Construction And Standardisation Of Awareness Towards Disaster Management For Teacher Trainees

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Abstract

The purpose of the paper is to determine the extent to which the Teacher trainee students are having the Awareness towards Disaster management. A well-structured questionnaire was administered among the teacher trainee students. Initially the tool was constructed with 80 statements posing questions which cover the topic in many dimensions. To standardize the tool the researcher used item difficulty and item discrimination index value test and finally 52 statements were retained for the final study. This paper discusses about the development of the tool to measure of the tool to measure the Awareness towards disaster management among teacher trainee students.

Keywords: Disaster Management, Teacher Trainees,

Introduction

All the world governments are concerning about the natural disasters such as Tsunami, Earthquake, Floods, Volcanic eruptions and strong winds. In 1989, the United Nations General Assembly declared the decade 1990-2000 as the International Decade for Natural Disaster Reduction with the objective to reduce loss of lives and property and restrict socio-economic damage through concerted international action, especially in developing countries. In India, the Indian Government is taking all the possible efforts to reduce the effects of natural disasters. Though the Government made considerable scientific and material progress the loss of lives and property due to disasters has not yet decreased. Natural disasters affect both developing and developed countries. The developing countries like India are gravely affected in terms of the loss of lives, adversity bared by population and the percentage of their GNP lost. Since 1991, two-third of the victims of natural disasters was from developing countries, while just 2 per cent were from highly developed nations. Those living in developing countries and especially those with limited resources tend to be more adversely affected. With the alarming rise in the natural disasters and vulnerability per se, the world community is strengthening its efforts to cope with it (www.tn.gov.in, 2013).

Disaster Management is the term which is recently popular in India. The National Disaster Management Authority (NDMA) has been constituted under the Disaster Management Act 2005, with the Prime Minister of India as its Chairman. The Government urges the importance of disaster management strongly and advised all the Academic Staff Colleges to conduct a Refresher Course on disaster management. In this context, it is essential to analyze the awareness about natural disasters and the management of disasters among the teacher trainees. This study shows that the awareness about disaster management should be improved among the

teacher trainees of higher education. It also reveals that both the male and female teacher trainees should be given in-service training in general awareness, activities and administration related to disaster management. The investigator decided to construct and standardize a test to measure the Awareness towards Disaster management of teacher trainee students. In order to develop the test at the preliminary stage the investigator consulted the experts in Disaster management, referred Disaster management books, journals, related studies and also visited websites and gathered a variety of information regarding Awareness towards Disaster management. Based on that as many as 80 Yes or No type questions covering the many dimensions.

Methodology

This test comprises of 80 items with many dimensions. The validated scale is a two point scale with the options namely Yes or No. Scores are given in the order of 1 and 0.The maximum mark for a question is 1 and the minimum mark is 0.therefore one can get a maximum score of 80 and a minimum score of 0 on this test. After having constructed the Awareness towards Disaster management the investigator administered it to a sample of 100 teacher trainee students studying in the teacher trainee students of Thiruvallur, Chennai and Kanchipuram District, Tamilnadu, in order to carry out the pilot study .the respondents were asked to put a tick mark. Then all the Questionnaire of 100 higher secondary students were scored carefully and the Questionnaire were arranged in the descending order from highest to lowest score. Then they were subjected to item analysis.

Item Analysis

Item analysis is an important step in the standardization of any test. Standardization of Awareness towards Disaster management. The item which secured highest and lowest 27% of the subject were considered and taken for the item analysis. In the present study there are 27 subjects belonging to low and high groups. To short list the statements the researcher used, item discrimination index and item difficulty values. In order to select the statements the researcher used the highest 27 and lowest 27 item scores. As many as 52 items having both the index of difficulty in the range of 40% to 90% and index of discrimination ranging from 0.30 to 0.70 have been chosen in order to form the final test.

Table -1 Table Showing the Awareness towards Disaster Management of Teacher Trainee Students

ITEM NO.	COREECT RESPONSES		H+L	H-L	DIFFICULTY INDEX =(H+L/54) *100	DISCRIMINATIVE INDEX=H-L/27	SELECTED / NOT SELECTED
	HIGHER LEVEL(H)	LOWER LEVEL (L)					
1	23	7	30	16	55.55556	0.592593	SELECTED
2	23	12	35	11	64.81481	0.407407	SELECTED
3	27	14	41	13	75.92593	0.481481	SELECTED
4	26	14	40	12	74.07407	0.444444	SELECTED
5	27	16	43	11	79.62963	0.407407	SELECTED
6	26	12	38	14	70.37037	0.518519	SELECTED
7	12	1	13	11	24.07407	0.407407	SELECTED
8	19	13	32	6	59.25926	0.222222	NOT SELECTED
9	21	12	33	9	61.11111	0.333333	SELECTED
10	27	15	42	12	77.77778	0.444444	SELECTED
11	25	6	31	19	57.40741	0.703704	SELECTED
12	24	22	46	2	85.18519	0.074074	NOT SELECTED
13	27	17	44	10	81.48148	0.37037	SELECTED
14	27	16	43	11	79.62963	0.407407	SELECTED
15	26	20	46	6	85.18519	0.222222	NOT SELECTED
16	24	26	50	-2	92.59259	-0.07407	NOT SELECTED
17	27	24	51	3	94.44444	0.111111	NOT SELECTED
18	24	17	41	7	75.92593	0.259259	SELECTED
19	27	21	48	6	88.88889	0.222222	NOT SELECTED
20	26	27	53	-1	98.14815	-0.03704	NOT SELECTED
21	25	19	44	6	81.48148	0.222222	NOT SELECTED
22	26	13	39	13	72.22222	0.481481	SELECTED
23	27	15	42	12	77.77778	0.444444	SELECTED
24	20	15	35	5	64.81481	0.185185	NOT SELECTED
25	23	13	36	10	66.66667	0.37037	SELECTED
26	27	15	42	12	77.77778	0.444444	SELECTED
27	27	25	52	2	96.2963	0.074074	NOT SELECTED
28	24	11	35	13	64.81481	0.481481	SELECTED
29	23	21	44	2	81.48148	0.074074	NOT SELECTED
30	27	16	43	11	79.62963	0.407407	SELECTED
31	27	18	45	9	83.33333	0.333333	SELECTED

