A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING MNEMONICS IN ENHANCING THE LEVEL OF PERCEIVED MEMORY AMONG B.SC., NURSING FIRST YEAR STUDENTS IN TIRUVANNAMALAI

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ABSTRACT

A quantitative research approach using a pre-experimental pre-test and post-test design was adopted to assess the effectiveness of a structured teaching programmein enhancing the level of perceived memory regarding mnemonics among B.Sc., Nursing First year students. This study was conducted at Arunai institute of nursing education and research with a sample size of 30 B.Sc., Nursing First year students, selected through a convenience sampling technique. Demographic data were collected, and a structured questionnaire was administered to evaluate participants' levels of perceived memory before and after the intervention. In the pretest B.Sc., nursing student's level of perceived memory, the majority of60% of them had inadequate level of perceived memory, 36.6% of them had moderately adequate level of perceived memory, 3.3% of them had adequate level of perceived memory. Following the structured teaching program, posttest100% of them had adequate level of perceived memory. The pre-test mean score was 54.2 with the standard deviation 18.75, after structured teaching programme and the overall posttest mean score was 124.7 with the standard deviation 13.36. The calculated paired t-test value (t = 18.67) was statistically significant at p < 0.05, indicating a substantial improvement inlevel of perceived memory.The findings demonstrate that the structured teaching program was effective in enhancingthe level of perceived memoryregarding the mnemonics among B.Sc., Nursing first year students.The significant improvement in post-test scores highlights the importance of educational interventions in promoting the level of perceived memory.

KEY WORDS: *Structured Teaching Program, Mnemonics, enhancing, perceived memory, B.sc nursing first year,college students, Tiruvannamalai.*

1. INTRODUCTION

Memory plays a fundamental role in learning, especially in fields like nursing, where students must memorize vast amounts of medical information, including terminologies, anatomical structures, disease classifications, and pharmacological details (Bower, 2020)[2]. However, many students struggle with memory retention, leading to academic stress and decreased confidence (Kumar & Rajan, 2021)[7]. Effective learning strategies, such as mnemonics, can enhance memory and improve academic performance.

Mnemonics are cognitive tools that help in encoding, storing, and retrieving information through techniques such as acronyms, chunking, rhymes, storytelling, and visualization (Higbee, 2019)[6]. Studies have shown that mnemonics can significantly enhance memory recall and learning efficiency among students in medical and nursing education (Atkinson & Shiffrin, 2022)[1]. Despite these benefits, mnemonics are not widely integrated into nursing curricula, leaving students to rely on conventional rote learning methods.

Structured teaching programs (STPs) incorporating mnemonic techniques have been found to enhance students' engagement, retention, and application of knowledge (Miller & Cuttler, 2021)[8]. By systematically introducing mnemonics, students can improve their perceived memory capacity, ultimately leading to better academic performance.

2. MATERIALS & METHODS

Design: A pre-experimental group research design was adapted for the present study.
Sample Size: A sample of 30 B.Sc Nursing First Year Students.
Sampling Technique: Convenient sampling technique was used to select the sample.
Data collection Procedure: The researcher obtained written permission from Arunai Institute of Nursing Education and Research at Tiruvannamalai, before conducting the study. Confidentiality was assured to all participants to ensure their cooperation throughout the data collection process. Each participant was informed about the purpose of the study, and written consent was obtained from them, adhering to ethical research guidelines.

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The main study was conducted over a period of four weeks. A total of 30 B.Sc Nursing First Year Students were selected using a convenient sampling method. After obtaining written consent, the participants were comfortably seated in a waiting hall. A structured questionnaire was administered to assess their pre-test level of perceived memory regarding mnemonics. The assessment lasted for 45 minutes.

On the following day, a structured teaching program was conducted for the same participants. After seven days, a post-test was administered to evaluate their level of perusing the same structured questionnaire. Previous studies have shown that educational interventions significantly improve the level of perceived memory among B.Sc Nursing First year. Throughout the data collection process, all participants cooperated well, reinforcing the feasibility of educational strategies in improving the level of perceived memory.

3. RESULTS

The table presents the frequency and percentage distribution of demographic variables among the study participants.With regard to age the majority 30(100%) of B.Sc., nursing first year students were in the age group of 18-19 years.

With regards to religion, the majority 25 (83.3%) of B.Sc., nursing first year students were belongs to Hindu, 3(10%) of B.Sc., nursing first year student belongs to Muslim, and 2(6.6%) of B.Sc., nursing first year students belongs to Christian.

With regard to father's occupation the majority 14 (46.6%) of B.Sc nursing first year students fathers were farmers, 8(26.6%) of B.Sc nursing first year students fathers were daily waged workers, 1(3.3%) of B.Sc nursing first year students fathers were self-employee/ business, 7(23.3%) of B.Sc nursing first year students fathers were employed.

