CHAPTER VI

SUMMARY AND CONCLUSION

6.0 OVER VIEW:

This chapter summarizes the present study and also discusses the major findings, recommendations for the present study, suggestions for further research and conclusion.

6.1 SUMMARY

Disasters happen irrespective of time. The knowledge related to the happening, causes and effects of disaster is very much essential. Thus disaster management becomes very important which no one can neglect. Hence managing disasters is vital to avoid the destruction of possession and life of mankind. Particularly in today’s world teachers are the one who should have compulsory knowledge about disaster and its management strategies. The coastal regions of Tamilnadu often face the disasters like flood, cyclone, tsunami etc. Due to this there is a heavy loss in life and property. One should have knowledge on disaster management to overcome these types of disasters.
In Japan the disaster like earthquake, cyclone and tsunami often occurs. Due to the awareness on disaster management they minimize too much loss of life, but of course they face only material loss.

Disaster management should be brought as a compulsory subject at the school level itself. The teachers need to be trained well in disaster management. Real time experience and practical knowledge should be given to the teachers than theoretical knowledge because the practical knowledge sounds well.

**STATEMENT OF THE PROBLEM:**

Drastic changes occur due to the fast development in science and technology. From ancient period mankind have been facing many disasters both natural and artificial, such as tsunami, war, storm, famine, drought, fire, or bomb blast. One cannot stop natural disasters, but can have awareness and follow the safety measures to protect their lives. Disasters happen in several ways. For example, on January 26, 2001, Gujarat faced a heavy blow to life due to the earthquake in Bhuj district.

On December 26, 2004 Tsunami, caused a heavy loss of innocent lives and had shaken the entire world. After one such disaster, December 15, 2011 Thane cyclone occurred and destroyed more than 1000 hectares of agriculture lands. Simultaneously flood has occurred in Cuddalore, Karaikal, Chennai and Pondicherry. If one has awareness on tsunami, cyclone and floods, one could take
action to minimize the loss of lives and possessions which includes safety and security of life. Such awareness program will have an impact on disaster management. Spreading messages for the welfare of an individual or a village through any media is a way of imparting education which gradually bring changes.

It is true, that different types of disasters happen in various parts of the earth. Children are the main victims of such disasters. Hence the disaster management is important for the teachers to safeguard the lives of mankind and in turn they can also impart it to others in future.

**TITLE OF THE RESEARCH:**

“DEVELOPMENT AND TESTING OF MULTIMEDIA PACKAGE ON DISASTER MANAGEMENT FOR PRIMARY SCHOOL TEACHERS”.

**OPERATIONAL DEFINITIONS:**

**DISASTER:**

Disaster is referred to us a sudden accident or a natural catastrophe that causes great damage or loss of life. *Oxford Dictionary* (2013)

In this present study the investigator refers disaster to an unexpected natural flood, cyclone and tsunami of substantial extent causing significant physical
damage or destruction, loss of life or sometimes permanent change to the natural environment.

**DISASTER MANAGEMENT:**

Disaster management means managing resources and various responsibilities to deal with all humanitarian aspects of emergencies. This may include preparedness, response and recovery. The purpose of disaster management is to lessen the impact of disasters.

- *Web definition (Wiki Pedia)*

In this present study the investigator refers Disaster management to how one can manage and implement the action of plan with reference to cyclone, flood and tsunami.

**MULTI MEDIA:**

Multimedia is the technology engaging a variety of media, including text, audio, video, graphics and animation, either separately or in combination with computers to communicate ideas or to disseminate information.

In this present study the investigator refers multimedia to teach the electronic module which includes both audio / video.
OBJECTIVES OF THE STUDY:

The Major and specific objectives of the study are:

MAJOR OBJECTIVES:

1. To develop multimedia package on disaster management for primary school teachers.

2. To generate awareness on disaster management through multimedia package among primary school teachers.

3. To test the effectiveness of multimedia package on disaster management developed for primary school teachers.

SPECIFIC OBJECTIVES:

4. To generate awareness on tsunami and disaster management through multimedia package among primary school teachers.

5. To generate awareness on cyclone and disaster management through multimedia package among primary school teachers.

6. To generate awareness on flood and disaster management through multimedia package among primary school teachers.
HYPOTHESES:

1. There is no significant difference between pretest and posttest score of the primary school teachers with regard to their awareness in disaster management.

