



# A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME REGARDING MNEMONIC'S, CHUNKING AND MIND MAPPING IN ENHANCING THE PERCEIVED MEMORY AMONG THE SCHOOL CHILDREN (9<sup>TH</sup> STD) IN SELECTED GOVERNMENT HIGHER SECONDARY SCHOOL, AT KARAİKAL

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## ABSTRACT

### BACKGROUND

*"Memory means by which we draw on our past experience in order to use this information in the present"(Sternberg, 1999). It is a term given to the structure and process involving in the storage of past experiences and subsequent retrieval of information. Memory is very essential to all your lives.*

### AIM'S & OBJECTIVES

*To assess the pretest level of perceived memory among the school children, To assess the effectiveness of video – assisted teaching programme regarding mnemonic's, chunking & mind mapping in enhancing the perceived memory among the school children and To find the association between pre - test level of perceived memory among the school children with their selected demographic variables.*

### RESEARCH DESIGN AND METHOD

*Pre-experimental with one group pre-test and post-test design was used. 60 children (9<sup>th</sup> std) studying in NSC Bose higher secondary school, Karaikal were selected by using purposive sampling technique. Demographic data was collected and pre-test was conducted by using structured knowledge questionnaire to assess the student's knowledge regarding mnemonics, chunking and mind mapping from their subject. Video assisted teaching programme was given about mnemonics, chunking and mind mapping. After 7 days post test was conducted by using the same structured knowledge questionnaire.*

### RESULT

*Descriptive statistical methods like percentage, mean, standard deviation and inferential statistics like paired 't' test and chi-square was used to analyze the collected data. The results revealed that in pre-test 96.7% had inadequate level of perceived memory, 3.3% had moderate level of perceived memory and none of them had adequate level of perceived memory. Where as in post-test 93.3% had moderate level of perceived memory, 5% had inadequate level of perceived memory and 1.7% had adequate level of perceived memory. It was effective video assisted teaching programme on mnemonic's, chunking and mind mapping. The level of perceived memory in school children has statistically significant association with their favorite subject.*

### CONCLUSION

*From the findings of the present study it can be concluded that the video – assisted teaching programme was very effective in enhancing perceived memory on mnemonic's, chunking and mind mapping among school children. The findings can be utilized for supporting the research studies on the effectiveness of video teaching programme.*

*Key Words: Assess, effectiveness, mnemonic's, chunking, mind mapping.*



## INTRODUCTION

It is a great to reminisce about good memories of our past. It was enjoyable when it was today. So learning to enjoy today has two benefits. "It gives me happiness right now, and it becomes a good memory later".

**George Foreman**

Memory is the faculty of the brain in which information is encoded, stored, and retrieved when we needed. Memory is a vital to experiences it's a retention of information over time for the purpose of influencing future action. "If we can't remember past events, we can't learn or develop language, knowledge, relationships, or personal identity".

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**Wikipedia**

A mnemonic device (memory device), it is a learning technique that backing information retention or retrieval (remembering) in the human memory. Mnemonic devices are techniques for improving memory. People with super memories sometimes use mnemonic's, and we can also learn to do so. Most of the mnemonic techniques depend on the linking, or association, of to be remembered material with a systematic and organized set of images or words that are already forcibly established in long term memory and can therefore serve as reminder cues.

In cognitive psychology (chunking), it is a process by which single pieces of a new information set are broken down and then grouped together. A chunking is defined as a familiar collection of more basic unit that has been inter-related and stored in memory repeatedly and act as a coherent, integrated group when retrieved.

**-Tulving & Craik**

A mind map is a diagram used to visually organize and easy to recall the information. Mind map is a scale and shows relationships among pieces of the whole. It is often generated around an each concept, draw as an image in the center of a blank paper, to which associated presentations of concepts such as images, words and parts of words are added. Major ideas are connected straightly to the central concept, and other ideas branch out from those major ideas.

Of the 17,752 students, who appeared for the examination from the two regions (Puducherry and Karaikal), 16,407 students were declared successful and 1,345 students are failed in their examination. An overall pass percentage was 92.42%

The examination result shows that poor achievement in academic performance of high school student. This situation indicates the relevance of memory training for the high school students for the

better achievement in their academic performance. There are several studies conducted to improve the memory or to assess the factors influencing memory. These factors influence the researcher to implement the mnemonic, chunking and mind mapping techniques on school students and assessing its effectiveness. These memory improvement techniques not only enhance the memory power of the students but also reduce their examination tension.