With regard to mother's occupation the majority 12(40%) of B.Sc nursing first year students mothers were farmer, 3(10%) of B.Sc nusing first year students mothers were daily waged worker, 2(6.6%) of B.Sc nursing first year students mothers were self employee/business, 5(16.6%) of B.Sc nursing first year students mothers were employed, 8(26.6%) of B.Sc nursing first year students mothers were unemployed/ house wife.

With regard to family income the majority 2(6.6%) of B.Sc nursing first year student's family income were less than Rs 5,000, 11(36.6%) of B.Sc nursing first year student's family income were between Rs 5,001-Rs 10,000, 10(33.3%) of B.Sc nursing first year student's family income were between Rs 10,001-Rs 15,000, 7(23.3%) of B.Sc nursing first year student's family income were above Rs 15,000.

With regard to duration of study time the majority 3(10%) of B.Sc nursing first year student's study time were less than 1 hour, 19(63.3%) of B.Sc nursing first year student's study time were between 2-3 hours, 7(23.3%) of B.Sc nursing first year student's study time were between 4-5 hours, 1(3.3%) of B.Sc nursing first year student's study time were more than 6 hours.

With regard to wake up time the majority 1(3.3%) of B.Sc nursing first year students waking time were before 3'o clock, 9(30%) of B.Sc nursing first year student's waking time were between 4-5 hours, 20(66.6%) of B.Sc nursing first year student's waking time were after 6 hours.

With regard to duration of sleep time the majority 12(40%) of B.Sc nursing first year student's sleeping time were 8 hours, 17(56.6%) of B.Sc nursing first year student's sleeping time were 6 hours, 1(3.3%) of B.Sc nursing first year student's sleeping time were 4 hours.

With regard to previous knowledge the majority 5(16.6%) of B.Sc nursing first year student's were exposed to previous knowledge regarding mnemonics, 83.3% of B.Sc nursing first year student's were not exposed to previous knowledge regarding mnemonics.
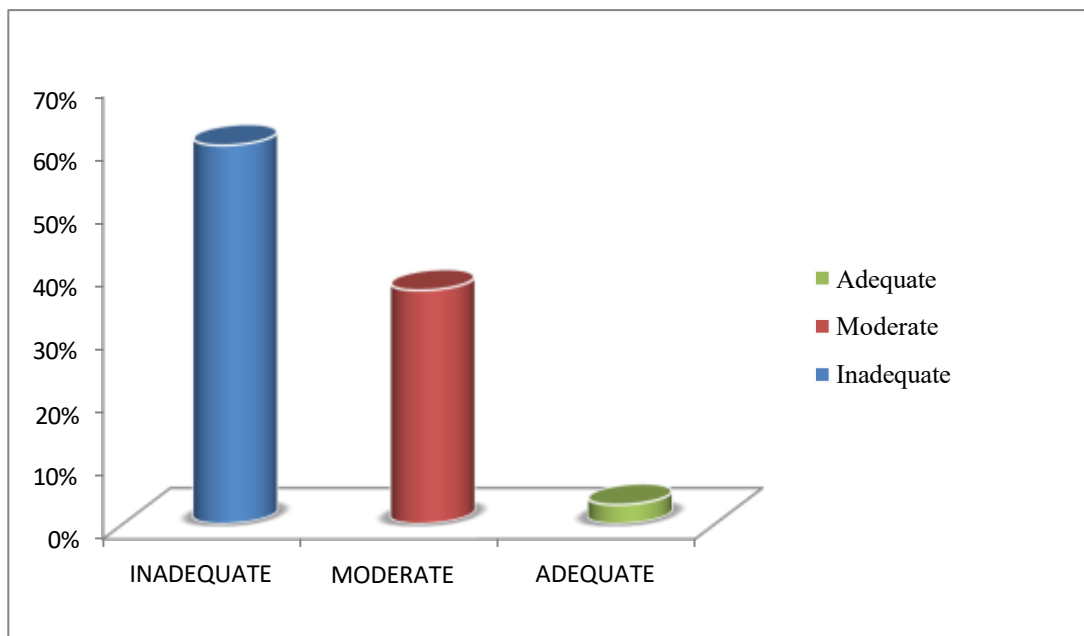
EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM

