachers a questionnaire were used to collect data for the above said study.

**QUESTIONNAIRE:**

Self-made questionnaire were used for collecting data.

[Disaster Management awareness scale is prepared covering different phases of disaster management. It contained five sections. Section:A includes Disaster Phase. Section: B focused on Response phase. Section: C & section: D includes Recovery Phase & Risk reduction Phase respectively. Section E contained preparedness phase. Each section contained 6 items and the Likert(3 point scale) response mode of not at all aware (NA); somewhat aware (SA); extremely aware (EA).]

Test retest method was used for established of reliability of present scale. For this purpose the present scale was administrated twice with an interval of 10 days on total 100 pupil teachers. The coefficient thus obtained was 0.85 .Validation of the scale has found out with help of three experts.

**SOURCES OF DATA:**

Primary data in reference to awareness of disaster management among pupil teachers by Teachers' training institutes were collected by detailed questionnaire survey from the selected Teachers' training institutes existing in the study area.

**DATA COLLECTION AND ANALYSIS:**

The above mentioned tools were used for data collection from among the 120 pupil teachers.

The data analysis for this study is on-going process which began at the onset of data collection. Before the data can be effectively analysed it will be necessary to first convert it into a format that can be easily analysed.

Quantitative data was analysed and interpreted by different statistical methods (frequency, median, mode.). Cartographic techniques were applied for the analysis and graphical representation of data. Suitable diagrams, tables were prepared for the interpretation of the data. T-test was used for testing disaster management awareness level of pupil teacher respect their locality, gender and their school type. In this way generalization were made in reference to the said topic.

**ANALYSIS AND INTERPREATION OF DATA:****ANALYSIS OF DATA:**

The data were carefully analysed employing the appropriate statistical techniques.

1) Percentage was used to calculate the level of Disaster Management awareness pupil teachers.

2) For the comparison, between the Means of scores of male & female, urban & rural and govt. & private B.Ed. College pupil teachers used t-test.

**TABLE-2:****AWARENESS LEVELS OF PUPIL TEACHER IN DISASTER MANAGEMENT:**

SL. NO	DISASTER MANAGEMENT AWARENESS LEVEL	CLAS S	FREQUENC Y	PERCENTAGE OF PUPIL TEACHERS
1	very low	31-40	1	0.83
2	low	41-50	32	26.66
3	normal	51-60	28	23.33
4	moderate	61-70	22	18.33
5	high	71-80	26	21.66
6	Very high	81-90	11	9.16

