



An experimental study to compare the level of knowledge of nursing students attending spaced learning technique and traditional class regarding art at Sharda University, Uttar Pradesh

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Abstract

A study was conducted to compare the knowledge level of nursing students attending spaced learning technique and traditional class regarding Anti Retroviral therapy. The research design of this study was pre-test and post-test experimental research design. Forty nursing students were chosen for this study. The selected subjects were divided in to two groups with 20 nursing students in each. The study participants were selected by using simple random sampling technique. A structured knowledge questionnaire was used to collect the data from the subjects consisting of 20 items to assess the level of knowledge on ART. The mean pre-test level knowledge was 7.3 and SD was 2.00 and the post-test mean after spaced learning method was 14.6 and SD was 1.53 and the pre-test mean was 5.25 and SD was 1.91 and post-test mean after the traditional method was 8.65 and SD was 3.71. The mean post-test knowledge scores of nursing students attending spaced learning plan is significantly higher than the post test knowledge scores of nursing students attending traditional class at 0.05 level of significance.

Keywords: spaced learning technique, traditional class, ART

Introduction

Learning is a dynamic process, which encompasses both personal and professional life. Life-long learning involves seeking and appreciating new ideas in order to gain a new perspective as well as questioning one's environment, knowledge, skills and interactions.

Spaced learning is a new and innovative technique in learning design which is just beginning to make its mark. It is a method of embedding information in our long- term memory through repetition. When we hear, see or do something once, it can be stored in our short-term memory. If we hear, see or do it repeatedly, it can enter our long-term memory.

A spaced learning session consists of three inputs divided by 10 minute breaks during which the students engage in doing simple activity such as dribbling a basketball, playing with modeling clay or any other physical activity. The break in activities is the key to the spaced learning approach, during these intervals the brain actively forms connections between the new concept learnt and the learner's existing knowledge. This process of rapid structured repetition, separated by short breaks, embeds the information in the long-term memory.

The repeated stimulation of the same neural pathway demonstrates its importance to the brain and makes it easier to locate when you need to access the information stored within it.

Repetition of information improves learning and memory. However, how information is repeated determines the amount of improvement. If information is repeated back to back (massed), it is often learned quickly but the knowledge gained fades fast. If information is repeated in a distributed fashion or

spaced over time, it is learned more slowly but it is retained for much longer.

Statement of the Problem

A study to compare the level of knowledge of nursing students attending spaced learning technique and traditional class regarding art at sharda Univrsity, Uttar Pradesh

Objectives of The study

1. To assess the level of knowledge on ART among nursing students before and after administration of spaced learning technique.
2. To assess the level of knowledge on ART among nursing students before and after administration of traditional class.
3. To compare the level of knowledge on ART among nursing students attending spaced learning teaching and traditional class.

Hypothesis

- H₁:** The men post- test knowledge scores will be significantly higher than the mean of pre- test knowledge scores of nursing students attending spaced learning plan at 0.05 level of significance.
- H₂:** The mean post-test knowledge scores will be significantly higher than the mean of pre-test knowledge scores of nursing students attending traditional class at 0.05 level of significance.
- H₃:** The men post-test knowledge scores of nursing students attending spaced learning plan will be significantly

higher than the post-test knowledge scores of nursing students attending traditional class at 0.05 level of significance.

Research methodology

Research approach

A quantitative research approach was selected for this study.

Research design

Pre-test & post-test experimental research design was used in the present study.

Variables in the study

Independent Variable

Spaced learning technique and traditional class

Dependant Variable

Knowledge of nursing students

Research setting

The present study was conducted in nursing college at Sharda University, Greater Noida, Uttar Pradesh.

Target Population

Target populations for the present study were all Nursing students.

Accessible population

Nursing students studying at School of Nursing Science and research,

Sample

Sample size

The 40 nursing students were chosen for this study. The selected subjects were divided in two groups with 20 nursing students in each.

Sampling technique

Simple random technique was employed to select the sample of nursing students of Sharda University, Greater Noida, UP.

Description of the tool

The data collection tool selected for the study was structured knowledge questionnaire to assess the level of knowledge of nursing students regarding ART.

Section A

It consists of demographic data related to age, sex, religion, level of education and previous knowledge regarding ART.

Section B

It comprised of 20 multiple choice questions regarding ART.

