



# A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGARDING MNEMONICS IN ENHANCING THE PERCEIVED MEMORY AMONG THE (SECOND YEAR OF DGNM & B.Sc) NURSING STUDENTS IN KMC COLLEGE OF NURSING AT TRI

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## ABSTRACT

*A study assess the evaluate of structured teaching programme regarding mnemonics in enhancing the perceived memory among the DGNM & B.Sc nursing students. The Research approach used for this study was quantitative approach. The research design for this study is pre experimental research design. The study was conducted at KMC College of Nursing at Trichy, TN State. The sample size for the study consist of 52 college students. Purposive sampling technique was used and the college students. Data analyzed by using descriptive and inferential statistics on the basis of objectives and hypothesis of the study. The data was planned to be presented in the form of tables and figures. In present study, show that distribution of sample according to the level of knowledge on pre-test 51(98.1%) of college students had inadequate level of perceived memory, 1(1.9%) had moderate level of perceived memory. Whereas during post-test 23(44.2%) of college students had moderate level of perceived memory and 29(55.8%) of college students had adequate level of perceived memory. Data on evaluate of planned teaching programme on level of perceived memory on mnemonics among college students. Paired 't' test was used and it reveals that difference observed between the value of pre-test and post-test were true difference. Thus, it proves that the structured teaching programme regarding mnemonics to enhance the perceived memory among college students is effective at 5% ( $p < 0.001$ ) level. It's reveals that there is significant association found between pre-test level of perceived memory of college students with their educational qualification of parents, at 5% ( $p < 0.05$ ) level.*

**KEY WORDS:** Assess, effectiveness, mnemonics, college students.

## INTRODUCTION

“The more often you share what you’ve learned, the stronger that information will become in your memory”.

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”.

-Wikipedia

Memory is defined as retention of learned information and experiences. It is an extension of learned information and experiences as well. Thus memory is a distinct cerebral function, separable from other cognitive abilities. However it is not a unitary faculty of mind but is composed of multiple systems that have different operating principles and neuro anatomical regions. Memory is the ability to maintain primarily learned information with an



internal storage system, so that it may be accessed at present or later. The stored information can be retrieved and utilized at any time in life whenever needed.

Memory is formed from the time that we are born and it is a continuous process of events, experiences and situations which we receive through the senses. This vast information should be stored in a systematic manner so that it can be easily retrieved when necessary. This is like trying to locate a particular book from a huge library. If there is a proper catalogue, list made with reference to either subject, title or author of the books then finding the book is very simple task but if all these lists or catalogues are unavailable, locating the book becomes a very tedious and confusing job.

A man's personal recollections have a definite place in developing and maintaining his relationship with others. Remembering the names of your classmates of the 8<sup>th</sup> standard is not easy. You may remember many of them but not all. No one is able to recall anything without memory. Thus memory is a part and parcel of personality. It occupies a central place in our learning. Memory is a mark of competence and it has a sound sense of personal identity. It is a must for a successful professional career.

Memory is a highly selective process in which you perceive the past and it guides your future. The capacity to recall persons, names, things etc, is what you covet or look for your life. Good memory is a sure sign of sound learning and you cannot learn if you are unable to remember. When we mix up learned materials with all other sorts of knowledge that is stored in our memory the task of remembering becomes more difficult. We should not make a mess of things learned. The teachers often ask us to learn our lessons well, so that we can remember them for a long time. But over learning doesn't always work.

## MNEMONICS

The term memory comes from a Latin word 'mnemonic', meaning "to be mind full of" or "to serve as a reminder" the term memory refers to what is retained-the total body of remembered experience, as well as a specific experiences, that is being recalled. So memory is either retaining experiences or identifying, recalling them successfully at the right moment. Memory is an integral part of our day to day life. In every work that we do and every form of communication, we rely completely on memory of past experiences, conversations, information and skills. It is also the most important and fundamental aspect of the teaching learning process. In the teaching learning process, the learner has to remember the information, knowledge and wisdom gathered by self and others. There is a definite process through which all this is stored in the brain.