**HISTOGRAM**  
**SHOWING NO OF PUPIL TEACHERS FALL IN DIFFERENTS DISASTER MANAGEMENT AWARENESS LEVEL**

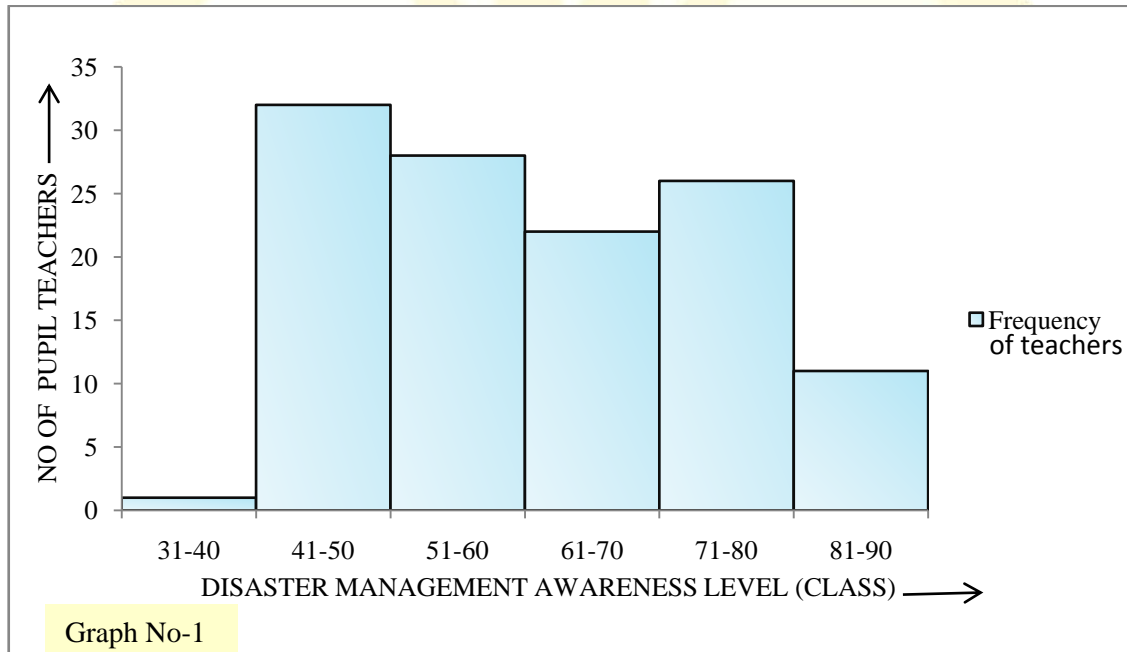
**INTERPRETATION:**

Table no.2 shows that 9.16% of the pupil teachers have very high Disaster management awareness level whereas 0.83% of pupil teachers have very low Disaster management awareness level. 26.66%, 23.33%, 18.33% and 21.66% of pupil teachers have found to be in low, normal, moderate & high Disaster management awareness level respectively.

Graph no.1 shows that only one pupil teacher has very low awareness in Disaster management. 11 pupil teachers have very awareness in Disaster management. Maximum 32 pupil teachers have low awareness in Disaster management.

**COMPARISON OF MEAN OF MALE AND FEMALE PUPIL TEACHER WITH RESPECT TO THEIR DISASTER MANAGEMENT AWARENESS LEVEL**

**Table no.3**

VARIABLE	N	MEAN	P-VALUE	t-VALUE
MALE	60	64.66	0.0263	2.2525
FEMALE	60	59.53		

**Table-3** reveals that the male pupil teachers have secured a better mean score than female pupil teachers.

It is found that mean of male pupil teachers is 64.66 (standard deviation is 13.26) and mean of female pupil teacher is 59.53 (standard deviation is 11.64) respect to their awareness of disaster management. Whether the difference of mean is significant or not 't'-test was employed and after analysis it was found that the calculated t(df118) is 2.25 and p-value is 0.025 at 0.05 significance level.so p value is less than 0.05.so it is significant at 0.05 significance level. H<sub>0</sub> or null hypothesis is rejected.

It is concluded that there is significant difference in awareness of disaster management between Male and Female pupil teachers. Consequently, the research hypothesis No.1 is rejected.

**COMPARISON OF MEAN OF URBAN AND RURAL PUPIL TEACHERS WITH RESPECT TO DISASTER MANAGEMENT AWARENESS LEVEL**

**Table no.-4**

VARIABLE	N	MEAN	p-value	T-VALUE
URBAN	60	63.80	0.1430	1.474
RURAL	60	60.40		

**Table-4** reveals that the urban pupil teachers have secured a better mean score than rural pupil teachers.

It is found that mean of urban pupil teachers is 63.80 (standard deviation is 12.57) and mean of female pupil teacher is 60.40 (standard deviation is 12.68) respect to their awareness of disaster management. Whether the difference of mean is significant or not 't'-test was employed and after analysis it was found that the calculated t (df118) is 1.474 and p-value is 0.1430 at 0.05 significance level.so p value is greater than 0.05.so it is not significant at 0.05 significance level. H<sub>0</sub> or null hypothesis is not rejected.

It is concluded that there is no significant difference in awareness of disaster management between urban and rural pupil teachers. Consequently, the research hypothesis No.2 is not rejected.