2. There is no significant difference between the primary school teachers in their awareness on disaster management with regard to their gender.

3. There is no significant difference between the primary school teachers in their awareness on disaster management with regard to their locality.

4. There is no significant difference between the primary school teachers in their awareness on disaster management with regard to their marital status.

5. There is no significant difference between the primary school teachers in their awareness on disaster management with regard to their personal experience of disaster.

6. There is no significant difference between the primary school teachers in their awareness on disaster management with regard to their residence.

7. There is no significant difference between the primary school teachers in their awareness on disaster management with regard to the training they received in disaster management.
8. There is no significant difference among the primary school teachers in their awareness on disaster management with regard to the type of school management.

9. There is no significant difference among the primary school teachers in their awareness on disaster management with regard to their age group.

10. There is no significant difference among the primary school teachers in their awareness on disaster management with regard to their educational qualification.

11. There is no significant difference among the primary school teachers in their awareness on disaster management with regard to their teaching experience.

12. There is no significant difference among the primary school teachers in their awareness on disaster management with regard to the size of the population in their work place.

13. There is no significant difference among the primary school teachers in their awareness on disaster management with regard to their socio economic status.

14. There is no significant relationship between the dimensions of awareness on disaster management among primary school teachers
15. There is no significant difference between the retention of the primary school teachers in their awareness on disaster management with regard to their gender.

16. There is no significant difference between the retention of the primary school teachers in their awareness on disaster management with regard to their locality.

17. There is no significant difference between the retention of the primary school teachers in their awareness on disaster management with regard to their marital status.

18. There is no significant difference between the retention of the primary school teachers in their awareness on disaster management with regard to their personal experience of disaster.

19. There is no significant difference between the retention of the primary school teachers in their awareness on disaster management with regard to their residence.

20. There is no significant difference between the retention of the primary school teachers in their awareness on disaster management with regard to the training they received in disaster management.
21. There is no significant difference among the retention of the primary school teachers in their awareness on disaster management with regard to the type of school management.

22. There is no significant difference among the retention of the primary school teachers in their awareness on disaster management with regard to their age.

23. There is no significant difference among the retention of the primary school teachers in their awareness on disaster management with regard to their educational qualification.

24. There is no significant difference among the retention of the primary school teachers in their awareness on disaster management with regard to their teaching experience.

25. There is no significant difference among the retention primary school teachers in their awareness on disaster management with regard to the size of the population in their work place.

26. There is no significant difference among the retention of the primary school teachers in their awareness on disaster management with regard to their socio economic status.
27. There is no significant difference between pretest and retention of the primary school teachers with regard to their awareness on disaster management.

28. There is no significant difference between posttest and retention of the primary school teachers with regard to their awareness on disaster management.

29. There is no significant difference between gain and retention of the primary school teachers with regard to their awareness on disaster management.
RESEARCH DESIGN:

The design of research is given below:

<table>
<thead>
<tr>
<th>Research Method</th>
<th>Variables</th>
<th>Population</th>
<th>Samples</th>
<th>Tools</th>
<th>Analysis and Statistical Techniques</th>
</tr>
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METHODS OF STUDY

The methods adopted by the researcher for present study are survey and experimental method.

SURVEY METHOD

This method is mostly used in social science research. In the present study the investigator has adopted the survey method and research has been conducted among primary school teachers in Kanyakumari, Cuddalore and Nagapattinam Districts and also in Union territory of Pondicherry. The investigator intends to find the level of attitude, interest skill, strategies and knowledge about disaster management among primary school teachers of these areas.