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 mnemonics, and we can also learn to do so. Most of the mnemonics, 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.

The word "mnemonic" is derived from the ancient Greek word, meaning "of memory, or related to Mnemosyne ("remembrance"), the name of the goddess of memory in Greek mythology. Mnemonics is an antiquity were most often considered in the context of what is today known as the art of the needed.

A mnemonic, also known as memory aid, is a tool that helps you remember an idea or phrase with a pattern of letters, numbers, or relatable associations. Mnemonics devices include rhymes and poems, acronyms, images, songs, outlines, and other tools. Mnemonics is derived from the Greek phrase *Mimneskesthai* meaning to "remember".

Thus it becomes important to give a serious thought to memory and memorization. If memorization is the doorway to all mental and physical activities, it should be learnt in a systematic manner. There are various techniques through which this is possible. Mnemonics are memory techniques which make the process of memorization interesting and effective. These are methods in which any given information can be memorized using principles of association, attention, organization, meaningfulness and visualization.

Mnemonics are cheat codes for those who struggle with memorizing a certain complicated subject, list, or concept. They follow us to use more memorable phrases that tie the concepts we want to memorize to our minds. They allow us to quickly and successfully learn, and remember key concepts in a variety of subjects from English to Math. They work because our minds tend to remember information to which we can relate or experience. Mnemonics have been proven to work as tools of memory forming for a variety of tasks. They aid doctors, scientists, geologists, artists, and students. If you're struggling to remember something consider making yourself a mnemonic.

Mnemonic strategy to optimize the content of the nervous system which is structurally necessary, considering the methods that can be used to recall material to structural techniques will also help. Hence we close with mnemonic devices which are systems or brief methods designed to improve memory, and these provide a useful summary of our prior discussions. But first a comment about cueing.



Mnemonics techniques have some positive non memory side effects, such as increasing motivation to study in one of the study students are reported on a survey that having acronyms on a review sheet made it easier for them to remember course content and made them start studying earlier. In other studies show that students think that some mnemonic techniques are easier, faster, more enjoyable, and more useful than note rehearsal, and that mnemonics can reduce examination anxiety. Although preliminary these results mesh with anecdotal reports about students enjoying the use of mnemonics, and suggest that mnemonics may have some additional motivational benefits that could increase their utility in educational contexts.

### STATEMENT OF THE PROBLEM

A study to assess the effectiveness of planned teaching programme regarding Mnemonics in enhancing the perceived memory among the nursing students (Second year of DGNM & B.Sc) in KMC College of Nursing at Trichy.

### OBJECTIVES

- To assess the pretest level of perceived memory among the DGNM and B.Sc nursing students.
- To assess the effectiveness of planned teaching programme regarding mnemonics in enhancing the perceived memory among the DGNM and B.Sc nursing students.
- To find the association between pre - test level of perceived memory among the DGNM and B.Sc nursing students with their selected socio-demographic variables.

### OPERATIONAL DEFINITION

#### Effectiveness :

It refers to extent to which planned teaching programme on mnemonic's to enhance the perceived memory among has achieved the desired effect in improving the memory of college students as evidenced by gain in post test score.

#### Mnemonics :

It refers to memory device used for memory retrieval. Any of several techniques or devices used to help remember or memorize names or concepts.

#### Perceived Memory :

It refers to obtaining of the memory by way of perception of the children.

#### Teaching program :

It is a systematically developed teaching program designed for children to provide information regarding mnemonic's.

#### College :

It is an institution designed to provide learning space & for teaching of the students under direction of teacher.

### HYPOTHESIS

H1: There will be a significant difference between the pretest and post test level of perceived memory among the nursing students.

H2: There will be significant association between the pretest level of perceived memory among the nursing students with their selected demographic variables.

