A STUDY OF THE LEVEL OF DISASTER MANAGEMENT AWARENESS BEFORE AND AFTER THE INTERVENTION MODULE (ACTION MODEL) AMONG PRE-SERVICE TEACHERS OF PILLAI COLLEGE OF EDUCATION AND RESEARCH, CHEMBUR.

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Abstract

(This research was funded by University of Mumbai as a Minor Research Project.)
The aim of this research was to study the level of disaster management awareness before and after the intervention module among Pre-service Teachers of Pillai College of Education and Research, Chembur. A questionnaire consisting of 14 statements ranging from Agree to Strongly Disagree, Undecided and 16 questions in form of Match the column and 14 in the form of Multiple choice. The validity and reliability of the tools were established, and were distributed among the target population and primary data gathered through questionnaire were analysed and discussed in accordance with the objectives and hypothesis of the study. There is significant difference between the level of pre and post disaster management awareness scores before and after the intervention module, among the Pre-service teachers of Pillai College of Education and Research, Chembur. The reasons for this result may be that the explicitly designed intervention module (ACTION Model) played a significant role in fostering more awareness about disaster management as it was implemented for more than one week through rigorous exposure through various activities and training by experts in the field of disaster management which helped them to gain more insight about disaster management.

Keywords: disaster management, ACTION Model, Pre-service teachers.

Introduction

The importance of education in promoting and enabling Disaster management has already been identified by researchers and policy makers. In doing so, there is a renewed focus on disaster risk education in schools. Mainstreaming Disaster Management into school curricula aims to raise awareness and provide a better understanding of disaster management for children, teachers and communities. Training in disaster management will help in saving lives of many thus saving humanity. There is an urgent need for disaster management training for pre service teachers so that they are well equipped to cope up with emergencies and disasters. By training the pre-service teachers we are ensuring to produce future disaster managers and leaders. Thus, we are ensuring sustainability and building of a resilient society. This would help in promoting a culture of disaster preparedness.

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Hence the researcher felt the need to develop an intervention module (ACTION Model) for Pre-service teachers as they are shouldered the responsibility of safe guarding the students in schools and in Nation building.

**Objectives of the study:**
To compare the level of pre and post disaster management awareness scores before and after the intervention programme, among the Pre-service teachers of Pillai College of Education and Research, Chembur.
To study the effectiveness of the Explicitly Designed Intervention Training Module (ACTION Model) on Disaster Management.

**Hypothesis of the study:**
There is no significant difference between the level of pre and post disaster management awareness scores before and after the intervention programme, among the Pre-service teachers of Pillai College of Education and Research, Chembur.

**Methodology of the study:**
For the present study the researchers adopted following methodologies:
Descriptive Analysis: Mean, Median, Mode, SD, Skewness and Kurtosis
Experimental: One group Pretest-Posttest Design

**Inferential statistics:**
In the present study the researchers used the inferential statistical techniques for testing the hypotheses i.e. the ‘t’ test.

**Sampling:** Purposive sampling

**Sample of the study:**
The population consisted of 38 Pre-service teachers of B.Ed belonging to Pillai College of Education & Research, Chembur.

**College Selected for the study:**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of the College</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pillai College of Education and Research, Chembur.</td>
<td>38</td>
</tr>
</tbody>
</table>

**Tools Used for the Study:** As regards the tool for the study, there was no tool available to measure the Disaster Management awareness. The researcher had to prepare the tool on Disaster Management awareness and also Intervention Module (ACTION Model).
The following tools were constructed by the investigator:

1. A questionnaire to find the Disaster Management Awareness among Pre-service Teachers of B.Ed colleges.

2. An Intervention Module (ACTION Model) on Disaster Management Strategies.
   - A - Awareness related to disaster and disaster Management
   - C - Capacity building for disaster Management - First Aid, Types of Injuries, Fractures etc.
   - T - Training in fire-fighting, search and Rescue etc.
   - I - Integration of disaster management activities into curriculum

O - Organization of preparedness, emergency plans for survival

N - Nurture the skills to basics of disasters.

**DESCRIPTIVE ANALYSIS**

*Descriptive Statistics of Disaster Management Awareness Pre-test scores of the Pre-service Teachers of Pillai College of Education and Research, Chembur for the study.*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>MEAN</th>
<th>MEDIAN</th>
<th>MODE</th>
<th>SD</th>
<th>SKEWNESS</th>
<th>KURTOSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38</td>
<td>69.76</td>
<td>71</td>
<td>73</td>
<td>8.20</td>
<td>-0.8255</td>
<td>0.9709</td>
</tr>
</tbody>
</table>

The Mean of the distribution is 69.76 and the Median is 71. This shows that the Mean is lower than the Median. The Mode of the distribution is 73 which is higher than the Mean. This indicates that the difference between Mode and Median is marginally different whereas difference between Mean, Median and Mode is substantially different and hence the distribution is near to normal. Thus the sample selected is representative of the population. The Skewness of the distribution is -0.8255 i.e. the distribution is negatively skewed. The Kurtosis of the distribution is 0.9709 which is more than 0. Hence the distribution curve is leptokurtic.