EXPERIMENTAL METHOD

The experimental method involves manipulating one variable to determine if changes in one variable cause changes in another variable. The investigator has chosen the experimental method. The experimental design adopted for the present study is “One group pre test –Post test design”, because experimentation is the most scientifically sophisticated research method in Humanities. Based on this the investigator has prepared the multimedia package with help of supervisor and subject experts. Pretest was conducted to test the entry level performance of the
The multimedia package is developed to create awareness about disaster management. After the intervention the posttest was conducted to evaluate the exit level performance. After an interval of two months, the same test was conducted to find out the retention.

MULTIMEDIA PACKAGE DEVELOPED ON FLOOD, CYCLONE AND TSUNAMI AND TESTING

The investigator has developed a multimedia package on disaster management.

The multimedia package is self-explanatory and conveys all the information regarding safety, preparedness, relief and rescue, and rehabilitation to safeguard the lives and property from all the disasters. This multimedia package also provides information such as how and when disasters occur? What are the reasons for occurrence of disasters? What are the preventive measures and precautions? Do’s and don’ts at the time of disasters especially with reference to flood, cyclone and tsunami are depicted in which runs for twenty minutes multimedia package.

Multimedia is a combination of audio, video, animation, text etc. The module was prepared with the help of multimedia technology. When the information is provided visually, it will remain in the minds of the teachers forever. When the concept is delivered in demonstration form, it provides the first-
hand experience and in depth knowledge about disaster management. It teaches the teachers about various disasters and disaster management. The multimedia package is effectively delivered and the teachers visualized it for about 26 minutes.

This multimedia package is such an edutainment that serves the purpose of teaching learning in the present scenario. This is an educational module on disaster management. The main focus is on three main disasters viz.

1) Cyclone
2) Flood
3) Tsunami

The multimedia package includes module over view, objectives of the study, video, text, questions and answer, reference and summary. There is a button which helps the reader to link the various components of the module is also provided in the multimedia package.

MULTIMEDIA MAIN PAGE

The main page of the multimedia package consist of the various button such as module over view, objectives of the study, video, text, questions and answer, reference and summary. There is a button which helps the reader to link the various components of the module prepared in the multimedia package. The
function of each button is explained and proper links has been given in this package.

MODULE OVERVIEW

In the module overview button consist of introductory part of the entire multimedia package.

OBJECTIVES

This button consists of major objectives of the preparation of this Multimedia package.

VIDEO

Under video button the aspects included are

1) Introduction
2) Cyclone
3) Flood
4) Tsunami
5) Disaster Management
INTRODUCTION (Video -2)

Introduction depicts the video on what is disaster and types of disaster.

CYCLONE (Video -3)

The cyclone is depicted in detailed video clippings on what will be the existing situation in the cyclone affected area, the effect of cyclone on the life and possession of mankind. This part ends with the preventive measures and management techniques, how to overcome the effects occurred before and after cyclone.

FLOOD (Video-4)

The video clipping on flood depicted what is flood, how it occurs, what is the situation, its preventive measures and the management tactics to rescue. Also this video explains who is mostly affected through flood.

TSUNAMI (Video -5)

The video clipping on tsunami depicted what is tsunami, the scientific reasons for the occurrence of tsunami, its affect in the coastal area, the preventive measures to be taken and also the management strategies.
DISASTER MANAGEMENT (Video-6)

The disaster management video clipping depicted the safety, preparedness, relief and rescue on disaster management. What should be done before disasters occurs, at the time of disasters and after disasters take place. The video also explains how the disaster management teams should be initiated during disasters. The role of school and teacher is also highlighted.

The investigator in the concluding part, rather than managing the disaster after its occurrence, the disasters preventive measures should be taken to save the lives of the people as well as the environment. Hence it should not be exploited or depleted.

TEXT BUTTON

The text buttons consist of text that includes the content of disasters such as cyclone, flood and tsunami.

QUESTIONS AND ANSWER BUTTON

The questions and answer session which includes 20 questions on the content of the module. These questions will help the individual to self-evaluate them how far they gained knowledge in the content of disasters.
SUMMARY BUTTON

This session includes the summary of the module.

REFERENCE BUTTON

This session includes reference in which the investigator has included the glossary.