### ASSUMPTION

- Mnemonics will be improve the perceived memory of the DGNM & B.Sc nursing students.
- Planned structured teaching program will help them to improve their perceived memory of the DGNM & B.Sc nursing students

### DELIMITATIONS

- The study was undertaken in single setting and samples were selected on the basis of purposive sampling.
- The study is limited to only the DGNM & B.Sc nursing 2<sup>nd</sup> year students who are studying in selected nursing college trichy
- The period of study is limited to 4 weeks.

### RESEARCH METHODOLOGY

#### RESEARCH APPROACH

For the present study quantitative approach has been selected.

#### RESEARCH DESIGN

For the present study pre-experimental one group pre-test and post- test design was selected. There was manipulation of independent variable (planned teaching programme)

O1.....X.....O2

O1: Assessment of perceived memory regarding mnemonics among the second year of DGNM & B.Sc nursing students before planned teaching programme.

X: Planned teaching programme.on mnemonics on enhancing perceived memory.

O2: Assessment of perceived memory regarding mnemonics among the first year of DGNM & B.Sc nursing students after planned teaching programme.

### VARIABLES

#### Independent variable:

Planned teaching programme.

#### Dependent variable

Mnemonics to enhance the perceived memory among college students.

### SETTING OF THE STUDY

The study was carried out in KMC College of Nursing situated in Trichy district, Tamilnadu state. This college consists of DGNM & B.Sc Nursing programme. It is headed by a principal and nursing teaching faculty are working in this college. Apart from the academic curriculum music, sports, yoga and other extra activities has also being taught to the students.

### POPULATION

All the nursing students studying in the college.  
**Target population:** In this study target population comprise of college students studying in second year of DGNM & B.Sc nursing students.

### SAMPLING

**Sample**  
The samples for the present study were college students studying in second year of DGNM & B.Sc nursing students in KMC college of nursing at Trichy district, Tamilnadu state. Who meets the inclusion and exclusion criteria of the study.

### Sample size

The sample size comprised of 52 nursing students studying first year of DGNM (16) & B.Sc nursing (36) in KMC college of nursing college at Trichy, Tamilnadu state.

### Sampling technique

Purposive sampling technique was used to select the sample for the present study.