32	27	23	50	4	92.59259	0.148148	NOT SELECTED
33	27	16	43	11	79.62963	0.407407	SELECTED
34	27	17	44	10	81.48148	0.37037	SELECTED
35	27	11	38	16	70.37037	0.592593	SELECTED
36	26	21	47	5	87.03704	0.185185	NOT SELECTED
37	24	15	39	9	72.22222	0.333333	SELECTED
38	27	17	44	10	81.48148	0.37037	SELECTED
39	27	26	53	1	98.14815	0.037037	NOT SELECTED
40	27	25	52	2	96.2963	0.074074	NOT SELECTED
41	25	12	37	13	68.51852	0.481481	SELECTED
42	27	18	45	9	83.33333	0.333333	SELECTED
43	27	25	52	2	96.2963	0.074074	NOT SELECTED
44	27	12	39	15	72.22222	0.555556	SELECTED
45	26	16	42	10	77.77778	0.37037	SELECTED
46	25	12	37	13	68.51852	0.481481	SELECTED
47	22	10	32	12	59.25926	0.444444	SELECTED
48	24	14	38	10	70.37037	0.37037	SELECTED
49	27	18	45	9	83.33333	0.333333	SELECTED
50	25	14	39	11	72.22222	0.407407	SELECTED
51	27	23	50	4	92.59259	0.148148	NOT SELECTED
52	24	10	34	14	62.96296	0.518519	SELECTED
53	27	25	52	2	96.2963	0.074074	NOT SELECTED
54	25	11	36	14	66.66667	0.518519	SELECTED
55	27	23	50	4	92.59259	0.148148	NOT SELECTED
56	27	24	51	3	94.44444	0.111111	NOT SELECTED
57	25	14	39	11	72.22222	0.407407	SELECTED
58	25	16	41	9	75.92593	0.333333	SELECTED
59	25	12	37	13	68.51852	0.481481	SELECTED
60	27	21	48	6	88.88889	0.222222	NOT SELECTED
61	25	16	41	9	75.92593	0.333333	SELECTED
62	27	13	40	14	74.07407	0.518519	SELECTED
63	27	22	49	5	90.74074	0.185185	NOT SELECTED
64	27	25	52	2	96.2963	0.074074	NOT SELECTED
65	27	16	43	11	79.62963	0.407407	SELECTED
66	27	17	44	10	81.48148	0.37037	SELECTED
67	25	20	45	5	83.33333	0.185185	NOT SELECTED
68	25	16	41	9	75.92593	0.333333	SELECTED
69	27	21	48	6	88.88889	0.222222	NOT SELECTED
70	26	15	41	11	75.92593	0.407407	SELECTED
71	25	11	36	14	66.66667	0.518519	SELECTED
72	27	15	42	12	77.77778	0.444444	SELECTED
73	24	18	42	6	77.77778	0.222222	NOT SELECTED
74	27	18	45	9	83.33333	0.333333	SELECTED
75	25	15	40	10	74.07407	0.37037	SELECTED
76	25	14	39	11	72.22222	0.407407	SELECTED
77	24	25	49	-1	90.74074	-0.03704	NOT SELECTED
78	25	13	38	12	70.37037	0.444444	SELECTED
79	26	21	47	5	87.03704	0.185185	NOT SELECTED
80	27	14	41	13	75.92593	0.481481	SELECTED

The value of 't' is above a measure of the extent to which a given statement differ between the high and the low group. Only those items having the 't' value is 1.75 and above only selected. This is the process of selection of 52 items from the initially 80 drafted items.

Reliability and Validity

Reliability refers to the accuracy of measurement by the test. In this study, co-efficient of internal consistency has been found to be 0.876 by split half method and followed by the use of spearman-brown prophecy formula. Its intrinsic validity was found to be 0.876 which clearly states that the tool is valid and the reliability of this tool was found to be 0.928 by using Cronbach's alpha, which is high and therefore the tool is reliable.

Conclusion

This tool will be very much useful to measure the Awareness towards Disaster management among teacher trainee students. This highlights the need for disaster safety education. It is evident that disaster has significant impact on school children. Improvement in knowledge and practices of teacher trainee equip the teacher trainees with knowledge of how to react if an emergency situation arises. Teacher trainee should take initiative

to improve their knowledge and practices by using booklet, posters, brochures, charts, etc. The college authority should provide such material to the teacher trainees.

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