This multimedia package is mainly developed to enable the primary school teachers to understand various disasters and their impact, remedial measure. These kinds of information are covered in this package.

RESEARCH FRAME WORK:

This research study consists of three phases. In each phase the same tool was administered to the teachers and their responses are obtained.

Phase: I

Pre test

The tool consists of 46 items in four point scale related to awareness on disaster management. The second tool consists of 29 items with multiple choices was used to know the entry behavior of primary school teachers.
Phase: II

Post test

In the second phase a 26 minutes multimedia package on disaster management was projected to the teachers and posttest was conducted immediately to find out how far the awareness has been created among them after they viewed the multimedia package.

Phase: III

Retention test

The same tool was again administered to the teachers after a period of two months and the level of retention was analysed.

STATISTICAL TECHNIQUES USED:

Gain ratio and retention ratio was calculated to find out the effectiveness of multimedia package in creating the awareness on disaster management in primary school teachers.
GAIN RATIO:

After phase II, with the score of pretest and posttest gain ratio was calculated using the following formula

\[
\text{Gain Ratio} = \frac{\text{Posttest score} - \text{Pretest score}}{\text{Maximum possible score - posttest score}} \times 100
\]

RETENTION RATIO:

After Phase III, retention of the teachers was calculated by finding the retention ratio using the following formula

\[
\text{Retention Ratio} = \frac{\text{Retention score}}{\text{Post test score}} \times 100
\]

RESEARCH TOOLS

Questionnaires were used for data collection.

DESCRIPTION OF THE TOOL:

The content of the tool includes questions related to awareness on disaster management with dimensions like knowledge, attitude, interest, skills and
strategies, preventive activities for better disaster management among the primary school teachers.

**TOOL: 1**

For primary school teachers working in coastal areas.

This tool disaster management questionnaire consists of 46 items in a four point scale related to awareness on disaster management. The tool mainly focused on the following dimensions

1. Attitude towards Disaster Management
2. Skills required for disaster Management
3. Interest in Disaster Management
4. Strategies of Disaster Management

**TOOL: 2**

The second tool awareness and knowledge about disaster management consists of 29 items with multiple choices. The tool focused on the dimension knowledge about Disaster Management
VALIDITY OF THE TOOL

The questionnaire was constructed on disaster management by S.Devi and Dr.V.Rajeswari (2010) to collect data from the primary school teachers. The investigator consulted the guide, subject experts and obtained Jury’s opinion. Necessary modification was carried out as suggested by the experts.

RELIABILITY OF THE TOOL:

The investigator conducted a pilot study with 50 samples from the disaster affected areas and reliability co-efficient was found. For each dimensions as follows.

1. Knowledge about Disaster Management reliability co-efficient was found to be 0.8417
2. Attitude towards Disaster Management reliability co-efficient was found to be 0.6121
3. Skills required for Disaster Management reliability co-efficient was found to be 0.8378
4. Interest in Disaster Management reliability co-efficient were found to be 0.8693
5. Strategies of Disaster Management reliability co-efficient was found to be 0.8519
GEOGRAPHICAL AREA OF THE STUDY:

Tamilnadu was highly affected by tsunami in the year 2004, more than 10,776 people were subjected to death and 5,640 people were missing in Tamilnadu. Again Tamilnadu and Andhra Pradesh were severely affected by Laila cyclone on 17\textsuperscript{th} May 2010. Cuddalore district and Union territory of Pondicherry were drastically affected by Thane cyclone in December 2011. Nilam cyclone affected Tamilnadu on 28\textsuperscript{th} October 2012 and 21 people passed away. Hence East Coast of Tamilnadu and Pondicherry was selected for this study.

VARIABLES:

The investigator has to select three types of variables viz., one is Independent variable, dependent variables and other is personal variables. The independent variable is Multimedia Package and dependent variables are Skill, Knowledge, Interest and Strategies. Personal variables are Gender, Place of Residence, Marital Status, Age group, Education qualification, Experience in Disasters, Teaching Experience, Type of Management.