### SELECTION CRITERIA

The samples were selected based on the following criteria

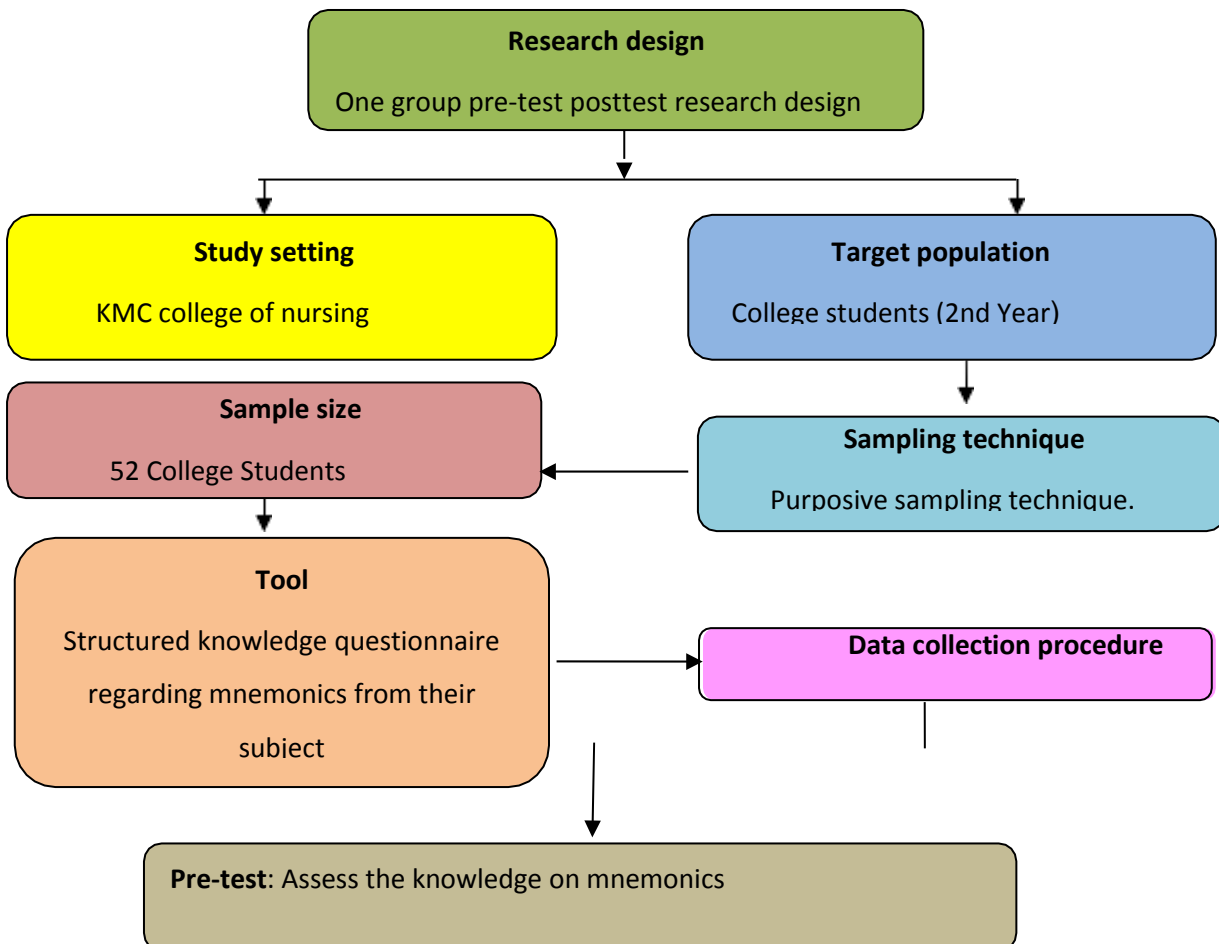
#### I. Inclusion criteria

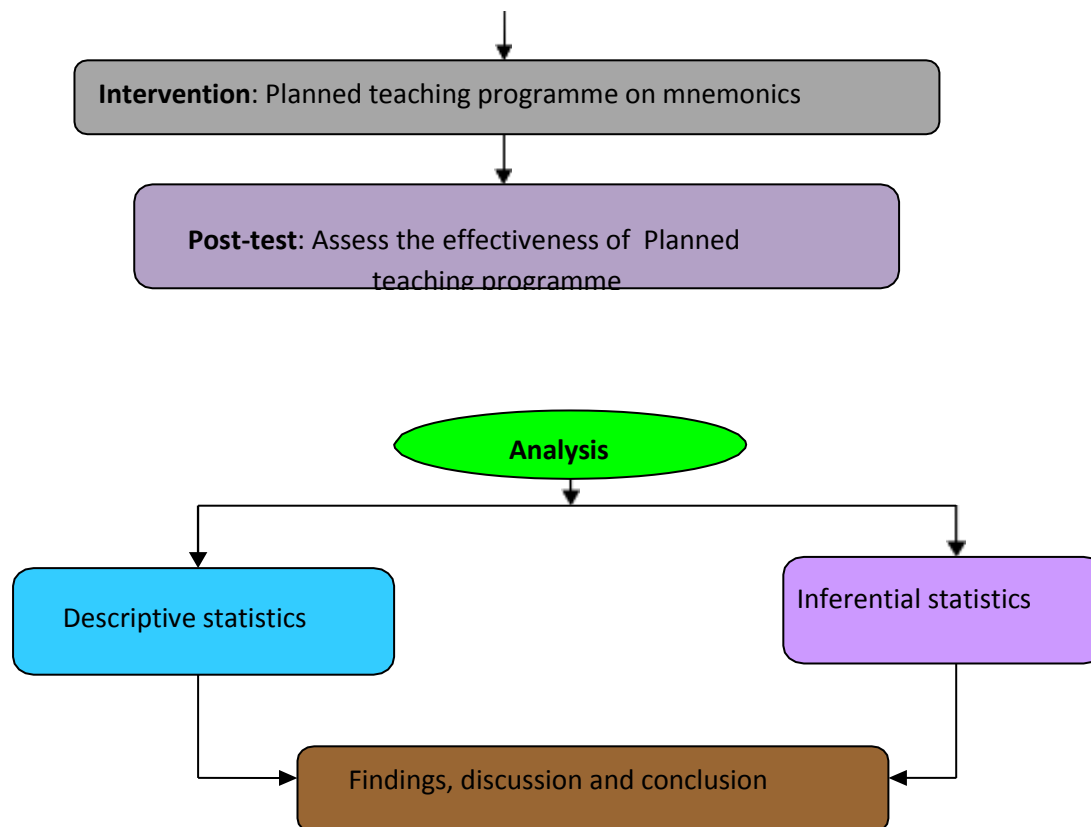
- The study is limited to the college students, who
- Are studying second year of DGNM & B.Sc nursing students.
  - Can able to understand, read and write English
  - Are willing to participate in the study