**COMPARISON OF MEAN OF GOVT. AND PRIVATE COLLEGE PUPIL TEACHERS WITH RESPECT TO DISASTER MANAGEMENT AWARENESS**

**Table no.-5**

VARIABLE	N	MEAN	p-value	T-VALUE
PRIVATE COLLEGE	60	64.16	0.074	1.80
GOVT. COLLEGE	60	60.03		

**Table-5** reveals that the private college pupil teachers have secured a better mean score than govt. college pupil teachers.

It is found that mean of private college pupil teachers is 64.14 (standard deviation is 13.41) and mean of govt. college pupil teacher is 60.03 (standard deviation is 11.68) respect to their awareness of disaster management. Whether the difference of mean is significant or not 't'-test was employed and after analysis it was found that the calculated t (df 118) is 1.8001 and p-value is 0.074 at 0.05 significance level. so p value is greater than 0.05. so it is not significant at 0.05 significance level. H<sub>0</sub> or null hypothesis is not rejected.

It is concluded that there is no significant difference in awareness of disaster management between Govt. College and private college pupil teachers. Consequently, the research hypothesis No.3 is not rejected.

## DISCUSSION

According to this study we know that moderate awareness level of teachers about disaster management. 9.16% of the pupil teachers have very high Disaster management awareness level whereas 0.83% of pupil teachers have very low Disaster management awareness level. 26.66%, 23.33%, 18.33% and 21.66% of pupil teachers have found to be in low, normal, moderate & high Disaster management awareness level respectively. Study also said that difference between awareness level of rural and urban pupil teachers' has been noticed. Male pupil teachers' are more aware than female teacher in both urban and rural case. It also found male urban are more aware than urban female and rural male, female pupil teachers. Urban pupil teachers are more aware about disaster management than rural teachers. Also told those rural females are less aware than others. Private college pupil teachers are more aware than govt. college pupil teachers in disaster management awareness.

## FINDINGS:

The study examined disaster awareness of B.ED college pupil teachers in Kolkata. The study adopted a descriptive survey design and targeted 120 pupil teachers. All 120 teachers were purposively selected sample for the study.

The findings of the study revealed that planning for disaster awareness in Kolkata districts and established that although a number of workshops and seminars on disaster awareness



have been planned and conducted on rear occasions, some of pupil teachers have participated in such workshops or seminars.

It was also established that crucial disaster awareness information materials such as school and college safety manuals were not available in most B.Ed. Colleges. It is therefore concluded that extent of planning for disaster awareness in these colleges in Kolkata inadequate to effectively prevent and mitigate disasters.

#### **MAJOR FINDINGS OF THIS STUDY:**

- ➡ The present study reveals that Disaster management awareness level of 69% pupil teachers which is moderate.
- ➡ There is significance difference between Disaster management awareness levels of pupil teachers in terms of gender.
- ➡ There is no significance difference between Disaster management awareness levels of pupil teachers in terms of locality.
- ➡ There is no significance difference between Disaster management awareness levels of pupil teachers in terms of institution type.

#### **CONCLUSION:**

On the basis of the findings of the study, it can be concluded that gender has significant effect in the perceived awareness for disaster management among the pupil teachers. It also concluded that locality and the type of institution have no significant effect in the perceived awareness for disaster management among pupil teachers.

Every school, college and community must take it seriously and strive continually to achieve highest safety. Every schools and colleges are unique by virtue of its teachers, students, location and culture. Pupil teacher's role is very important in mitigating the hazards and disasters in schools. The pupil teacher who is aware of disasters and its management can improve the practices successfully.

#### **IMPLICATION OF THE STUDY:**

- People teachers experience more awareness with regard to disaster management after and during their training period due to commitment to teaching profession. People teacher with high disaster management awareness level can successfully manage the disaster situation.
- They have to perform multi roles in their future professional life so it is vital the training institute plays a significant role in developing disaster management skill in them.
- Pupil teacher should not be compare needlessly.

- By organizing workshop and Community Based Training program Disaster management awareness level of pupil teacher should be enhanced.
- Group activities and team work should be encouraged.

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