



Effectiveness of Mind mapping on the internal exam score of Nursing Students

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ABSTRACT

The modern period is now in effect. The entire planet is moving forward. The nation's success and development are based on its educational practices and system. The education system will also need to be upgraded in order to keep pace with the trends. It's not required to deliver the education in the same manner as before. The educational system has to be improved, and new methods must be used. The ability to integrate new methods into the educational system shows that it is urgently need. To compare the effect of mind mapping technique in the internal exam score among nursing students. The present study adopted a Quasi experimental study design pre test post test control group. 104 students were recruited as a study subject by non-probability purposive sampling technique. These study subjects were further grouped 52 in experimental group who received mind mapping technique; and 52 in control group who received traditional teaching method. Findings of the study revealed that mind mapping was a comparatively effective method of learning for the subjects as it helped them to understand the lecture more significantly at $p < 0.005$ in comparison with traditional teaching method. The study finding have revealed that the there was changes in the scoring of the experimental group students in view of their exam scores. The statistical analysis proved that mind mapping is a method which can be utilized by teachers as a routine in order to provide a quality education to the students.

Keyword: Mind mapping Nursing students.

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INTRODUCTION

The modern period is now in effect. The entire planet is moving forward. The nation's success and development are based on its educational practices and system. The education system will also need to be upgraded in order to keep pace with the trends. It's not required to deliver the education in the same manner as before. The educational system has to be improved, and new methods must be used. The ability to integrate new methods into the educational system shows that it is urgently need⁸.

Both mind mapping and CL have shown to be effective active learning techniques for today's college students. Positive attitudes and self-directed student development are fostered through cooperative learning strategies used in educational programmes. In a group context, exchanging ideas and getting feedback from others enhances critical thinking, reasoning skills, learning comprehension, and academic accomplishment [1].

. The mind is prepared via the mind mapping technique so that information may be used logically and imaginatively to create an image in the brain [2]. In the mind mapping technique, the linear view is given after the core concept is stated. Additionally, it is advantageous for oneself and groups, where it might be more effective than written reviews [3, 4]. For recurring and difficult-to-understand themes, this strategy is appropriate for both teachers and students. It also encourages students' knowledge. This method boosts the creative potential of novel ideas and contributes to a rise in study-related motivation.

MATERIAL AND METHODS

Design of Research study: Quasi Experimental Pretest Post Control group Design

Sampling Technique used: Non Probability Purposive Sampling Technique

Setting of the study: Nursing Institute

Sample size was: 104

Tool

Section I: Structured Questionnaires' on Demographic variables

Section II: Observational checklist to assess the quality of teaching method

Section III : Likert Scale to assess the score of Internal and External exam

RESULT

The result of the study was divided in the following sections

Section I: Analysis to compare the subject matter of Experimental teaching methodology and Traditional teaching methodology.

Section II: Analysis to Compare the scores of students in their first and second internal exams among experimental and control group.

Section III Analysis to Compare the Quality of performance by the student's Experimental teaching methodology and Traditional teaching methodology.

Section I

Analysis to compare the subject matter of Experimental teaching methodology and Traditional teaching methodology.

Table 1. Description of subject matter comparison of Experimental teaching methodology and Traditional teaching methodology. N=104

Items	Experimental group (Mind Mapping Group) (52)) %	Traditional method Control Group(52) %	P value
Good Method for learning	80	20	0.003
Increase attention	70	30	0.005
Interesting method	80	20	0.007
Easy to understand	79	21	0.05
Memory retention	78	22	0.004
Time saving	85	15	0.003

The table 1 above depicts that the subjects from experimental group have comparatively higher level of satisfaction about various components like, good learning method, increasing attention, easy and interesting, memory retention and time saving. Thus, the study indicates that there is significant difference between experimental and control group at $p < 0.05$. Hence, it can be stated that mind mapping method is more effective than traditional method of teaching.

Section II

Analysis to Compare the scores of students in their first and second internal exams among experimental and control group.

Table 2 Description of scores of students in their first and second internal exams among experimental and control group.N=104

Internal exam scores		Experimental group (Mind Mapping Group) (52)) %	Traditional method Control Group(52) %
Score in First internal exam	Poor	10	40
	Average	40	30
	Good	40	30
	Excellent	10	4
Score in Second internal exam	Poor	0	30
	Average	10	40
	Good	40	26
	Excellent	50	4