#### II. Exclusion criteria:

- The exclusion criteria are the subjects who
- Are suffering from any diagnosable physical or mental disorder.
  - Are absent on the day of study.

FIGURE:1 SCHEMATIC REPRESENTATION OF RESEARCH DESIGN





**DESCRIPTION OF DATA COLLECTION INSTRUMENT:**  
**Tool consists of two parts.**

**Section I:** Socio- Demographic data

It consists of age, sex, class of studying, educational qualification of parents, occupation of parents, family income, religion, domicile, type of house, type of family and favorite subject.

**Section II :** Multiple choice knowledge questionnaire. It includes the items related to mnemonics from their subject of Medical Surgical Nursing.

**Scoring procedure:**

There were 30 items pertaining to multiple choice knowledge questionnaire on mnemonics from their subject. Each item has four options the score “one” was given to correct response and “zero” was given to wrong response. The maximum score was 30. The level of knowledge was categorized based on the percentage of score obtained.

**Validity and reliability of the tool**

**Validity:**

Content validity of the tool was established by sending the tool to the experts concerned in field of mental health nursing. Their options and suggestion were taken to modify the tool.

**Reliability:**

Reliability of the tool was tested during pilot study. Cronbach’s alpha method was used to find out the reliability of the checklist method. The reliability (r) was found to be 0.86.

**Preparation of final draft:**

The final draft of the multiple choice knowledge questionnaire and video assisted teaching content was prepared after testing the reliability, validity and in consultation with the guide.

**Pilot study**

Pilot study was conducted from 25.11.2019 to 30.11.2019. 6 students from KMC college of nursing at Trichy, were selected by purposive sampling technique. Samples selected for the pilot study were not included in the main study and the study was found to be feasible for conducting main study.

**Ethical consideration:**

- ❖ Written permission was obtained from the principal of KMC college of nursing at Trichy, Tamilnadu state.
- ❖ Informed consent obtained from the college students.

**Period of data collection**

The data collection was conducted from 02.12.2019 to 31.12.2019. During this period the investigator collected pre-test and post-test data and also



implemented the planned teaching for the 52 samples selected by purposive sampling technique.

**DATA COLLECTION PROCEDURE**

**Stages of data collection**

The data was collected in following three stages.

**a) Pretest**

Pre-test was conducted among the selected samples by using socio-demographic schedule multiple choice knowledge questionnaire method. The data collection was done between 3.30 am to 4.30 pm. The procedure was explained in detail. Approximately 7-8 students were attended the pre-test each day. The duration of pre-test assessment varied from 40 to 45 minutes for each sample.