INDEPENDENT VARIABLE:

The investigator has to select a Multimedia package which is the independent variable for this study.
DEPENDENT VARIABLES:

The investigator has to concentrate on three types of dependent variables for this study namely Knowledge, Attitude, Skill, Interest and Strategies

PERSONAL VARIABLES:

The investigator has chosen the following personal variables for the present study.

GENDER:

In the socialization process of educational institution it is found that Men and Women teachers, boys and girls do differ in their perception of teaching, understanding, learning, and performance. Gender differences do exist in the society. Hence Gender is taken into consideration in this investigation.

PLACE OF RESIDENCE:

Place of Residence is considered as one of the important variables of the study by the investigator since teachers hailing or working in the disaster prone areas may have more experience or exposure. Hence the investigator has planned to compare the teachers who are from coastal area and non coastal areas. Hence this variable is taken for this study.
MARITAL STATUS:

It is assumed that married people shall be mentally and emotionally matured when compared to youth who yet to get married. Hence the investigator has taken this as a variable for the study.

AGE GROUP:

Age factor is one of the important variable. Age reflects one’s experience and exposure. Therefore it is also taken into consideration.

EDUCATIONAL QUALIFICATION:

In practical situations, the educated persons can be easily oriented and effectively trained when compared to the people who have less education profile. Therefore educational qualification as a variable also taken for comparative analysis.

EXPERIENCE IN DISASTERS:

It is obvious that people who have any experience of any type of disaster may differ in their attitude and learning style when compared to their counterparts. Hence it is also taken up for investigation.
TEACHING EXPERIENCE:

Experienced person may have better attitude towards disasters than that of the people who do not have. Hence the investigator has taken this variable.

TYPE OF MANAGEMENT:

The investigator has taken this variable because different management of schools adopt different ways of training their children. It includes various strategies, infrastructure and qualified teachers. Hence the investigator has taken this also as one of the variables.

SAMPLE:

The investigator collected data from 300 primary school teachers working in the east coastal areas. Purposive and cluster sampling techniques were adopted by the investigator to select the area and sample for the present study.

LIMITATIONS OF THE STUDY:

The following are the limitations of the study

- The investigator selected only the disaster affected coastal areas in Tamil Nadu and Union territory of Pondicherry for this study.
• Teachers working only in the disaster affected areas were considered for this study.

• The main contribution of this research is “developing a multimedia package on disasters and management for primary school teachers” since the investigator has developed this package, due to time constraint and availability of sample one group pre test - post test design was adopted for the present study.

**DELIMITATIONS OF THE STUDY:**

The following are the delimitations of the study

• Only primary school teachers have been taken for this study.

• This study was focused on disasters namely Cyclone, Flood and Tsunami.

**6.2 MAJOR RESEARCH FINDINGS:**

• There is a significant difference between pretest and posttest scores of the primary school teachers with regard to their awareness on disaster management. It is inferred that pretest score and posttest score of primary school teachers differ significantly in their knowledge, attitude, interest, skill and strategy on disaster management. It is found that the posttest score is high when compared to the
pretest score with regard to the dimensions knowledge, attitude, interest, skill and strategy on disaster management.

• There is a significant difference is found between men and women primary school teachers awareness on disaster management with regard to their pretest score. It is inferred that men and women teachers do differ significantly in their knowledge on disaster management at their entry level performance. It reveals from the pretest score that the men teachers have attained knowledge on disaster management than the women teachers. It is inferred that they acquired knowledge on disaster management at same level after the intervention given through multimedia package. Overall gain ratio reveals that women teachers are better than men teachers in the dimensions of attaining knowledge and interest. Whereas men primary school teachers were better than women teachers in attitude, skill and strategy on disaster management.

• There is a significant difference between rural and urban area primary school teachers on awareness of disaster management in their entry level as far as overall pretest score is compared. It is inferred that rural and urban area primary school teachers do differ significantly in their strategy on disaster management when compared to their pretest score. The pretest score reveals that the urban area primary school teachers have adapted the strategy on disaster management when
compared to rural area primary school teachers. In the same way overall gain ratio reveals that the teachers have gained awareness on disaster management through the multimedia package.