Results

1. To assess the knowledge level of nursing students attending spaced learning technique.

Table 1

Variabe	Mean	Median	SD
Knowledge (Pre-Test)	7.3	7	2.00
Knowledge (Post-Test)	14.6	14.5	1.53

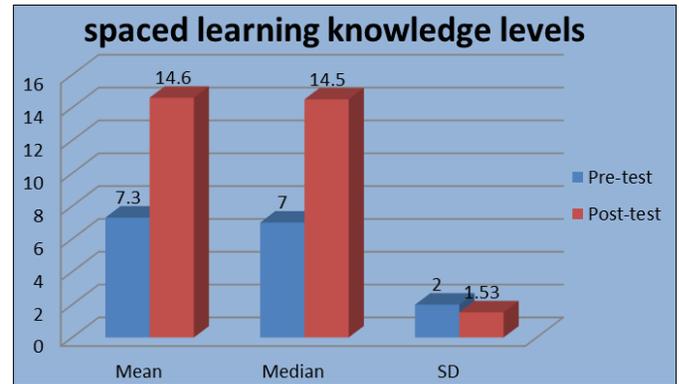


Fig 1

Pre-test knowledge scores of spaced learning among nursing students was found to have a mean of 7.3, median of 7 and the Standard deviation was 2.00 whereas the post-test knowledge mean scores were found to be 14.6, Median was 14.5 and Standard deviation was 1.53.

2. To assess the knowledge level of nursing students attending traditional class.

Table 2

Variabe	Mean	Median	SD
Knowledge (Pre-Test)	5.25	6	1.91
Knowledge (Post-Test)	8.65	8.5	3.71

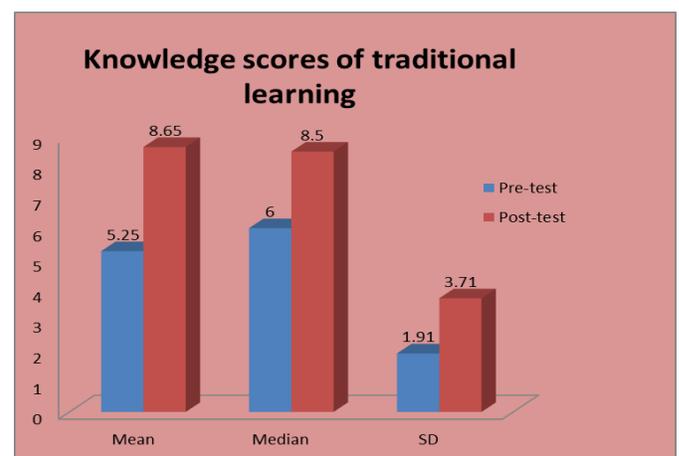


Fig 2

Pre-test knowledge scores of traditional class among nursing students were found to have a mean of 5.25, median of 6 and Standard deviation was 1.91 whereas the post –test knowledge mean scores were found to be 8.65, Median was 8.5 and Standard deviation was 3.71.

3. To compare the level of knowledge on ART between the nursing students attending spaced learning teaching and traditional class.

Table 3

Variabe	Mean	SD	t-value
Spaced learning (post-test)	14.6	1.53	6.62
Traditional class (Post-Test)	8.65	3.71	

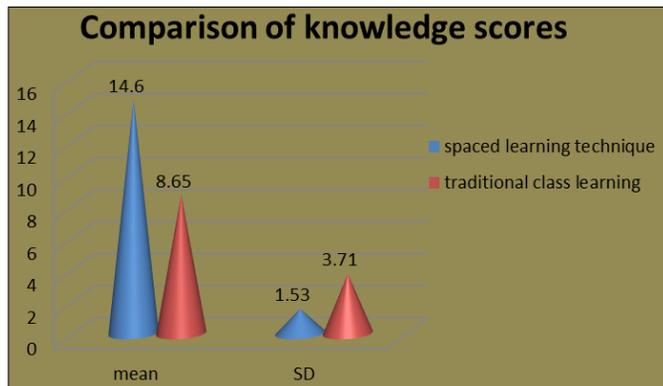


Fig 2

The mean post –test knowledge scores after spaced learning technique was 14.6 which was significantly higher than the mean post test score after the which was found to be 5.25. This proves that the spaced learning technique was statistically a better teaching method than regular traditional class at 0.05 levels.

Conclusion

The findings have revealed that majority of nursing students had inadequate knowledge regarding ART before the administration of spaced learning technique and traditional class that is pre-test mean of spaced learning is 7.3, 95 % (19 students) had inadequate knowledge and 5% (1 student) had moderate knowledge and no one was found with adequate knowledge and mean of traditional class was 5.25. 100 % (20) students had inadequate knowledge and 0% i.e. no student was found with adequate or moderate knowledge. During post-test of nursing students who had attended traditional class 75% (15) students had inadequate knowledge, 15% i.e. three students had moderate knowledge and 10 % i.e. 2 students had adequate knowledge. During post-test assessment of spaced learning technique 75% i.e. 15 students were found with moderate knowledge and 25% i.e. 5 students had adequate knowledge and 0% i.e. no students were found with inadequate knowledge. These results revealed that spaced learning technique was statistically a better method of teaching than regular traditional class and hence hypothesis H_1 , H_2 , H_3 was accepted at 0.05 significant levels.

Recommendation

1. A similar study can be conducted with large sample for better generalization in all nursing colleges.
2. A descriptive study can be done to assess the attitude of nursing faculty towards spaced learning technique.
3. The study can be conducted on widely spaced teaching plan.
4. A comparative study can be done between spaced teaching plan and other teaching methods.

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