**b) Implementation of planned teaching programme**

On the same day of pre-test assessment, the planned teaching programme on mnemonics was conducted by researcher in batches of 20 students. The intervention module consists of information regarding on mnemonics techniques. The time taken for each session of intervention was about 45 to 50 minutes.

**c) Post-test:**

Evaluation of planned teaching programme on mnemonics was done by conducting post-test on the 8th day implementation of the planned teaching programme by using the same multiple choice

knowledge questionnaire which was used for the pre-test.

**Plan for data analysis**

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 planned 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.

**Summary**

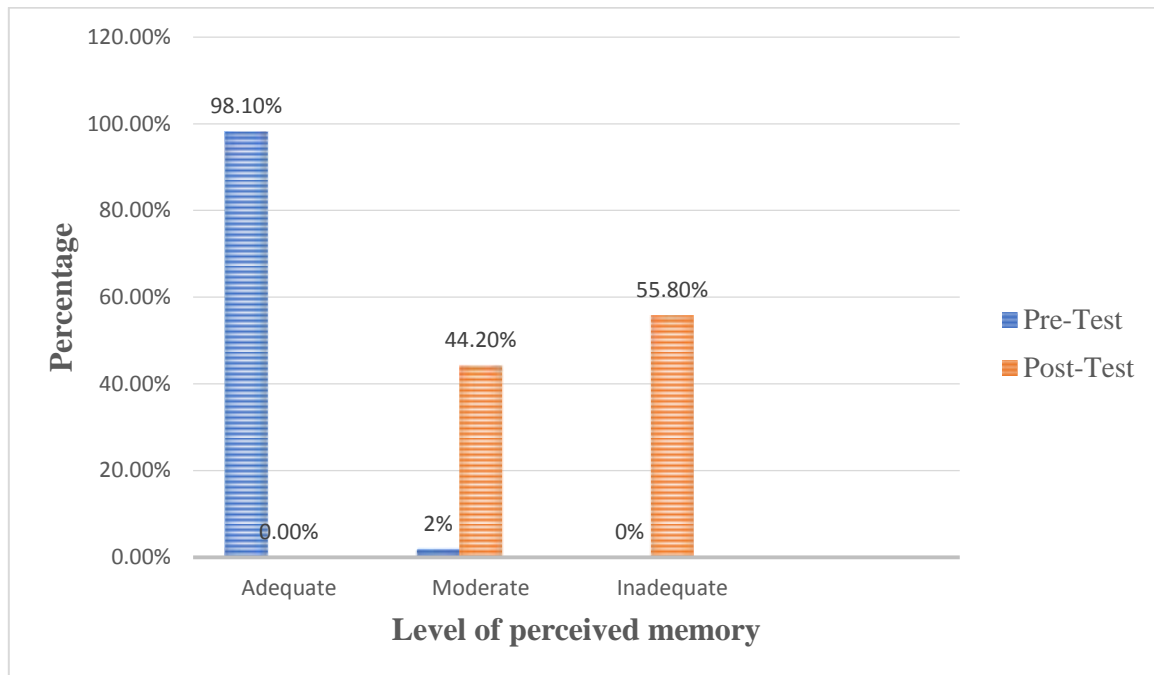
A Pre-experimental one group pre-test and post-test research design was carried to find the effectiveness of planned teaching programme on knowledge regarding mnemonics among second year of DGNM & B.Sc nursing students studying in KMC college of nursing at Trichy, Tamilnadu state. Multiple choice knowledge questionnaire and Planned teaching programme was prepared. Analysis was planned to be done by using descriptive statistics and inferential statistics.