- There is a significant difference between married and unmarried primary school teachers pretest score in the dimensions like knowledge and interest. Whereas the gain ratio reveals that the dimension “interest” differ significantly between married and unmarried primary school teachers on disaster management. The posttest score reveals that both married and unmarried primary school teachers have shown interest in the awareness on disaster management through the intervention of multimedia package. When the overall gain ratio was calculated it is inferred that both married and unmarried teachers have acquired same level of awareness on disaster management through the intervention of multimedia package, whereas unmarried teachers high in knowledge and strategy in the awareness on disaster management when compared to the married teachers. Since the married teachers were commitments with family constraints whereas unmarried teachers do not have such constraints and commitments.

- The pretest score reveals that there is a significant difference between experienced and inexperienced primary school teacher’s awareness on disaster in the dimensions like knowledge, attitude, skill and strategy in facing the disaster. Gain
ratio reveals that the experienced and inexperienced primary school teachers do 
differ significantly in their awareness of attitude on disaster management. Hence 
it is found that the intervention of multimedia package have created an attitudinal 
change in knowing about the causes, relief, rescue and preparedness on disasters 
to the inexperienced teachers than the experienced teachers.

• There is a significant difference in the posttest score of the primary school 
teachers with regard to their residence. It is found that there is a significant 
difference in the overall posttest score of the primary school teachers with regard 
to their residence. It is also found that the primary school teachers who are 
resident of disaster affected area are better in their attitude on disaster 
management than the primary school teachers who are nonresident of disaster 
affected areas. When the overall gain ratio is calculated it is inferred that the 
teachers who are in affected area are better than the teachers in disaster non 
affected area. Hence the teachers who are resident of affected area aware about 
the occurrence of disasters and its causes.

• There is no significant difference between the primary school teachers in their 
overall pretest score, overall post test score and also in their overall gain score 
with regard to their training in disaster management. When the overall gain score
is calculated it is inferred that the primary school teachers who have received training in disaster management are better than the primary school teachers who have not received training in disaster management.

- There is a significant difference the overall pretest score and overall gain ratio among the primary school teachers awareness on disaster management to the type of school management. The results from the pretest score reveals that teachers have awareness on disaster management in the dimensions like knowledge, attitude, interest and strategy whereas the teachers shows high attitude, interest and strategy in the gain ratio. Duncan Multiple Range Test (DMRT) There is a significant difference among the type of school management. It reveals that government school teachers do significantly differ with the other type school teachers in the dimensions like knowledge and strategy in their pretest, attitude in gain and overall pretest. In the same way government school teachers do significantly differ with government aided school teachers in the dimensions like attitude and interest of pretest score and adopted strategy in the gain and overall gain ratio.
There is a significant difference among the primary school teachers awareness on disaster management to their age group in the overall pretest score. It is inferred from the dimension wise analysis that there is a significant difference among the primary school teachers awareness on disaster management in the dimensions like knowledge and strategy in the pretest score. The Duncan multiple Range Test (DMRT) pretest score reveals that teachers with below 30 years do significantly differ with other age group teachers in the dimensions like knowledge and strategy. The overall pretest score reveals that the primary school teachers with age group of less than 30 years found to differ significantly with the age group of 40-50 years and above 50 years in their awareness on disaster management.

There is a significant difference among the primary school teacher in their pretest score and also the gain score in their awareness on disaster management to their educational qualification. It is found that there is a significant difference in the pretest score among the primary school teachers in their awareness on disaster management in the dimensions like knowledge, interest, strategy and skill. It is also found that there is a significant difference in the gain score among the primary school teachers in their awareness on disaster management in the dimension of knowledge and Strategy. Duncan Multiple Range Test (DMRT) the pretest score of the teachers qualified with M.Phil differ significantly with the other group of teachers in the of dimensions knowledge, skill, interest and
strategy. Also the gain ratio of the teachers qualified with M.Phil differ significantly with other group of teachers in the dimensions like knowledge and strategy. But the pretest score of teachers qualified with M.Phil differ significantly with teachers qualified with D.T.Ed in the dimensions like interest, skill and overall gain ratio. It is also inferred that the overall pretest score and overall gain ratio it is found to be significant.