## AIM'S & OBJECTIVES

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## METHODOLOGY

Pre-experimental with one group pre-test and post-test design was used. 60 children (9<sup>th</sup> std) studying in NSC Bose higher secondary school, Karaikal were selected by using purposive sampling technique. Demographic data was collected and pre-test was conducted by using structured knowledge questionnaire to assess the student's knowledge regarding mnemonics, chunking and mind mapping from their subject. Video assisted teaching programme was given about mnemonics, chunking and mind mapping. After 7 days post test was conducted by using the same structured knowledge questionnaire.

Written permission was obtained from CEO from educational department. Written permission was obtained from the principal of Nethaji subash Chandra Bose higher secondary school, Karaikal. The collected data was planned to be organized, tabulated and analyzed based on the objectives of the study by using descriptive statistics such as percentage, mean, standard deviation and inferential statistics such as chi-square and paired t- test. The paired t-test was planned to be used to find out the effectiveness of video assisted teaching programme and chi-square test to find out the association between demographic variable with pre-test knowledge. The data was planned to be presented in the form of tables and figures.

## RESULTS

The highest percentage 43(71.7%) of children were in the age of 14 years; whereas lowest percentage 3(5%) of children were in the age of 15 years old. The most of the school children 42(70%) were male and 18(30%) were female. The highest percentage



25(41.7%) children's parents had primary education; whereas lowest percentage 5(8.3%) children's parents were graduates. The highest percentage 40 (66.7%) children's father were working as a coolie; whereas lowest percentage 4(6.7%) children's father were working in private sector and self- employed. The majority of children's mother 29(48.3%) were working as a daily wages; and 3 (5%) children's mother were working in government/ private sector. The lowest percentage 6 (10%) had between Rs.6001-Rs10000 and 6 (10%) more than Rs.10001; The highest percentage 34 (56.7%) of children's family income was less than Rs.4000. Most of the 59 (98.3%) children's were belongs to Hindu, and 1 (1.7%) children's were belongs

to Christian. The maximum 51 (85%) children's were belongs to rural area, whereas 9 (15%) children's were from urban area. The majority 30 (50%) of children were living in Hut house; whereas 15 (25%) were living in Thatched house and 15 (25%) were in Pacca house. The most of the 26 (43.3%) children favorite subject was physics; whereas 11 (18.3%) have interest in chemistry, 20 (33.4%) have interest in botany and 3 (5%) have interest in zoology. The majority 26 (43.3%) of children favorite class was class teaching, 9 (15%) have interest was experiment, 21 (35%) have interest was through studying and 4 (6.5%) have interest in mass media.

**Table ; 1 Demographic variable (N=60)**

Variable	%
<b>Age</b>	
a)13 years	14
b)14 years	43
c)15 years	3
<b>Sex</b>	
a)Male	42
b)Female	18
<b>Educational qualification of parents</b>	
a)Illiterate	11
b)Primary education	25
c)High school	19
d)Graduate	5
<b>Occupation of father</b>	
a)Coolie	40
b)Government employee	4
c)Private employee	4
d)Self employee	12
<b>Occupation of mother</b>	
a)Home maker	29
b)Daily wages	20
c)Government/Private employee	2
d)Self employee	9
<b>Family income</b>	
a)> Rs.4000	34
b)Rs.4001to Rs.6000	14
c)Rs.6001to Rs.10000	6
d)< Rs.10001	6
<b>Religion</b>	
a)Hindu	59
b)Muslim	0
c)Christian	1
<b>Domicile</b>	
a)Rural	51



b)Urban	9
<b>Type of house</b>	
a)Hut house	30
b)Thatched house	15
c)Pacca house	15
<b>Favorite Subject</b>	
a)Physics	26
b)Chemistry	11
c)Botany	20
d)Zoology	3
<b>Favorite Class</b>	
a)Teaching	26
b)Experiment	9
c)Studying	21
d)Mass Media	4

**Table : 2 Comparison of pre- test and post- test level of perceived memory on mnemonic's, chunking and mind mapping among school children**

S.No.	Level of Perceived memory	Pre-test		Post-test	
		Frequency	%	Frequency	%
1	Inadequate	58	96.7	3	5
2	Moderate	2	3.3	56	93.3
3	Adequate	-	-	1	1.7