**ORGANIZATION OF DATA:**

**TABLE:1 DATA ON COMPARISON OF PRE-TEST AND POST-TEST LEVEL OF PERCEIVED LEVEL ON MNEMONICS AMONG NURSING STUDENTS.**

N=52

S.NO	LEVEL OF PERCEIVED MEMORY	PRE-TEST		POST-TEST	
		FREQUENCY	%	FREQUENCY	%
1	Inadequate	51	98.1	0	0
2	Moderately Adequate	1	1.9	23	44.2
3	Adequate	0	0	29	55.8



**FIGURE 2: COMPARISON OF PRE-TEST AND POST-TEST LEVEL OF PERCEIVED MEMORY ON MNEMONICS AMONG NURSING STUDENTS**

**Table 1:** Shows that in pre-test 51(98.1%) of students had inadequate level of perceived memory, 1(1.9%) of students had moderately adequate level of perceived memory, whereas in post-test 23(44.2%) of students had moderately adequate level of perceived

memory, 29(55.8%) of students had adequate level of knowledge. It represents that level of perceived memory of students were improved in post-test when compared to pre-test.

**TABLE:2 MEAN, STANDARD DEVIATION AND MEAN PERCENTAGE OF PRE-TEST AND POST-TEST LEVEL OF PERCEIVED MEMORY AMONG NURSING STUDENTS.**

N=52					
S. NO	KNOWLEDGE SCORE	MEAN	STANDARD DEVIATION	MEAN %	DIFFERENCE IN MEAN %
1	Pre-test	9.35	2.472	31.16	45.64
2	Post-test	23.04	2.686	76.8	

Figure: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 mnemonics among college students. Pre-test level of perceived memory mean score was  $9.35 \pm 2.472$ (SD) which is 31.16% of the total mean score,

whereas in post-test, the mean score was  $23.04 \pm 2.686$  (SD) which is 76.8% of the total mean score. Difference obtained level of perceived memory of mnemonics 34% to 62% that difference in mean percentage was (45.64%).

**TABLE:3 EFFECTIVENESS OF PLANNED TEACHING PROGRAMME REGARDING THE MNEMONICS IN ENHANCING THE PERCEIVED MEMORY AMONG THE NURSING STUDENTS.**

N=52

S. No	Knowledge Score	Mean	Standard Deviation	Standard Error Mean	't' Value	df	"P" Value
1	Pre-Test & Post-Test	13.692	2.697	.374	36.604	51	0.000*

\*:-Significant at 5% (p<0.05) level

Table.3 shows that data on effectiveness of planned teaching programme on level of perceived memory on mnemonics among College students. Paired 't' test was used and it reveals that difference observed between the dimension wise mean score value of pre-test and post-test were true difference. Thus, it proves that the planned teaching programme regarding

mnemonics to enhance the perceived memory among college students is effective at 5% (p<0.05) level.

**TABLE:4 ASSOCIATION BETWEEN PRE-TEST LEVEL OF PERCEIVED MEMORY AMONG THE NURSING STUDENTS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES.**

N=52

S. NO	DEMOGRAPHIC VARIABLES	LEVEL OF PERCEIVED MEMORY				Chi Square value	d. f	P VALUE
		INADEQUATE	MODERATELY ADEQUATE	ADEQUATE	TOTAL			
1	AGE					.439	2	.803 NS
	a)19 years	35	12	0	47			
	b)20 years	3	1	0	4			
	c)21 years	1	0	0	1			
2	SEX				52	0	2	00
	a)Female	51	1	0				
	b)Male	0	0	0				
3	RELIGION					2.034	3	.565 NS
	a)Hindu	33	12	0	45			
	b)Muslim	4	0	0	4			
	c)Christian	2	1	0	3			
4	OCCUPATION OF FATHER					13.739	3	.003* S
	a)unemployed	0	3	0	3			
	b)Coolie	33	7	0	40			
	c)Gov't /private employee	1	2	0	3			
	d)Business	4	2	0	6			