- There is a significant difference among the primary school teachers in their overall pretest score to their teaching experience in their awareness on disaster management. It is inferred that there is a significant difference in the pretest score among the primary school teachers in their awareness on disaster management in the dimensions like knowledge, strategy and skill. Also it is found that there is a significant difference the gain ratio among the primary school teachers in their dimension of awareness on disaster management in knowledge and interest. Duncan Multiple Range Test (DMRT) the teachers with less than 5 years of teaching experience different significantly with the teachers who have 15- 20 years of teaching experience and more than 20 years of teaching experience. Also the teachers who have 15 to 20 years of teaching experience differ significantly in the pretest scores in their knowledge. It is also found that the pretest scores of teachers with less than 5 years of teaching experience differ significantly with the teachers who have 5- 10 years teaching experience and more than 20 years of teaching experience in their skill. It is also found that the gain ratio of teachers
with more than 20 years of teaching experience differ significantly with teachers with less than 5, 5-10 and 15-20 years of teaching experience in their interest. Then it is also found that the gain score of teachers with 15–20 years of teaching experience differ significantly with all other teachers in their knowledge.

**•** There is a significant difference in their overall pretest score and gain ratio among the primary school teachers in their awareness on disaster management to the population in their workplace, but there is no significant difference among the primary school teachers in their overall posttest and gain ratio. The (DMRT) Duncan multiple Range Test reveals that the pretest score of teachers working in place of less than 5000 population significantly differ with the other groups in their knowledge, skill and strategy and posttest score in their knowledge. But in the pretest score of teachers working in place of less than 5000 population significantly differ with teachers working in the place of more than 10000 population in their skill.

• There is a significant difference in the overall pretest score among the primary school teachers in their awareness on disaster management to their socio economic status. Duncan Multiple Range Test (DMRT) in the overall pretest score of teachers whose monthly income of Rs. 30000-40000/- differ significantly with teachers less than Rs.20000/- and 20000-30000/- as the monthly income.
Also the pretest score of teachers with monthly income less than Rs. 20000/- differ significantly with teachers with monthly income of Rs.30000-40000/- and more than Rs. 40000/- in their strategy.

- Overall posttest score and overall gain ratio reveals that there is a significant difference between the teachers’ resident and nonresident of disaster affected area in their awareness on disaster management. It is inferred that the teachers’ resident and nonresident of disaster affected area do differ significantly in their attitude on disaster management in their posttest score. Overall gain ratio reveals that teachers’ resident and nonresident of disaster affected area do differ significantly in all the dimensions of awareness on disaster management. Hence the resident of disaster affected area teachers aware about the occurrence of disasters and its causes whereas the teachers’ nonresident of disaster affected area is not much aware of the disasters and its occurrence.

- The pretest score and retention ratio reveals that the primary school teachers differ significantly in their knowledge, attitude, interest, skill and strategy in the awareness on disaster management. It is reveals that the retention ratio have higher score in the dimensions like knowledge, attitude, interest, skill and strategy on the awareness on disaster management than the pretest score. Overall pretest
and overall retention reveals that primary school teachers differ significantly in the awareness on disaster management. It is found that the intervention of multimedia package have motivated the primary school teachers awareness on disaster management.

• The posttest score and retention ratio reveals that the primary school teachers differ significantly in the dimensions like knowledge, attitude, interest, skill and strategy in the awareness on disaster management. It is reveals that the retention ratio have the higher score in the dimensions like knowledge, attitude, interest, skill and strategy in the awareness on disaster management when compared to the posttest score of the primary school teachers. Overall posttest and overall retention reveals that primary school teachers differ significantly in the awareness on disaster management. It is found that the intervention of multimedia package have stimulated the primary school teachers awareness on disaster management.