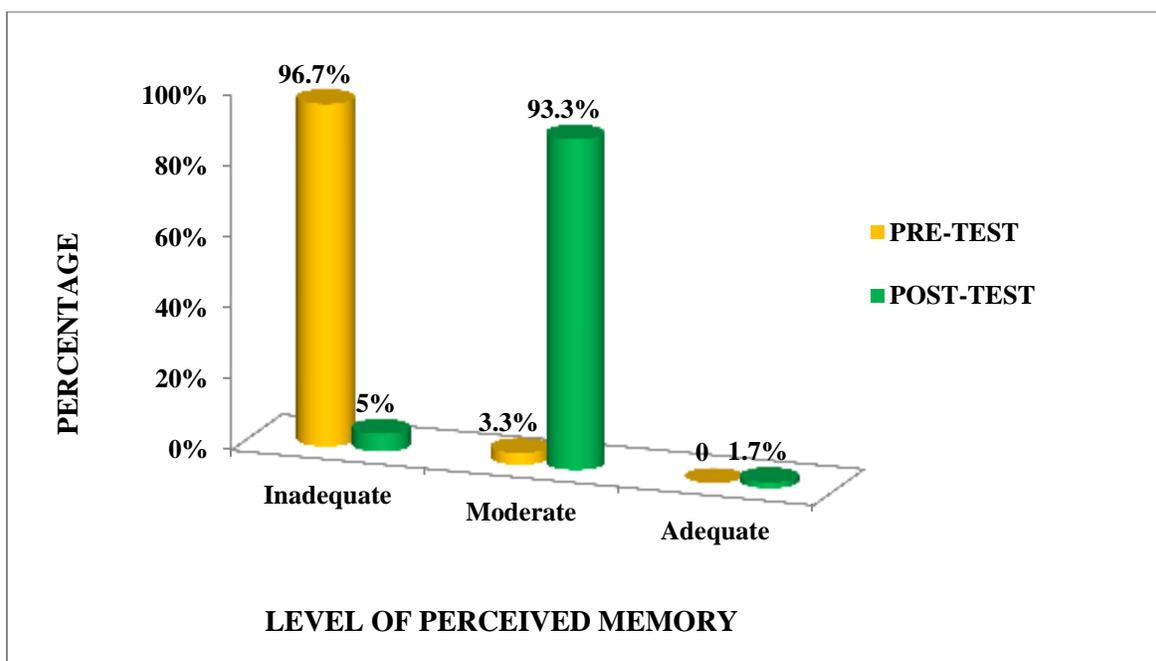


Table.2 shows that during pre-test 58(96.7%) of children had inadequate level of perceived memory, 2(3.3%) had moderate level of perceived memory.

Whereas during post-test 3 (5%) of children had inadequate level of perceived memory 56(93.3%) of children had moderate level of perceived memory and



1(1.7%) of children had adequate level of perceived memory.

**Table.3: Dimension wise comparison of mean and standard deviation of pre-test and post-test level of perceived memory on mnemonic's, chunking and mind mapping among school children**

S.No	Memory Dimension	Max Score	Pre-test score			Post-test score			Difference in Mean (%)
			Mean	SD	Mean (%)	Mean	SD	Mean (%)	
1	Level of perceived memory on mnemonic's	10	2.93	1.471	2.93	7.18	1.434	71.8	68.87
2	Level of perceived memory on chunking	20	6.90	2.427	34.5	11.75	2.486	58.75	24.25
3	Level of perceived memory on mind mapping	20	6.92	2.360	34.6	12.27	2.448	61.35	26.75
<b>TOTAL</b>		<b>50</b>	<b>16.75</b>	<b>6.258</b>	<b>33.5</b>	<b>31.2</b>	<b>6.368</b>	<b>62.4</b>	<b>28.9</b>

Table.3 shows that in all three dimensions mean percentage of post-test score has increased than mean percentage of pre-test score in level of perceived memory on mnemonic's, chunking and mind mapping among children. Pre-test level of perceived memory mean score was  $16.75 \pm 6.258$ (SD) which is 34 % of the total mean score, whereas in post-test, the mean score was  $31.2 \pm 6.368$  (SD) which is 62% of the total mean score. Difference obtained level of perceived memory of mnemonic's, chunking and mind mapping 34% to 62%.

## DISCUSSION

This findings of the present study was supported by Helen Widia W.P (2018) conducted a pre-experimental one group pre – test and post- test design on effectiveness of biology subject based mnemonic strategies-assisted process mind mapping against learning retention of students. The data collection procedure was in the form of test. The technique of data analysis was using the formula

recognition process. Based on the analysis of the data shows the average value of the post-test 1 is 83.86, the average value of post-test 2 is 96.48. The results showed that the Biology subject based mnemonic strategies-assisted method of mind mapping effective against retention of student learning.

## CONCLUSION

The subjects of the study have gained thorough knowledge on mnemonic's chunking and mind mapping from their subject by the video assisted teaching programme. Prior to implementation of video assisted teaching programme 96.7% of children had inadequate level of perceived memory and 3.3% had moderate level of perceived memory, whereas after the video assisted teaching programme on mnemonic's chunking and mind mapping from their subject 93.3% of children had moderate level of perceived memory. In which proves that the video assisted teaching programme is effective on mnemonic's, chunking and



mind mapping from their subject among school children.

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