5	OCCUPATION OF MOTHER							
	a)House maker	26	11	0	37	1.712	2	.425 NS
	b)Coolie	8	1	0	9			
	c)Gov't /private employee	5	1	0	6			
	d)Business	0	0	0	0			
6	FAMILY INCOME/MONTH							
	a)Below Rs.4000	12	3	0	15	.412	3	.938 NS
	b)Rs.4001-6000	12	6	0	18			
	c)Rs.6001-10,000	5	2	0	7			
	d)Above Rs.10,000	9	3	0	12			
7	EDUCATION OF PARENTS							
	a)Illiterate	7	4	0	11	2.371	3	.499 NS
	b)primary education	10	4	0	14			
	c)High school	20	5	0	25			
	d)Graduate	1	1	0	2			
8	DOMICIDE							
	a)Rural	23	12	0	35	2.529	1	.112 NS
b)Urban	15	2	0	17				
9	TYPE OF HOUSE							
	a)Hut house	2	1	0	3	.688	2	.709 NS
	b)Pucca house	28	8	0	36			
	c)Thatched house	9	4	0	13			
10	WHICH SUBJECT DID YOU LIKE MORE							
	a)Medical surgical nursing	15	11	0	26	5.983	2	.050* S
	b)Child health nursing	17	3	0	20			
	c)Mental health nursing	6	0	0	6			
	d)Nursing research and statistics	0	0	0	0			

\*:-significant at 5% (P<0.05) level



## CONCLUSION

This chapter deals with analysis and interpretation of collected data to evaluate the effectiveness of planned teaching programme. This findings reveals that, in all three dimensions post-test mean score percentage was higher than the pre-test mean score percentage. Thus planned teaching programme on mnemonics among the college students was effective at 5% ( $p < 0.05$ ) level and demographic variable that occupation of father and favorite subject have significant association with pretest level of perceived memory of college students.

## NURSING IMPLICATIONS

The Nurses and the nursing students should have the knowledge of mnemonics to perform the nursing activities without any mistake and to improve the memory in students, to develop their knowledge level, and to lift up the quality of education etc. The findings of the study have several implications on Nursing education, Nursing practice, Nursing research and Nursing administration.

## NURSING EDUCATION

- ❖ This study helps the nursing professors to improve the teaching method.
- ❖ Conference, seminars and workshops can be conduct for nurses to improve their knowledge on mnemonics.
- ❖ The materials collected will help to improve and update their knowledge on mnemonics.
- ❖ The nursing educator should encourage the nursing students to use mnemonics to improve their memory.

## NURSING PRACTICE

- ❖ This study helps the nurses to play a good nursing role by improving their memory and knowledge with the help of mnemonics.
- ❖ Nurses have an important role to provide a care without any error/mistake .so mnemonics should be learned by nurses to avoid these errors.
- ❖ Memory is the most important thing for nurses to provide a perfect care at perfect time. So mnemonics will help them to promote their memory.
- ❖ The nurses needs to understand the importance of mnemonics.

## NURSING RESEARCH

- ❖ The study findings will support for conducting further study on planned teaching programme.
- ❖ This study encourage the nurses to read, discuss and to conduct the research studies to improve their knowledge.
- ❖ The findings of this study will motivate the researchers to conduct research in various settings.

- ❖ The study helps the nursing researcher to conduct further study related to mnemonics.

## NURSING ADMINISTRATION

- ❖ This study helps the nurse administrator to implement the knowledge of mnemonics in nurses to improve their knowledge.
- ❖ The nurse administrator can conduct a classes to nurses working in hospital regarding the mnemonics.
- ❖ The nurse administrator should encourage the nurses to conduct the research regarding mnemonics in various aspects.

## RECOMMENDATIONS:

- ❖ The study can be replicated with the large number of samples.
- ❖ A similar study can be conducted in various settings like for school Children.
- ❖ The time series study can be conducted to evaluate the long-term effect of the planned teaching programme on mnemonics in enhancing memory.
- ❖ The similar study can be done with a same approach having a control group.
- ❖ A comparative study can be conducted between different age group.

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