• It is inferred that gain and retention ratio of primary school teachers differ significantly in the awareness of knowledge, attitude, interest, skill, strategy in the overall gain and retention ratio on disaster management. It is reveals that the retention ratio found to have the higher score in the dimension knowledge, attitude, interest, skill, strategy and overall retention test on disaster management when compared to the gain score. Overall gain and overall retention reveals that primary school teachers differ significantly in the awareness on disaster
management. It is found that the intervention of multimedia package have involved the primary school teachers awareness on disaster management.

- It is clearly stated that the retention ratio found to be highest when compared to the gain ratio with regard to all dimensions in awareness on disaster management. Hence the investigator concludes that multimedia package is developed have created a great impression among the primary school teachers and it is found to be very effective module in generating awareness on disaster and disaster management.

6.3 RECOMMENDATIONS FOR THE PRESENT STUDY

AWARENESS CAMPAIGNS:

Awareness campaigns and sensitization program on disaster management should be conducted for the people in the disaster prone areas at least once in a year.

IN SERVICE TRAINING:

During in service training for teachers training on disaster management can be given. In this way the knowledge on disaster management can be transmitted to every child by the teachers.
CAMPS:

Students should be given training to protect themselves from disaster through special camps.

CURRICULUM FRAMING:

The topics related to disaster and disaster management can be included in the present school curriculum.

TREE PLANTING:

Government should take initiative to help and guide the educational institution in the disaster prone area to plant trees like bamboo and mangrove trees.

OPENING CAUTION CENTERS:

More number of caution centers in and around disaster prone areas should be started to create awareness on disaster and disaster management among the people.

DISASTER MANAGEMENT:

Both Government and Non-Governmental organization should have a disaster committee that actively function at time of disaster and take effective actions.

CO-CURRICULAR ACTIVITIES:

Co-curricular programme on disaster and disaster management should be conducted in all educational institutions.
STREET THEATERS:

Government and Non-Governmental Organizations should take initiatives to create awareness among the people in the disaster prone areas through street theater which will be more effective in creating awareness among illiterate adult and common public.

6.4 EDUCATIONAL IMPLICATIONS OF THE PRESENT STUDY

1. The knowledge regarding disasters and disaster management can be imparted to the people who are not aware of the management strategies to safeguard their lives and possession.

2. To enable the teachers and students in coastal areas to realize the importance of the study on disaster and disaster management.

3. This study suggests the government to incorporate the content on disaster and disaster management as a part of school curriculum. So that it helps the present generation to safeguard themselves against disaster.

4. Since teachers are the best transmitters of knowledge to the future citizen. It is very much essential in screening the multimedia package on disaster management to all teachers working in disaster prone areas.
6.5 SUGGESTIONS FOR FURTHER RESEARCH

- A similar study can be conducted among college students and teachers.
- A similar study can be done among student educators in the teacher educational institutions.
- A similar study can be conducted in various other disaster prone areas.
- The comparative study on the awareness on disaster management among the people in coastal area and non-coastal area can be done.
- A comparative study on the awareness on disaster management among the disaster affected people in Tamilnadu and other states can be done.
- A similar study can be conducted by developing a module focusing in other types of disasters.
- A study on the effectiveness of various media like street play, Folk song, Puppet show, Mime in creating awareness on disaster management can be studied

6.6 CONCLUSION

Disaster is a sudden out break which can occur at any time anywhere. It is the duty of every human being to safeguard themselves as well as the environment. Environment is the gift for human being from which he drives all this sources and fulfills his needs. Hence it is the duty of every individual to protect the environment. So that one able to give away a sustainable environment
for the future citizen. Even though many environmental legislating have passed by the Government to protect them, the changes has to occur only in the minds of the every human to nature the nature. As a contribution of the investigator has developed a multimedia package on disaster management with special reference to the three kinds of disaster management like flood, cyclone and tsunami. The teachers are the arbiters of our nation who can shape the future citizen. Hence the investigator has focused to conduct the study among school teachers. Here to conclude that preparedness is the only way to minimize the loss and to safeguard the life and possession of people from disasters.