*Descriptive Statistics of the Disaster Management Awareness Post-test scores of the Pre-service Teachers of Pillai College of Education and Research, Chembur for the study.*
Table 1.3 Descriptive Statistics Of Disaster Management Awareness Post-Test Scores Of Pre-Service Teachers Of Pillai College Of Education And Research, Chembur For The Study.

<table>
<thead>
<tr>
<th>N</th>
<th>MEAN</th>
<th>MEDIAN</th>
<th>MODE</th>
<th>SD</th>
<th>SKEWNESS</th>
<th>KURTOSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>81.78</td>
<td>83</td>
<td>84</td>
<td>8.17</td>
<td>-0.614</td>
<td>0.389</td>
</tr>
</tbody>
</table>

The Mean of the distribution is 81.78 and the Median is 83. This shows that the Mean is lower than the Median. The Mode of the distribution is 84 which is higher than the Mean. This indicates that the difference between Mode and Median is marginally different whereas difference between Mean, Median and Mode is substantially different and hence the distribution is near to normal. Thus the sample selected is representative of the population. The Skewness of the distribution is -0.614 i.e. the distribution is negatively skewed. The Kurtosis of the distribution is 0.389 which is more than 0. Hence the distribution curve is leptokurtic.

**HYPOTHESIS**

**Testing of Hypothesis**

There is no significant difference in the level of disaster management awareness scores of pre-test and post-test of Pre-service Teachers of Pillai College of Education and Research, Chembur.

**TABLE 1.4**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Df</th>
<th>MEAN</th>
<th>SD</th>
<th>Table Evaluation t value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.05</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-test</td>
<td>38</td>
<td>37</td>
<td>69.7</td>
<td>8.20</td>
<td>2.0</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>38</td>
<td>38</td>
<td>81.7</td>
<td>8.17</td>
<td>2.0</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Awareness</td>
<td>8</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>4.60</td>
<td>S</td>
</tr>
</tbody>
</table>

From the table 1.3 it can be seen that for df = 37, the table value at .05 level of significance is 1.98 at .01 level of significance it is 2.63. The obtained value of t is 4.604 which is more than the tabulated values at both level of significance. Hence the null hypothesis is rejected at both 0.05 and 0.01 level of significance.

**Conclusion:** There is significant difference in the level of Pre-test and Post-test disaster management awareness scores of Pre-service teachers of Pillai College of Education and Research, Chembur.

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Findings of the study:
There is significant difference in the level of Pre-test and Post-test disaster management awareness scores of Pre-service teachers of Pillai College of Education and Research, Chembur.

Discussion:
The mean value of Post-test disaster management awareness scores of Pre-service teachers is more than the Pre-test of disaster management awareness scores of Pre-service teachers of Pillai College of Education and Research, Chembur. The reasons for this result may be that the explicitly designed intervention module (ACTION Model) was effective in fostering more awareness about disaster management. It helped in capacity building of disaster management strategies of pre-service teachers through various training program first aid, emergency methods, rescue, rope rescue, integration of disaster management awareness into curriculum through various subjects and activities. The intervention module (ACTION Model) promoted organization of preparedness and emergency plans for survival in the form of charts and nurtured the basics of disasters. Thus the intervention module (ACTION Model) implemented for more than one week through rigorous exposure and training by experts in the field of disaster management helped them to gain more insight about disaster management.

Educational Implications:
1. Disaster Management awareness should be promoted among the Pre-service teachers to develop resilient society for disaster preparedness.
2. B.Ed curriculum should include curricular and co-curricular activities endorsing disaster management strategies.
3. Training in disaster management prevention, mitigation, preparedness and response is very essential for B.Ed Pre-service teachers.
4. Teacher Education Programs should include Disaster Management as an interdisciplinary subject.
5. Develop Manuals and Teacher’s guide for disaster management.
6. Field visits to disaster management unit/cell should be encouraged to understand its functioning.
7. Pre-service teachers should be trained for simulated emergency drills and exercises.

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8. Pre-service teachers should be trained for preparing emergency plans for survival.

9. Post-traumatic counseling for disaster management should also become a part of B.Ed curriculum.

10. Setting up a disaster management cells in educational institutions and in community should be made mandatory.

Websites:

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