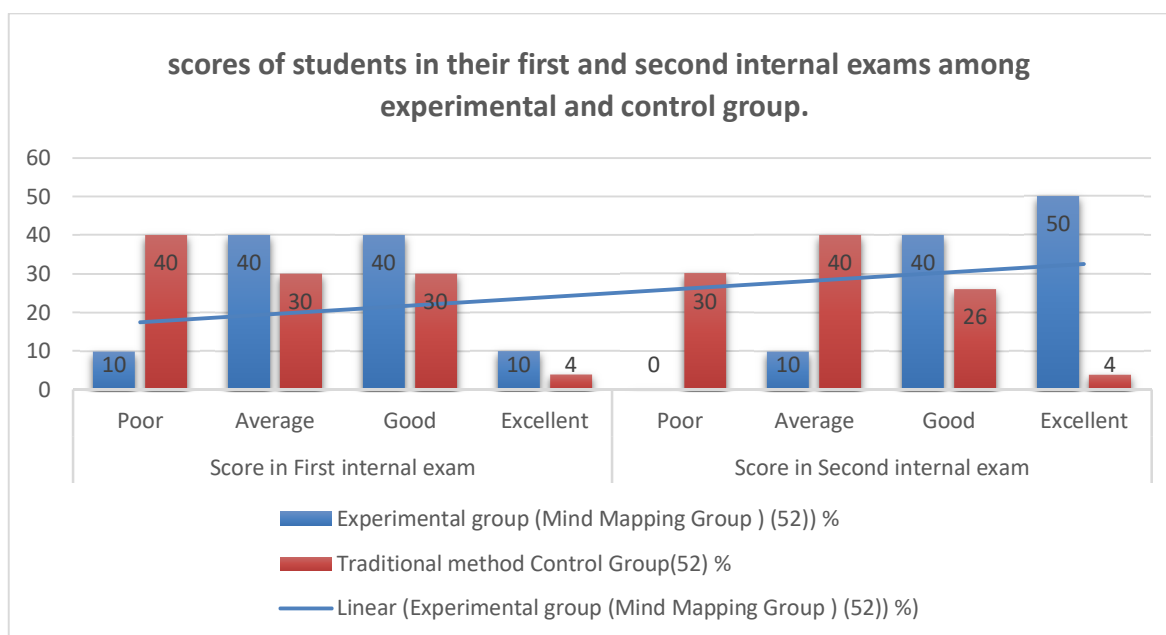


Fig 1: Description of scores of students in their first and second internal exams among experimental and control group.

An internal exam of students was conducted by which students were categorized as scoring below 50 were considered as poor , 51-70 were considered as average, 71-90 were good and above 91 and were excellent scorer From table 2 and Figure 2 it is clear that the scores of experimental group are higher in both good and excellent ranges in first as well as second internal exam. This reveals that using mind mapping as a technique

Section III

Analysis to Compare the Quality of performance by the student's Experimental teaching methodology and Traditional teaching methodology.

Table 3. Comparison of Items and Variables with Score between experimental and control group N=104

Items and Variables with Score		Experimental group (Mind Mapping Group) (52) %	Traditional method Control Group(52) %
Objective were clearly stated	Poor	5	30
	Good	20	40
	Very Good	35	20
	Excellent	40	10
Intreset of audiance	Poor	7	40
	Good	12	30
	Very Good	50	20
	Excellent	31	10
Confinement to the topic	Poor	6	46
	Good	30	24
	Very Good	40	20
	Excellent	24	10
Understanding on the topic	Poor	5	36

	Good	20	34
	Very Good	35	17
	Excellent	40	13
Time Management done by students	Poor	5	46
	Good	15	34
	Very Good	50	9
	Excellent	30	11
Objectives were Achieved	Poor	5	56
	Good	5	24
	Very Good	10	12
	Excellent	70	8
Overall rate	Poor	7	39
	Good	13	46
	Very Good	50	6
	Excellent	30	14

The findings of table no. 3 revealed that 40% of students who have received mind mapping technique were satisfied at excellent level by the objectives that were clearly stated, whereas, 10% subject were having same opinion about traditional method. 5% from experimental group and 30% from control group have committed about their respective methods being at poor level in the view of objectives been clearly stated. 93% subjects from experimental group admitted and 60% subjects from the control group stated that mind mapping and traditional methods were providing interest to the audience, whereas remaining 7% from experimental group and 40% from control group stated that their respective methods were poorly effective for the same.

94% subject from experimental group and 54% from control group were having good review about the confinement of the topics viz., mind mapping and traditional method respectively, whereas, 6 % from experimental group and 46% from control group were having poor review about the confinement of the topics. 85% subjects from experimental group admitted and 64% subjects from the control group stated respectively that mind mapping and traditional methods helped in understanding the topics, whereas remaining 7% from experimental group and 40% from control group stated that their respective methods were poorly effective for the same. 95% subject from experimental group and 54% from control group were having good review about the time Management done by students viz., mind mapping and traditional method respectively, whereas, 5 % from experimental group and 46% from control group were having poor review about the time management done by students.

95% subjects from experimental group admitted and 44% subjects from the control group stated respectively that mind mapping and traditional methods have achieved their objectives, whereas remaining 5% from experimental group and 56% from control group stated that their respective methods were poorly effective for the same. At the end, while overall rating the methods, 97% of the subjects have accepted mind mapping is more than a good method, whereas 62% subjects accepted about the same in case of traditional method. Only 7% subjects from experimental group stated that mind mapping is a poor method whereas 36% subjects stated the same about traditional method.

DISCUSSION

There was a study done to check the effectiveness of mind mapping teaching methodology the study was conducted in Prerna School, Sector 6 Gandhinagar, Gujarat which was a medium High Elementary school with a purpose to check the effectiveness of mind mapping technique in relation to the academic accomplishments In this study, the gender was used as a converter variable, with the academic achievement used as a dependable variable and the teaching style used as an independent variable. In total 120 students were included under the study. The study result along with the acquired T Value which

was calculated based on the average score and it was found that the mind mapping technique was more effective than traditional method [3-6]

CONCLUSION

Education is a field where continuous up gradation of knowledge and methods of providing knowledge keeps on changing as per trends. The study findings revealed that the students from experimental group who have received mind mapping as their teaching method were having better scores comparatively to control group samples. This method can be used as one of the routine method of teaching so as to improve the quality of education. While the subjects were Compared for Items and Variables with Score between experimental and control group it has been seen that in every aspect whether it be understanding of objectives, time management, concept clarity , confinement of the topics etc., the subject in experimental group subjects who received mind mapping technique were very comparatively satisfied than control group who have received traditional method.

Ethical Consideration: Institutional Ethical Committee approval was taken

Any Conflict of Interest: No

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