In the pre-test assessment of level of perceived memory regarding mnemonics among college students, majority 60% of them had inadequate level of perceived memory, 36.6% of them had moderately adequate level of perceived memory, 3.3% of them had adequate level of perceived memory. Where as in the post test level of perceived memory among B.Sc nursing first year students revealed that 100% of them had adequate level of perceived memory.
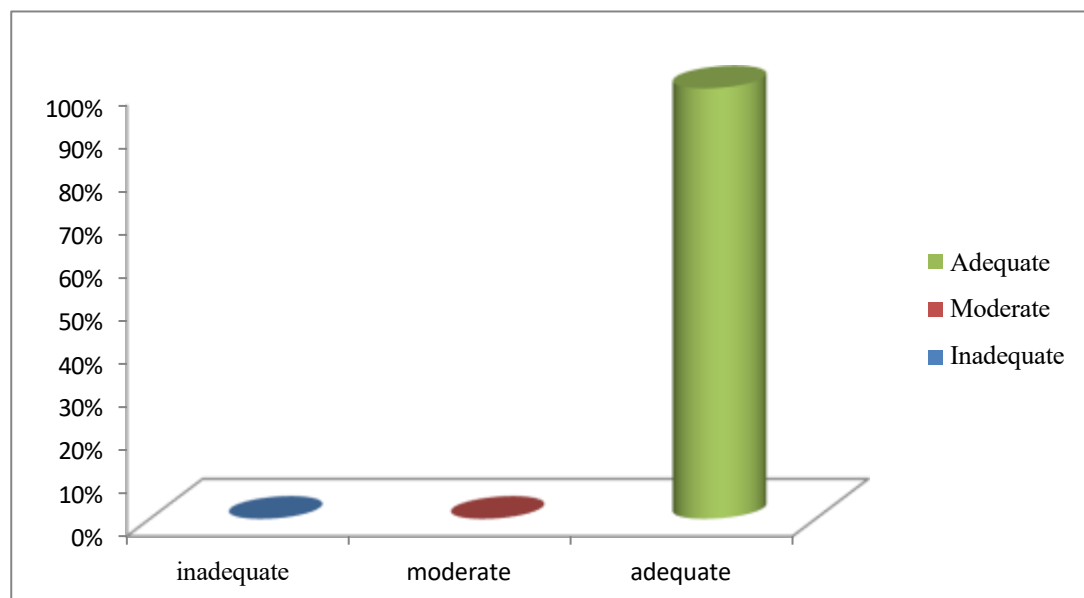
The comparison of pre-test and post-test scores revealed that the pre-test mean score was 54.2with a standard deviation (SD) of 18.75whereas the post-test mean score was 124.7with an SD of13.36. The calculated 't' value was 18.67, which was greater than the tabulated value at $p < 0.05$, indicating statistical significance. Therefore, the research hypothesis (H_1) was accepted, confirming that the structured teaching program was effective in enhancing level of perceived memory regarding Mnemonics among college students.

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Figure1: Percentage distribution of pre-test level of perceived memory regarding mnemonics among B.Sc Nursing First Year Students.

Figure2: Percentage distribution of post-test level of perceived memory regarding mnemonics among B.Sc Nursing First Year Students.

Table1:Comparison of pre-test and post test scores of effectiveness of structure teaching programme on knowledge regarding prevention and control of hyperlipidemia.

Variables	Mean	S.D	Paired't'test&Value
Pre-test	54.2	18.75	**t**=18.67
Post-test	124.2	13.36	**p=0.05*, S***

*$p<0.05$,S–Significant

4. DISCUSSION

A pre-experimental research design was used to select the sample. A total of 30 B.Sc Nursing First year Students were selected using a convenience sampling technique. The primary aim of the study was to assess the effectiveness of aStructured Teaching Programme on enhancing the level of perceived memory.

 The first objective was to assess the to assess the level of perceived memory among B.Sc nursing first year students. In **pretest** the majority 60% of them had inadequate level of perceived memory, 36.6% of them had moderately adequate level of perceived memory, 3.3% of them had adequate level of perceived memory and where as in the **post test** level of perceived memory among B.Sc nursing first year students revealed that 100% of them hadadequate level of perceived memory

The second objective was to estimate the effectiveness of structured teaching program on regarding mnemonics in enhancing the perceived memory among B.Sc nursing first year students. The overall pretest mean score of B.Sc nursing first year students was 54.2 with the standard deviation 18.75, after structured teaching programme and the overall posttest mean score of B.Sc nursing first year students was 124.7 with the standard deviation 13.36, it shows that the mean score of the posttest are higher than the mean score of the pretest.

 The overall improvement mean score of the students regarding mnemonics in enhancing the perceived memory were analyzed by **paired 't' test** $t= 18.67$, $p = 2.05$, $p = 0.05$.

 The third objective was to find out the association between the level of perceived memory among B.Sc nursing first year students with their selected demographic variables. Analytical assessment using pearson's chi- square test, from the analytical assessment the perceived memory will be more associated with demographic variable such as age, sex, religion, occupation of father, occupation of mother, family income, duration of study time, wake up time, duration of sleep, previous knowledge about mnemonics had shown statistically significant association with posttest level of perceived memory among B.Sc nursing first year students.

5. CONCLUSION

Based on the study findings, it was concluded that the structured teaching program was highly effective in enhancing the level of perceived memory among B.Sc Nursing First year students. The results demonstrated a significant increase in post-test knowledge scores, confirming the effectiveness of the intervention.

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